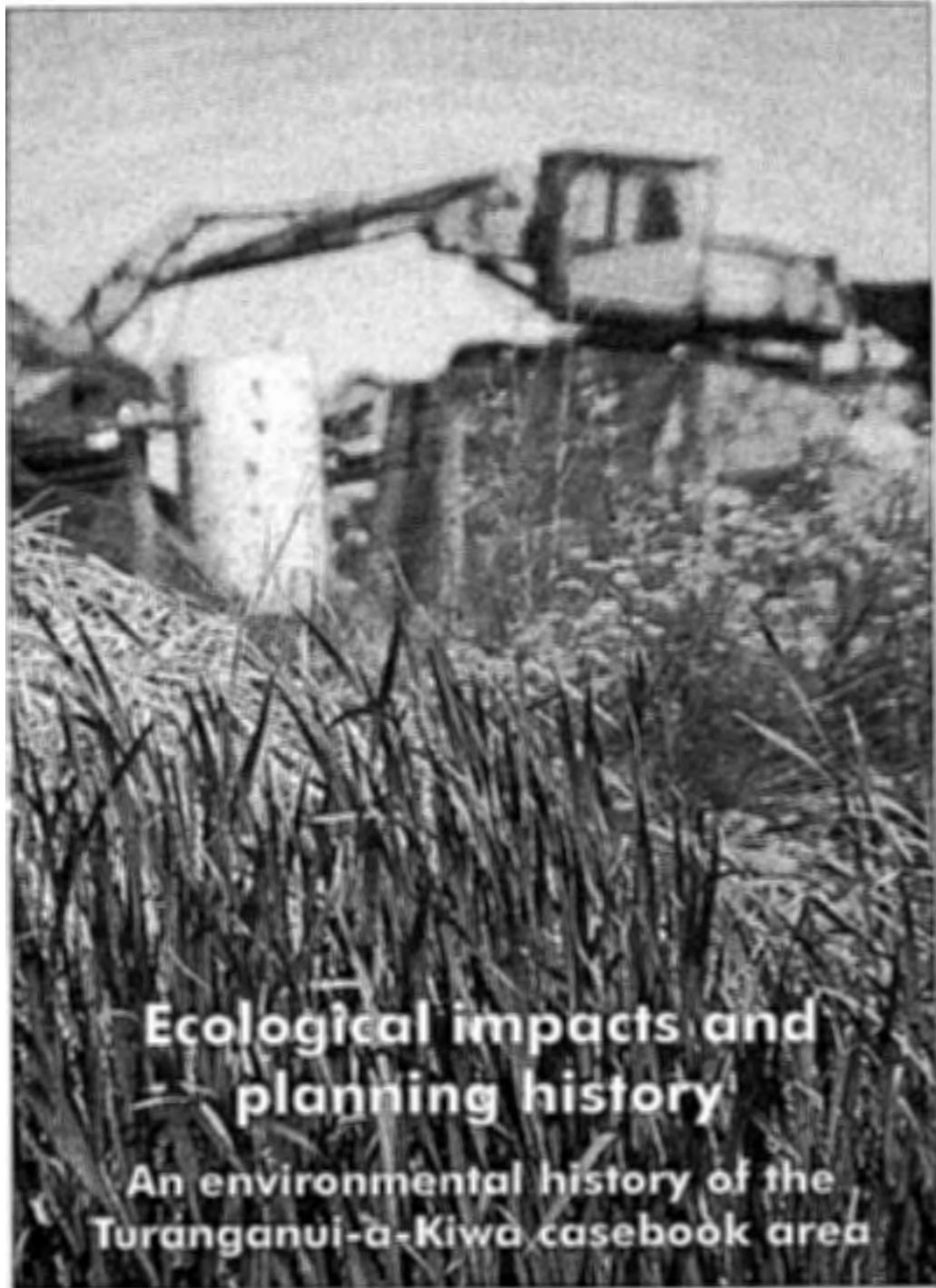


Wai 8/4 # A20



**Ecological impacts and  
planning history**

An environmental history of the  
Turanganui-a-Kiwa casebook area

ENCLOSURE

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# Ecological impacts and planning history

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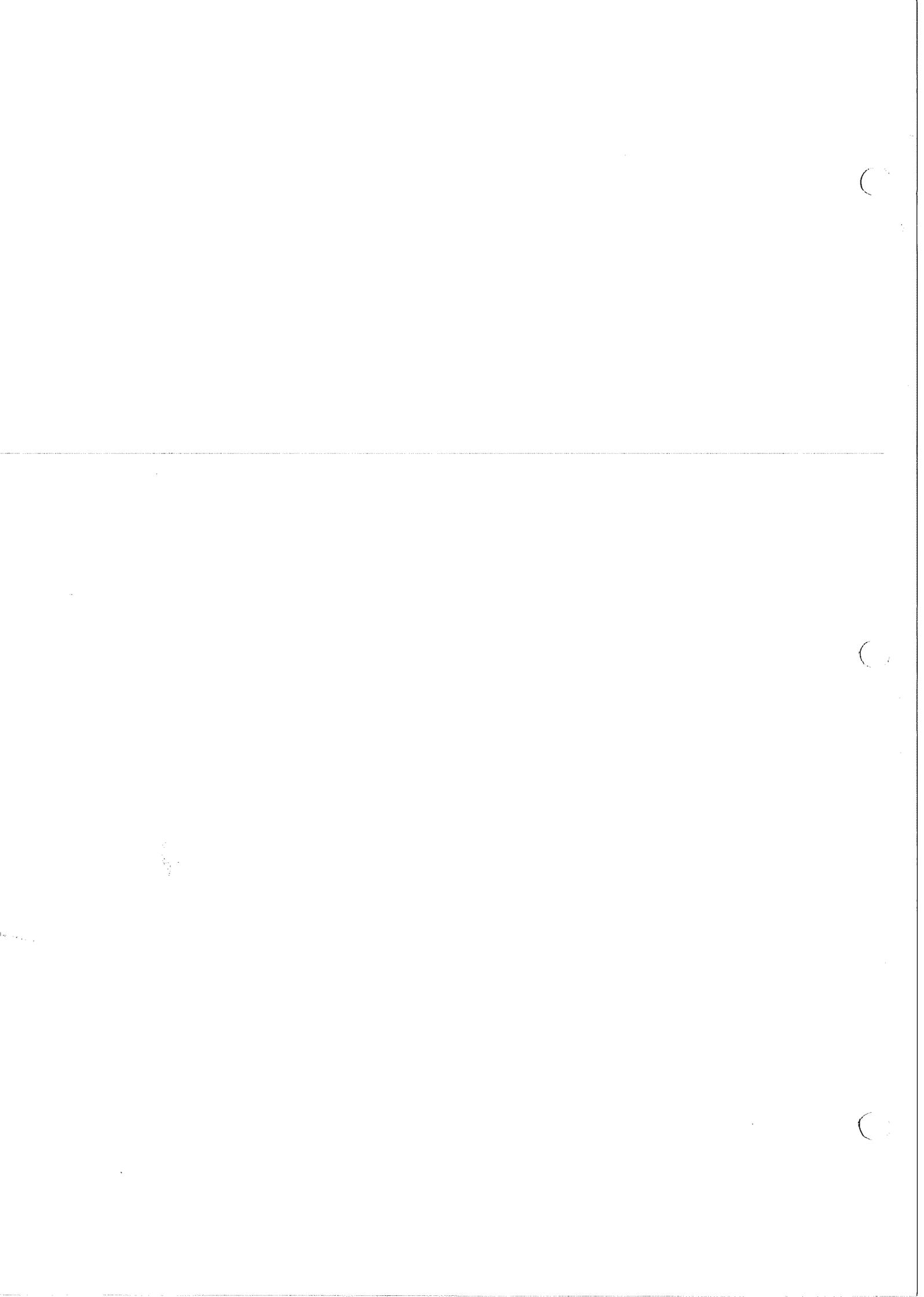
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\*With the assistance of Michael Browne, Jesse Irwin, Amy Hawcroft,  
Dr. Peter Hosking, Robert Quinn, and Claire Newman.



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My many thanks to these and other people who have made this a valuable learning exercise for me. Brad.



**Photo:** Three members of Te Aitanga-a-Mahaki outside the abandoned meeting house at Mangatu which was all but destroyed by valley infilling and flooding.



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## Introduction: Bay of poverty?

In her assessment of the first meeting between Maori from Turanganui-a-Kiwa and Europeans, Salmond contrasts two very different accounts of the local landscape. In evaluating the journals of crew members from the *Endeavour*, she suggests that:

...it is important to remember that the *Endeavour's* men never ventured more than about a kilometre inland, and that their impressions of the bay were in some respects misleading... Because they explored neither the Kopututea River... nor the upper reaches of the Tuaranga-nui, they did not realise that there were fertile gardens and large fortified settlements inland. In his frustration at being unable to secure food and water Cook named Tuaranga-nui 'Poverty Bay', a most inaccurate description<sup>1</sup>.

Through their biased preconceptions about the

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<sup>1</sup> Salmond 1991, p137.

likely appearance of a fecund landscape, and on the basis of their cursory explorations of the area, the crew of the *Endeavour* committed the first act of ecological imperialism in the present casebook area: the renaming of Turanganui-a-Kiwa as Poverty Bay. To Berg and Kearns<sup>2</sup>, the renaming of the Maori landscape is associated with the practice of cultural norming – the attempts of colonisers to assert cultural dominance over the landscape, thereby subjugating the close affinity of indigenous peoples to their valued environments. In interviews conducted for this research project and in statements on local marae, it is evident that 'Poverty Bay' is actively contested by local Maori; it is culturally offensive to their traditions, environmental knowledge and relationships with local resources.

Yet, the misnomer of 'Poverty Bay' was not only a cultural affront to tangata whenua; it was also an entirely inaccurate depiction of the local environment. Salmond's second account of the historical landscape of the Bay was based on Native Land Court records and other records to which Maori have contributed their views on local resources. This account is quoted in full because it represents a comprehensive overview of the Bay's resources in 1769:

Inland, the bay was sheltered by ranges covered with thick forest, while the hills nearer the flats were sparsely clad in scrub, with fern and grasses on the ridges. The central plains were braided by the courses and fertile fans of three major rivers, where taro, kumara, gourds and probably yams flourished in sunlit gardens. Gardens were also cleared on frost-free hillsides near the rivers, and fernroot diggings were scattered around the bay. Grasslands, wetlands, swamps, scrub and great stands of kahikaatea, pukatea, and tawa trees on the flats provided a variety of foods and materials for weaving and building...

Pigeons, kaakaaa, pukeko and parakeets were plentiful on the plains, and thousands of ducks lived by the rivers and the Awapuni Lagoon. Creeks leading into the main rivers on either side of the central plain were crossed by eel weirs with names such as Makaroro, Te Rua-o-Mapewa, Arowhati, built and maintained by particular families. Mullet, eels and whitebait swarmed in season in the tidal waterways.

The bay was famous for its crayfish, caught off Titirangi or further north along the coast, and the reefs and tidal flats harboured quantities of shellfish. Paua were plentiful off Onepoto (now Kaiti), and there were beds of white pipi off Oneroa, where the tamure (snapper) came to feed, crunching the shells in their powerful jaws. Sharks, kahawai, kingfish, flounder and many other species of fish were caught in the bay, and there were a number of favourite fishing grounds, including Te-Wai-o-Hii-Harore at Waikanae, where a spring seeped into the ocean, attracting kahawai, which, according to one early Land Court witness, came there to drink the fresh water. Now and then whales stranded on the beaches, to be claimed by the chiefly leaders of whichever kin-group controlled that part of the shoreline<sup>3</sup>.

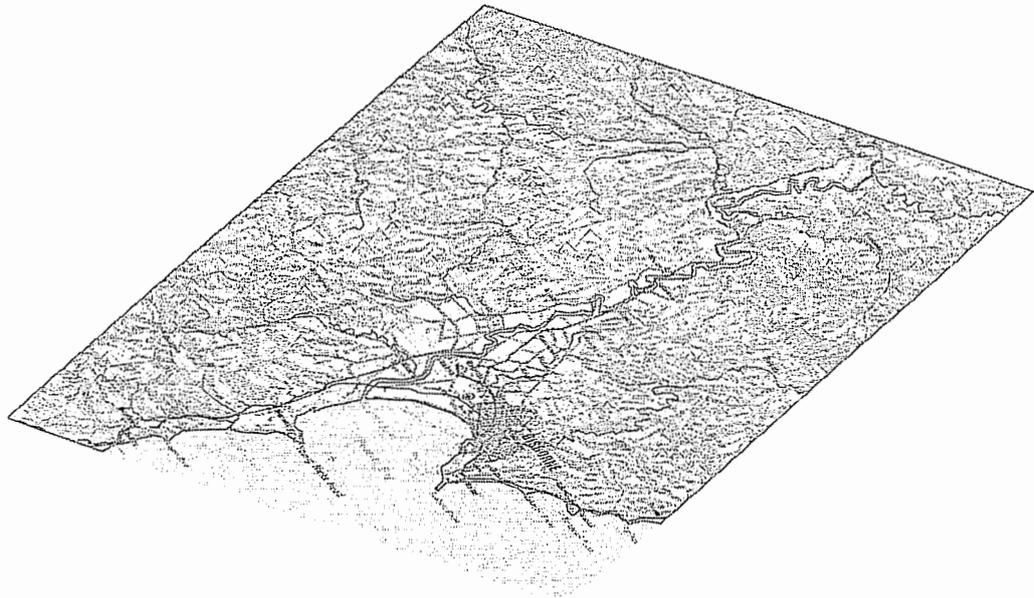
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<sup>2</sup> Berg and Kearns 1996.

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If Cook and his crew had explored further inland, they would have recognised that this was a bay of plenty. It may well be that the colonial system of land use, the western system of land administration, and the European model of resource management almost succeeded in transforming 'Poverty Bay' into something in keeping with the name. Even with the magnitude of these transformations, however, the casebook area retains its importance as a place where kai Maori and other resources of importance to Maori are abundant. Reduced to one statement, this report contends that the cultural bias which is inherent in the phrase 'Poverty Bay' has subsequently influenced the management of the cultural ecology of Turanganui-a-Kiwa.

Figure 1.1 – Oblique view of casebook area



### **Purpose of report**

As indicated in the title of the report – *Ecological impacts and planning history* – there are two principal objectives for this research project. In the first instance, the report concentrates on environmental transformation rather than an account of the historical and present resources of the Gisborne district. Traditional histories and mana whenua reports have also been commissioned for the casebook area. Within the wider body of research commissioned for hearings in Gisborne, the purpose of this report is to complement those traditional histories – To evaluate the transformation or despoilment of important resource spaces which are identified in other reports.

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<sup>3</sup> Salmond 1991, p119.

In order to focus the research for this objective, the following research questions were identified:

- Were the processes of environmental transformation a 'natural' component of water regimes and land surface evolution, or were they 'human-induced?'
- To what extent have government policies hastened the processes of environmental transformation?
- How have modifications to catchment headwaters affected downstream resource spaces and environments?
- Who has benefited from deliberate attempts to modify the environment?

The second objective for the report is to ascertain the extent to which Treaty principles have influenced the management of resources spaces of importance to Maori. Local case studies of the confrontation between tangata whenua and the European system of resource and environmental management are provided. For the assessment of these case studies, the following research questions were established:

- To what extent were Maori cultural, historical and environmental values incorporated into the decision-making for major projects which altered the landscape?
- What opportunities were provided for iwi and hapu to participate in the planning process for developments which affected their resources?
- To what extent were local agents of environmental management mandated by government policy and departments to implement the principles of the Treaty of Waitangi?
- What were the demonstrated intentions and outcomes of attempts to manage the environments and resource spaces of the Gisborne casebook area?

While these two sets of questions have been constructed as separate lists, they are, of course, related. The degree to which tangata whenua view an environmental transformation as negative is inversely proportionate to their ability to influence the decision-making for that transformation.

All attempts to reconstruct historical landscapes and to assess their evolution are restricted by the range of available records. In the case of this project, there is a discernible bias towards recent change in the environment and recent planning decisions. This reflects not only the loss of authorisations for early developmental projects, it is suggestive of the fact that few of the ecological transformations before the Second World War required authorisation. The way in which the European legal and cultural doctrines of ownership provided landowners with near to sovereign rights to transform their property without reference to Maori attachments to ancestral lands and ecological taonga is a recurring theme in this report.

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While the available records are predominantly from the post-1945 period, transformations before this time were also significant. As Oliver and Thompson suggest, the perceived exigencies of colonial settlement provided strong forces for environmental change:

Settler society came into existence in the early years of the Vogelite boom; through the 1870s it saw the government at Wellington borrowing and spending lavishly for development, but for development elsewhere in New Zealand. Vogel's largesse was pre-empted by louder and more forceful mendicants from the established regions. As rail construction went on elsewhere the East Coast clamoured, for too long in vain, for bridges across its rivers, for a drain at Patutahi, for some rocks to be blasted out of the river mouth<sup>4</sup>.

Where possible, these types of transformation have been evaluated, but the report remains heavily biased towards recent environmental change. Indeed, a secondary intention of the report is to provide evidence of the progress of the Resource Management Act 1991 (RMA) to the Waitangi Tribunal. The Motunui-Waitara (1983), Kaituna River (1984) and the Manukau Harbour (1985) reports of the Tribunal influenced the drafting of the RMA and specific clauses were inserted into the Act to protect Maori interests. There are striking similarities between these three reports and the case of Turanganui-a-Kiwa. As is shown in Part III of this report – *Pollution of resource spaces* – the disruption of customary fisheries by pollution is a significant concern of local iwi. Sadly, the ultimate conclusion of this report is that the RMA has not provided Maori with a greater level of influence over the outcomes of resource management decisions.

## Report structure and summary

It would be impossible to assess every environmental change in an environment as diverse and dynamic as the Gisborne casebook area. Early in the research process, an attempt was made to characterise the main environmental issues of concern for local iwi. On the basis of these discussions, three principal themes were established<sup>5</sup>, which have become the three Parts of this report [as indicated in brackets]:

- Alterations to the upper catchment area of major river systems which have transformed downstream resource spaces [Part I – *Forces of Change*.]
- Modification of landscapes and alterations to indigenous habitats [Part II – *Remodelling landscapes*.]
- Pollution of waterways, the Bay and other places where Maori traditionally collected kai and, in particular, the impact of sewage and refuse disposal practices on traditional resources [Part III – *Pollution of resource spaces*.]

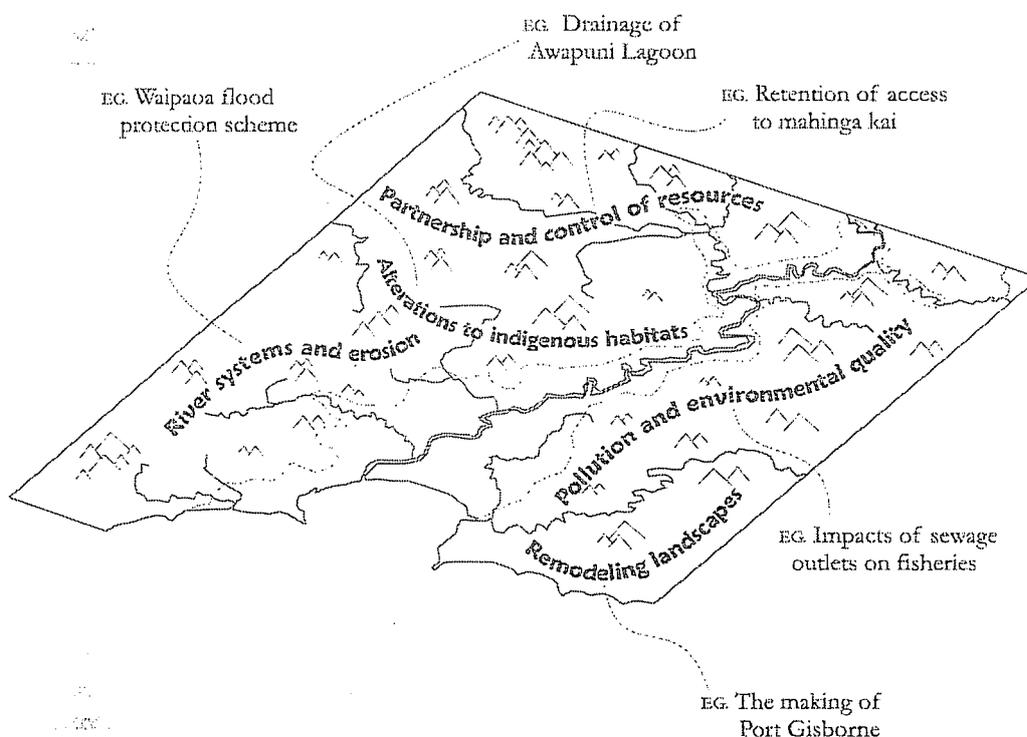
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<sup>4</sup> Oliver and Thompson 1971, p113.

<sup>5</sup> A scoping report was written in July of 1999: "Ecological impacts and resource histories: scoping report for the Gisborne inquiry district." – B. Coombes, UniServices and the Geography Department, The University of Auckland. Report submitted to the Crown Forestry Rental Trust and iwi of Turanganui-a-Kiwa as a discussion document.

The degree to which Maori were allowed to control their resources is blended into the discussion of these themes. Case studies were chosen under each of these key headings in negotiation with local iwi. While attempts have been made to make the report as comprehensive as possible, it has not been possible to research all possible case studies of importance. Moreover, the research for the report required a difficult balancing of the research needs of three principal iwi – Ngai Tamanuhiri, Rongowhakaata and Te Aitanga-a-Mahaki. Figure 1.2 highlights the attempt to sample case studies according to the themes as established in initial discussions with iwi representatives.

Figure 1.2 – Thematic sampling of ecological themes



**Part I – Forces of change** – is an attempt to provide context for environmental change in the Gisborne district. Not all ecological transformations are the result of human activity, and not all environmental changes reflect ecological imperialism. The Waipaoa River catchment and its plains are a dynamic environmental system within which catastrophic natural events were common even before Maori habitation of the area. Part I, however, highlights the way in which deforestation in the upper catchment areas of major valleys accelerated natural processes of erosion, valley infilling and flooding. In Chapter 2 (Forest use; forest clearance) the forest resources of the casebook area prior to European settlement are identified. It is concluded that, while Maori cleared substantial portions of the Poverty Bay flats

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and some of the lower hill country for cultivation, the upland parts of river catchments were left intact. The headwaters of river valleys were cleared of their forest cover much later, around the turn of the 20<sup>th</sup> Century. While much of this forest clearance took place on Maori land, Maori owners were not often involved in the decisions to fell or burn bush and replace it with pasture. These decisions were typically made by European lessees or the East Coast Commissioner. The outcomes of forest clearance are evaluated in Chapter 3 (Erosion, valley infilling and flooding). Without the protection of forest cover, rates of erosion increased, leading to the sedimentation of rivers and associated wetlands and the accentuation of downstream flooding. These impacts on water quality and downstream areas have degraded many fisheries within the casebook area.

Responses to these forces of change comprise the early chapters of **Part II – Remodelling landscapes**. The Waipaoa River flood control scheme (Chapter 4) and the afforestation of the headwaters of the Waipaoa (Chapter 5) were deliberate attempts to manipulate the hydrological system to limit the impact of flooding and erosion. While few local Maori would contest the necessity for such works, such hydrological changes as these had significant impacts on resources of importance to tangata whenua. Land was taken or purchased for both projects, but particularly in the case of the planting of the Mangatu State Forest. The flood control scheme negatively affected the delicate balance between the Waipaoa, its tributaries and such wetlands as the Wherowhero lagoon. Some of these outcomes were unavoidable, but others were not. Maori environmental values could easily have been incorporated into resource decisions for both projects, but this did not happen because local iwi were not given an opportunity to voice their concerns. Several deficiencies in the Soil Conservation and Rivers Control Act 1941, and in the resulting practices of the local catchment board, are highlighted. In particular, the Act did not mandate catchment boards to incorporate the principles of the Treaty in the management of rivers, nor did it provide rights of objection for Maori beyond the level of general rights.

Chapter 6 evaluates the 'Making of Port Gisborne', the first of three chapters about the manipulation of foreshore, fluvial and wetland environments. The Gisborne Harbour Board Act 1882 and, generally, the Harbour Board acts from 1878 to 1950 transferred powers of authority over the foreshore from Maori to the Crown and, subsequently, to beneficiaries of Crown grants. The Gisborne Harbour Board used its grant to the foreshore and tidal portions of the Borough's rivers to create a river port. The establishment of this port was at great expense to Maori resource spaces and cultural values: Mudflats containing the highly valued pipi were dredged and reclaimed; sacred rocks were blasted from the river; reefs and wave platforms which contained koura, paua and kina were reclaimed; and the course of the Turanganui River was radically altered. These on-site modifications also led to off-site resource appropriations which have caused offence to Maori, particularly in the case of the extraction of rock for harbour works (Chapter 7). All these alterations rested on the Crown's assumption of an absolute right to the foreshore. This assumption is no

better exemplified than in Chapter 8 – the drainage of the Awapuni lagoon. This drainage also reflects the monocultural predetermination of wetland spaces as wastelands, a theme which is developed further at the end of Chapter 8 in an analysis of the use of raupo swamps in the Waikanae Creek for refuse disposal.

**Part III**– *Pollution of resource spaces* – represents almost half of this report which, in turn, reflects the significant concern of local iwi about pollution issues. The evolution of the Paokahu landfill (Chapter 9) provides a useful case study of tangata whenua engagement in the planning process before the enactment of the RMA. The Town and Country Planning Act 1953 did not incorporate the logic of the Treaty of Waitangi and, under this Act and its amendment in 1977, Maori could only object where they were directly and *materially* affected by development projects. In the case of the Paokahu landfill, Maori owned the land targeted for refuse disposal but, even then, they did not necessarily obtain a satisfactory outcome from consent hearings held under these acts. Likewise, the Water Pollution Act 1953 and the Water and Soil Conservation Act 1967 did not include opportunities for Maori participation in environmental management. The protection of Maori interests under these acts was inadequate and, as a result, traditional fisheries in the Bay, along Kaiti Beach and within city rivers became heavily polluted. Chapters 10 (Pollution of city rivers and fisheries) and 11 (The Submarine sewerage outfall) provide a shameful history of abuse of the water regime as a convenient sink for human and industrial wastewater. While the RMA has led to greater involvement of iwi in the management of sewage and refuse disposal, Part III concludes that the outcomes of this involvement seldom reflect the principles of the Treaty of Waitangi, nor the ecological concerns of local iwi.

Pakowhai Reserve



**Part One**  
**Forces of Change**

Mangatu valley, near Mangamaia





## Forest use; forest clearance

**B**efore the extensive forest clearance which was undertaken throughout the East Coast, native flora and fauna were bountiful in the casebook area. Ironically, a bushfeller and fencer, Stanley Tait, who worked in the area during the early 1900s provides one of the more passionate descriptions of natural abundance in the surrounding hills:

The steep hills and river flats were bush covered right down to the beds of the rivers which were hard and full of huge boulders. The water was clear and sweet and it ran fast. Children swam in the clear pools, and there were eels, native trout and fresh water mussels. The native bush was beautiful. It was full of tawa, with plenty of totara, white pine and matai. There was beech forest at the higher levels. There were pongas and ferns of all sorts, and the undergrowth was thick and green<sup>1</sup>.

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<sup>1</sup> Cited in Howard 1976, p4.

Figure 2.1 – Tree felling, 1880s<sup>2</sup>



This depiction is no longer accurate for the Poverty Bay area, in which remnants of indigenous forest are now rare. Prior to European arrival, Maori had cleared land on the flats for cultivation purposes<sup>3</sup>, while the foothills and upper headwater areas were comparatively untouched. However, widespread land clearance and development eventually transpired on the steeper land as it was progressively sold or leased to Europeans for the purposes of settlement and farming. The clearance of indigenous vegetation in the headwaters of major rivers has led to a significant reduction in the quality of land and water in lowland areas, especially in the Waipaoa River catchment. This chapter evaluates the circumstances under which this land was cleared, especially in the upper catchment areas and provides context for the discussion of erosion and downstream flooding (Chapter 3), flood protection measures (Chapter 4) and state afforestation projects (Chapter

5). Initially, a description of the native vegetation present in the area prior to European arrival is attempted. While the records relating to this topic are generally unreliable, it can nevertheless be shown that Maori environmental values were not represented in the policies and programmes which led to the clearance of the upland areas for farming.

<sup>2</sup> Source: Gisborne Museum and Arts Centre.

<sup>3</sup> Murton 1969, p13.

## 2.1 The forest resource

### Indigenous vegetation

The historical characteristics and extent of indigenous vegetation in the inquiry district has not been thoroughly documented. Although a number of reconstructions of probable vegetation cover have been produced, the research methodologies used in these reconstructions are inherently inaccurate. The descriptions available are largely pieced together from soil core samples<sup>4</sup>, early survey maps<sup>5</sup>, and archaeological records<sup>6</sup>. These data sources, as well as a critique of the reliability of them, are summarised before a more comprehensive assessment of traditional vegetation cover is depicted.

Although they are a readily available source of information, the detail on land survey maps is notoriously inaccurate. While their main task was to divide parcels of land into transferable titles, surveyors were also charged with providing a description of the land prior to its sale. The main purpose of these descriptions was to assist potential landowners in calculating the cost of breaking in new land. In the context of the late 19<sup>th</sup> Century, a high proportion of native bush was considered to be a burden – something to which the application of expensive labour was required for removal in order to create pasture. Consequently, the description of vegetation type and volume often had an effect on sale price, as the timber was not valued as a resource but rather as an impediment to land development. Throughout New Zealand, it was not uncommon for surveyors and landowners or even land purchasers to collude in order to obtain a 'favourable' land description. When compared with such other regions of New Zealand as Wellington, there appear to have been few of the particularly unscrupulous purchases of 'sight-unseen' land in the Gisborne District. Nevertheless, the potential bias and vested interests of surveyors in their descriptions of the characteristics of land mitigate against the use of surveyors' maps to ascertain accurately the extent of indigenous forest at the time of colonisation.

Apart from these vested interests, a considerable margin of error could be expected from such maps because surveyors worked according to rigorous time constraints and often lacked appropriate botanical knowledge. The task of characterising stands of native forest was secondary to the main task of delineating boundaries, and was often performed without attention to detail. Murton has mapped information from early survey sheets of Maori land which were produced in the period 1867-1889<sup>7</sup>. The Native Land Court also used the maps as an aid to establish Maori land ownership<sup>8</sup>. As a result of the multiple forms of inaccuracy inherent in these maps, Mur-

<sup>4</sup> Pullar 1962.

<sup>5</sup> Murton 1968, 1969.

<sup>6</sup> Jones 1988.

<sup>7</sup> Murton 1968.

ton himself questioned their usage in reconstructing landscapes of the past. He commented that the “amount of vegetation data on each plan varies considerably and they are not uniform in scale, date or detail<sup>9</sup>”.

Pullar used soil cores to determine the coverage of indigenous vegetation on the Poverty Bay flats<sup>10</sup>. Remnants of timber and other vegetation which provide evidence as to the type of vegetation in the past can typically be found in such cores. The methods used to date the samples were relatively inaccurate in the 1960s, but of greater concern is the possibility of confusion between samples of vegetation which were deposited by flood and those which reflect trees which died naturally at the sample site itself. The deposition of trees which originated from the headwaters of the Waipaoa catchment was a common occurrence in an area which was historically afflicted by frequent floods<sup>11</sup>. While Murton also noted the presence of large buried trees on the flood plain, he concluded that the disappearance of forest cover from the lowlands was partly related to natural disaster and partly to Maori clearances for cultivation purposes<sup>12</sup>. It is unwise to read too much into a comparison of the work of Murton and Pullar. Their research related to entirely different time periods and used methods which are not readily comparable. Likewise, on the basis of uncertainty about the origin of sample material, it would be unwise to read too much into the results of soil cores.

Rather than depict forest coverage on the basis of historical records, Jones has provided an account of forest cover based on selected archaeological sites<sup>13</sup>. This account is also supported by archaeological evidence of cultivation patterns. Jones found that:

The plains themselves have broad expanses of poorly drained backlands which originally had a cover of pukatea and kahikatea forest while there were areas of manuka, kanuka, cabbage trees, and karaka groves on the river banks<sup>14</sup>.

While this is in keeping with other accounts of the pre-European pattern of vegetation, the relatively limited scope of Jones' sampling sites suggests that it is imprudent to generalise on the basis of his research.

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<sup>8</sup> Murton 1969, p262.

<sup>9</sup> *Ibid.*

<sup>10</sup> Pullar 1962.

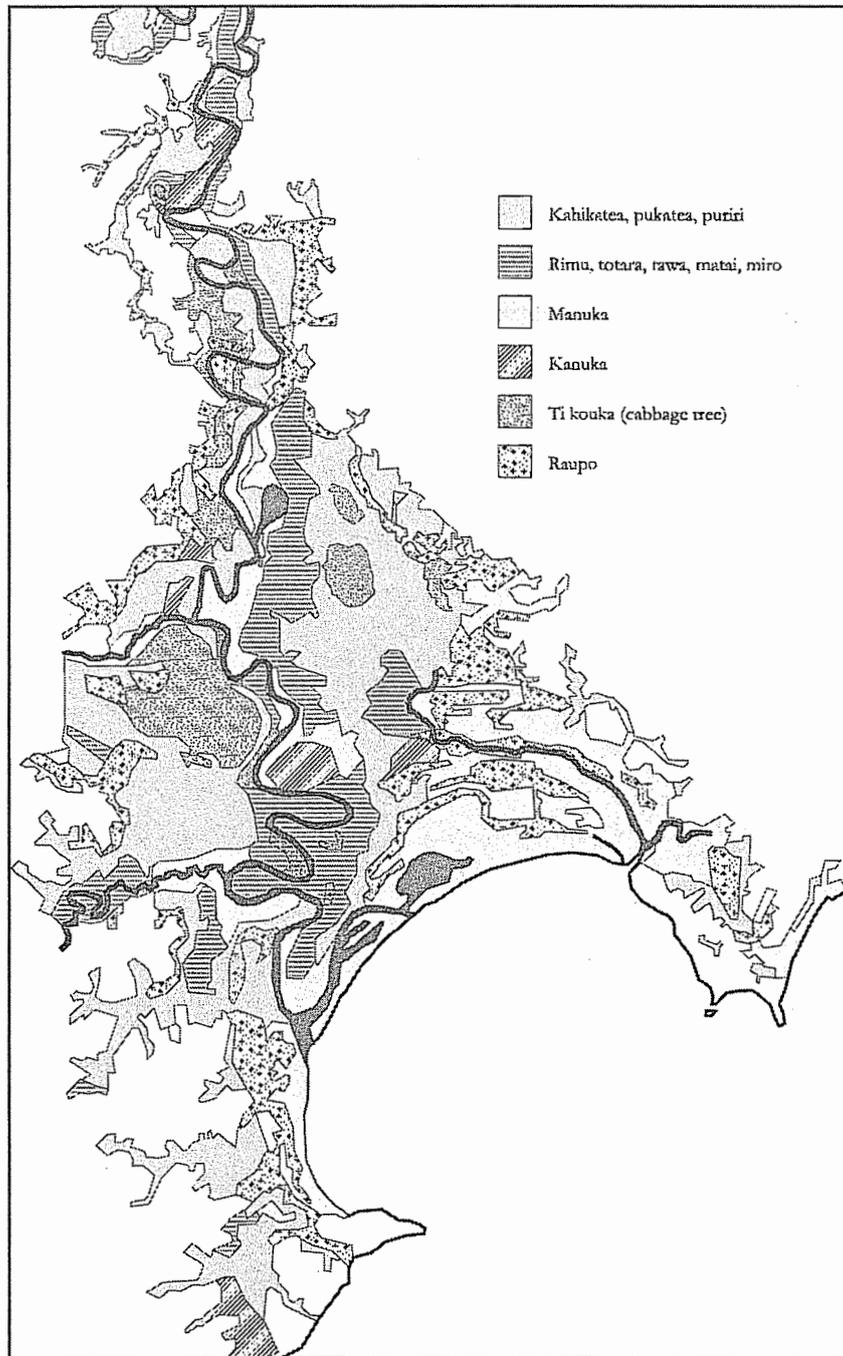
<sup>11</sup> Lands and Survey 1964, p14.

<sup>12</sup> Murton 1968, p264.

<sup>13</sup> Jones 1988.

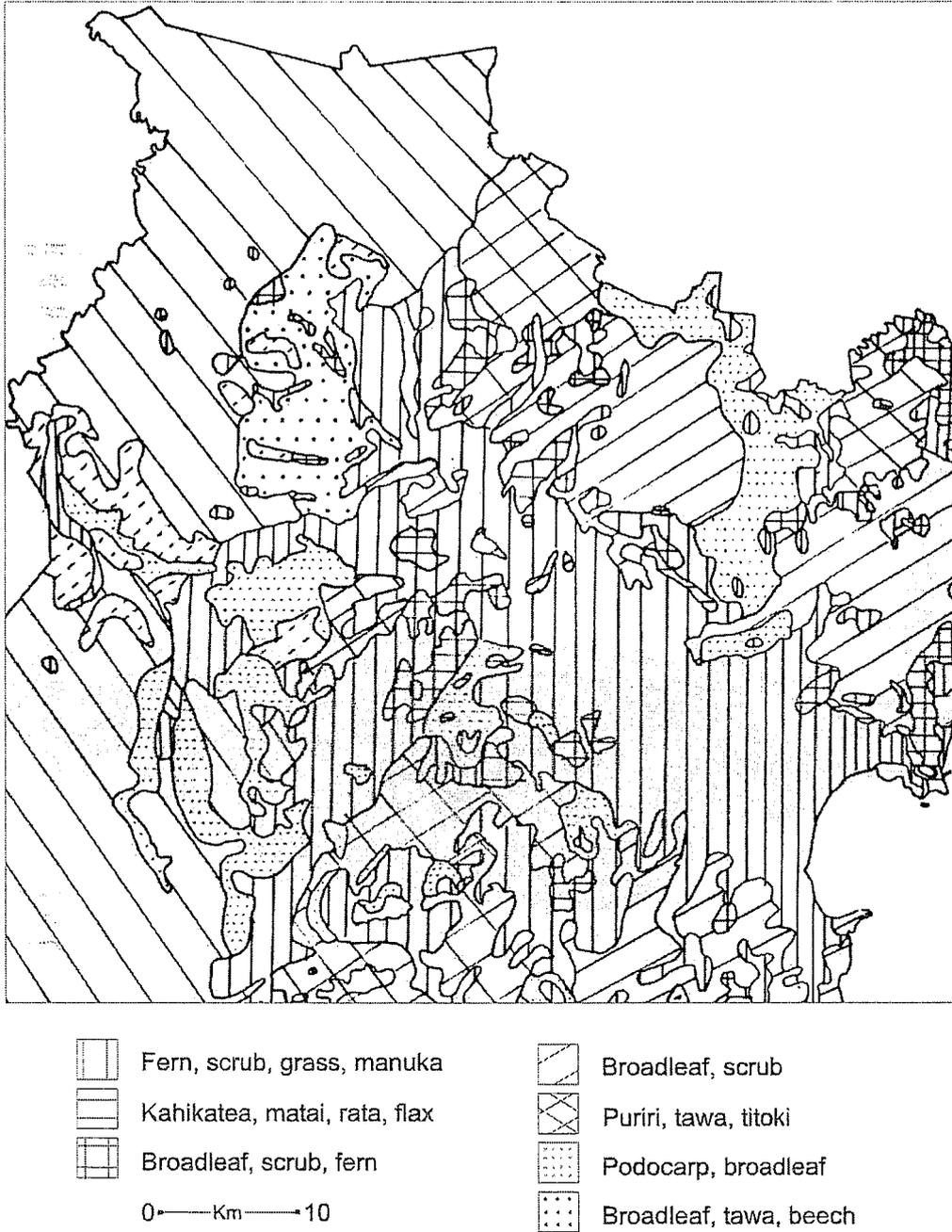
<sup>14</sup> *Ibid.*, p6.

Figure 2.2 – Indigenous vegetation at the time of Maori settlement<sup>15</sup>



<sup>15</sup>As constructed from vegetation remnants sampled from soil cores. **Source:** Fig 3, Pullar 1962.

Figure 2.3 – Indigenous vegetation at the beginning of Pakeha settlement<sup>16</sup>



<sup>16</sup>As constructed from land survey maps. **Source:** Murton 1969, Figure 11.

As has been shown, the data sources for the reconstruction of past landscapes in Gisborne are unsatisfactory. However, because there are no other suitable sources of such information, the vegetation coverage maps of both Pullar (Figure 2.2) and Murton (Figure 2.3) are used to indicate what little can be inferred from available sources of information. As can be seen, Pullar depicts the pre-Maori landscape as a dense and extensive forest cover of hardwoods, both in the hills and on the plains. Only near the coast and alongside the rivers did this cover ease into such shrub and plant species as kanuka, manuka, harakeke and ti kouka. While the vegetation cover of the upland areas would have varied little in the time between Maori and Pakeha settlement, Pullar's map of pre-human vegetation is significantly different to that of Murton, who accounted for vegetation cover at the time of Pakeha settlement. In part, this difference will have been determined by different methods of reconstruction (soil cores vs. survey maps), but there is considerable evidence to suggest that Maori cleared large portions of the Poverty Bay flats for cultivation prior to the arrival of Europeans.

Pullar provided a more detailed account of the types of habitat which had been present on the lowland portions of the inquiry district:

The most common tree was kahikatea (white pine) which grew with pukatea, putiri and tawa on poorly drained soils and with tawa, titoki, rimu and in a few places with miro, totara, and matai on the better drained soils about the Waipaoa and Te Arai rivers. There were few puriri trees, however, west of Waipaoa River. On the beach lands, which extend nearly 3 miles inland, there were mainly manuka and bracken fern with some kanuka. In the swamps, which were small but numerous, raupo, sedges and toetoe flourished<sup>17</sup>.

The only sizable remnant of the lowland hardwood forest which remains today can be found at Gray's Bush Scenic Reserve, east of Waerenga-a-hika. The dominant species in this reserve are kahikatea and pukatea, with some puriri and tawa<sup>18</sup>. The under storey present in this reserve is rich in diversity and is comprised of...

...kawakawa, hangehange, pigeonwood, mahoe, karaka, nikau, white maire, coprosma, ngaio, mapou, tarata, lacebark, flax, wireberry, and the cabbage tree...ferns, mosses and liverworts were found on the forest floor<sup>19</sup>.

Statements made by early European settlers indicate the presence of large areas of bush on the flats until the late 1860s. One described "extensive bushes at Makauri, Kupenga, Whatatuna, Whakawa, Rakaukaka, and Papatu<sup>20</sup>," some of which are depicted on Williams and Graham's survey map of 1868 (Figure 2.5). Today, however, the only extant remnants of this lowland bush are the Gray's, Pakowhai, Te Arai and Rakaukaka reserves, which are all richly endowed with kiekie and ti kouka.

<sup>17</sup> Pullar 1962, p9.

<sup>18</sup> Lands and Survey 1982; Pullar 1962, Appendix 1.

<sup>19</sup> Murton 1969, p17.

<sup>20</sup> *Ibid*, p14.

Figure 2.4 – Pakowhai reserve



In summary, the type of forest which would have been found in traditional times on the Poverty Bay flats was rich in the forest plants which Maori used for food and craft purposes. However, these “few scattered pockets, totalling less than 25 ha, are all that remains of the original forest that grew on the plains<sup>21</sup>.” More extensive remnants and areas of regenerating forest can be found

in the upland part of the district, but these also represent a small percentage of the original vegetation<sup>22</sup>. Today, only 17% of the headwaters of the Waipaoa have retained its indigenous vegetation cover<sup>23</sup>. While many parts of New Zealand have been deforested since 1840, the eradication of indigenous vegetation in the Poverty Bay-Waipaoa area was, perhaps, more comprehensive than other parts of the country.

Allsop assembled descriptions of forest clearance in the headwaters of the Waipaoa. He concluded that:

There appears to be little in the way of authoritative contemporary records of the forest with which the Waipaoa catchment was clothed before conversion to pasture. The earlier accounts that have been traced state that forest of podocarps and mixed hardwoods occupied most of the area, with beech forest on the higher hills. The impression given is that the podocarps, which included kahikatea on the moister flats and miro, matai, rimu and totara where the ground was drier, were somewhat scattered and that much of the forest consisted of tawa (probably the commonest species), rata, hinau, titoki, karaka, puriri and kowhai. On some steep hillsides there were areas of light hardwood forest containing ngaio, kohekohe, matipo, and hinahina as well as the hardwoods already mentioned. One description of a limited area confirms the abundance of tawa in the low level forests and notes the presence of tawhera. At higher elevations there was a zone, possibly related to change from mudstone to sandstone rocks, containing a few podocarps associated with red and silver beech; on the highest ridges there was some kawaka and tawari in predominantly beech forest<sup>24</sup>.

Generally, beech forests were found at altitudes between 600 and 1200m and broadleaf podocarps were more common below 600m<sup>25</sup>.

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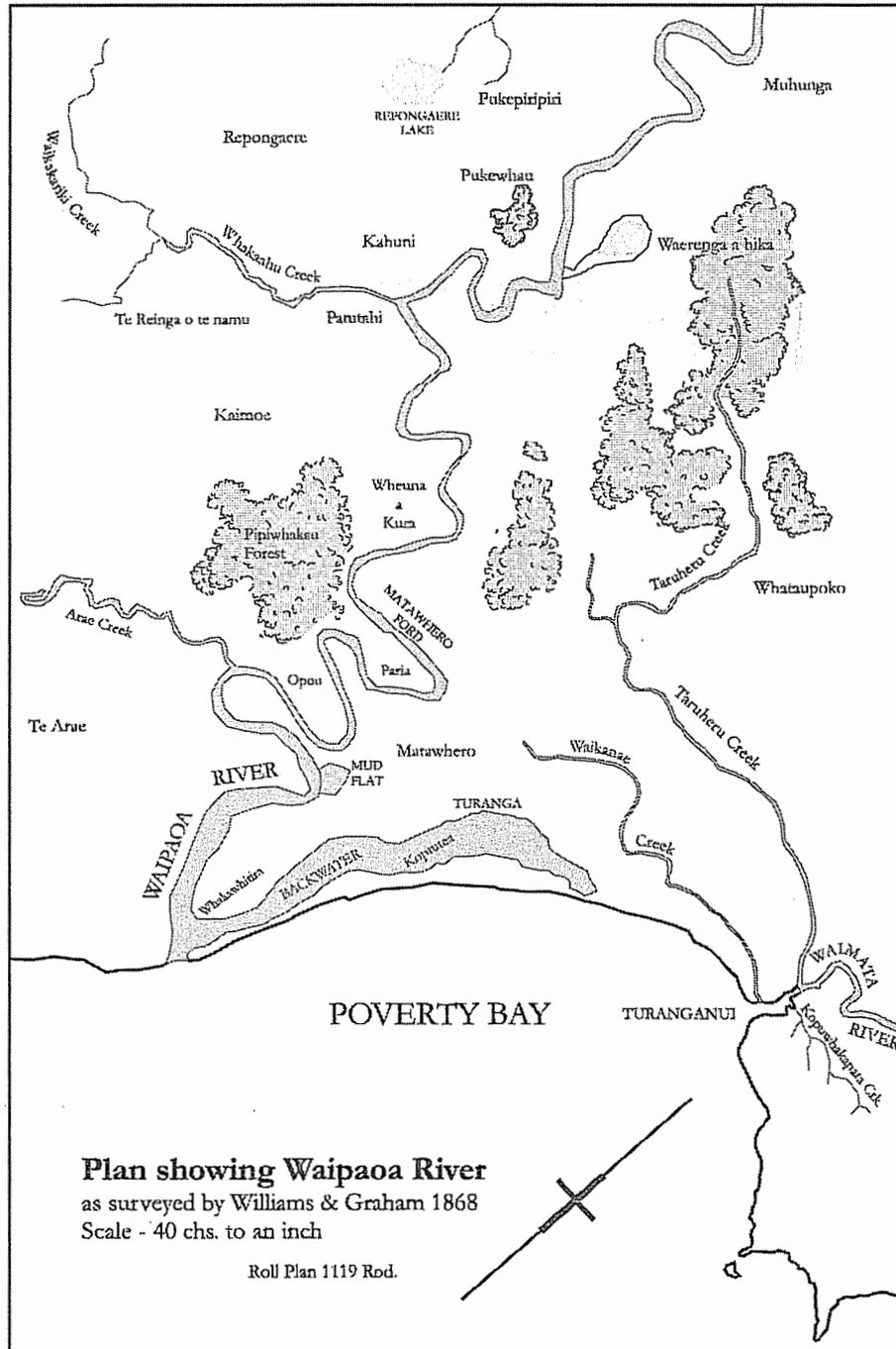
<sup>21</sup> Clarkson and Clarkson 1991, p7.

<sup>22</sup> Leathwick *et al* 1995.

<sup>23</sup> Page *et al* 2000.

<sup>24</sup> Allsop 1973, p19.

Figure 2.5 – Remnants of native forest on the Poverty Bay flats, 1868



<sup>25</sup> Pullar 1955, p34.

## Traditional Use

Although it is not within the scope of this report to give a detailed description of the traditional use of the forest resource, a brief account is provided here so that the impacts of forest clearance on Maori can be understood in context. The forest was not solely a food gathering area, but was also a store of resources used in many arenas of Maori life from cosmetics to medicines<sup>26</sup>. Residents of the Mangatu area traditionally traded logs for waka which were often built on site in the hills. Evidence to a 1918 Native Land Court hearing to establish ownership of the Mangatu Blocks states that other hapu from neighbouring areas would often visit the area to obtain totara logs for waka<sup>27</sup>. Flax, although not usually part of the forest ecosystem, and, more commonly, kiekie were also widely used for a number of tasks including weaving for kete, decorations and for medicinal purposes<sup>28</sup>.

These quotes from interviews with key tangata whenua representatives attest to the local importance of indigenous forests as resource spaces:

Those lot ate a lot of fish, caught mainly from the Waipaoa – up from the river mouth – and also eels and whitebait from Te Arai [River]. But, I reckon they caught a lot of birds and berries from the bush right up the Arai valley. That's what I was told. Families would make a family trip up the river to where it comes out of the hills in search of tutu and tawhara and sometimes kaka. In the bush down here [near Manutuke] there were plenty of keruru but they would go further for kaka<sup>29</sup>.

When I was a kid the Pipiwahakao forest provided for many of my family's needs: It was our supermarket, you see. I'd go there and trap birds – keruru especially. We'd set up traps by bending branches and tying them down with string... Wait, wait, wait some more, then... dinner. At other times of the year, we'd collect kiekie leaves – the inner ones which are whiter, just like you'd go for the heart of a good lettuce. We call that tawhara. I'd collect tutu and drain the juices out so my mother could make a dessert out of it with karengo to set it. There were all sorts of berries and fruits which could be collected there. Even in the 1960s, those foods were important as [a] supplement to shop food. How much more important those forests must have been before there were shops<sup>30</sup>.

Here [at Mangatu kainga] there were tuna [eel] in the river, but the people were a long way from the sea. The way I understand it, those people would go down to the sea in summer and fish and eat hard out for a while. For most of the year, though, they were dependent on finding food from the bush. Pigeons were eaten in great number, but the [Polynesian] rat was a very

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<sup>26</sup> "An early Gisborne publication on botanical art." – Paper presented for the Gisborne Philosophical Society, 11.4.1959 (GisMUS VF-Natural History: Botany).

<sup>27</sup> "Report of 1881 hearing: canoes." – 15.8.1918 (45 Gisborne MB 345).

<sup>28</sup> "Harakeke." – S. Steele and G. Walls, 1988 (GisMUS VF-Natural History: Botany).

<sup>29</sup> Pers. comm. Darcy Ria.

<sup>30</sup> Pers. comm. Tom Smiler.

important food source. If we couldn't have caught rats and pigeons from the bush, it would have been hard for the community like there was here to have survived<sup>31</sup>.

These three statements – from kaumatua who represent a cross-section of iwi in the casebook area – show that, while local Maori were predominantly a coastal people, they were also highly dependent on forest resources.

With deforestation, most of the species which were used extensively by Maori have declined, in many cases to a level which has endangered their local presence. In the Gisborne region, such avifauna as weka, kaka and keruru were plentiful at the beginning of Pakeha settlement and, historically, this was a much admired feature of the area<sup>32</sup>. However, widespread forest clearance has resulted in habitat destruction and the population of indigenous avifauna in the region has markedly declined<sup>33</sup>. The weka provides the most extreme example of local species eradication through habitat loss and the pressure of settlement. Weka were once plentiful in the Gisborne area, which was as recently as the mid-1980s considered to be one of the last significant breeding areas for the bird in the North Island<sup>34</sup>. However, the effects of habitat destruction and predation by domestic dogs and wild cats has had a significant impact on the number of weka in the casebook area<sup>35</sup>. The impact of opossums, pigs and goats on the habitat of local indigenous avifauna has also been significant<sup>36</sup>. Within living memory, many tangata whenua can recall feasts of locally caught weka. Now, however, their consumption is prohibited and, in any case, it is becoming increasingly difficult to find the bird in concentrated numbers.

## Maori forest clearance and cultivation

Maori inhabitants of the Poverty Bay flats were industrious horticulturists who employed sophisticated techniques to grow a reasonably broad range of crops<sup>37</sup>. In the context of pre-colonial needs, the Waipaoa valley was considered to be an area of "extraordinary horticultural potential<sup>38</sup>" and was used extensively by a number of hapu and iwi. Areas which could sustain cultivation were carefully organised so that each hapu and whanau managed areas assigned for their own use<sup>39</sup>. Horticulture was mainly practised on the "naturally fertile soils such as river levees or the near-level slopes at the foot of hills<sup>40</sup>." It appears that the relatively steeper slopes of the

<sup>31</sup> Pers. comm. Rutene Irwin.

<sup>32</sup> Davies 1913; Fowler 1974; Mackay 1927, p165.

<sup>33</sup> Clarkson and Clarkson 1991, p8; Henderson and Ongley 1920, p3.

<sup>34</sup> "Wekas: Proposed transfer from Poverty Bay, Wildlife Service." – no date (IA 1 49/19/3P1).

<sup>35</sup> "Weka release brings back memories of a once plentiful breed." – Gisborne Herald, p3, 17.10.1998 (GisMUS VF-Natural History: Zoology).

<sup>36</sup> Rasch 1989, p8.

<sup>37</sup> "Example set 700 years ago." – Gisborne Herald, 15.4.1987 (GisMUS VF-Maori); Jones 1988; Salmond 1991, p119.

<sup>38</sup> Jones 1988, p3.

<sup>39</sup> Murton 1969, p18.

<sup>40</sup> Jones 1988, p4.

foothills were used for root crops only when required<sup>41</sup>, such as times of flood which prevented cultivation on the flatter ground. The forest cover on the steeper land was heavier and, therefore, more difficult to clear. The soil was also less fertile and, consequently, was not extensively used for cultivation.

In pre-colonial times, terraces and levees either side of the Waipaoa River were important sites of settlement and cultivation. Waihirere soils – which were to be found on the higher, flood-free terraces – were the most important for traditional horticulture<sup>42</sup>. Closer to the river, Matawhero soils were not as desirable but were used for cultivation in drier periods<sup>43</sup>. Cultivation also took place on such alluvial fans as that found at the confluence of the Te Arai and Waipaoa Rivers. In addition to soil type, climate and aspect were important factors in determining which areas were cleared for cultivation. Locations which were free of frost, such as the area south of Ormond, were in high demand. Further up the valley, the risk of frost was greater, so most of the land clearance carried out by Maori was in the lowlands, or on slopes with a north facing aspect<sup>44</sup>.

As a result of the natural geography of the river valleys, two types of horticulture – each with different implications for forest removal – emerged: permanent or semi-permanent gardens on the flatter land and shifting horticulture on the lower portions of valley slopes and higher terraces. According to archaeological evidence, swidden techniques were used on these hill slopes, especially where soil fertility was expected to be poor<sup>45</sup>. Under this form of management, areas were cleared of vegetation through firing and the seed for one crop rotation was planted in the ash. Following production and harvest, a new area would have been cleared and planted leaving the preceding plot to regenerate<sup>46</sup>. Pullar believed that evidence of this form of horticulture explained the patches of manuka and kanuka on the lower portions of slopes in the Poverty Bay area and along the high banks of the Waipaoa and Te Arai Rivers<sup>47</sup>. These species are early successional, so repopulate cultivated lands after their abandonment.

As a result of these forms of horticulture, Murton contended that:

It is almost certain that the large Maori population residing on the lowlands of the district had destroyed much of this vegetation when clearing land for cultivation. Accounts of bushfires were numerous among the Maoris and several large areas of bush were destroyed after 1830<sup>48</sup>.

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<sup>41</sup> *Ibid.*, p8.

<sup>42</sup> *Ibid.*, p7.

<sup>43</sup> *Ibid.*, p8.

<sup>44</sup> *Ibid.*, p12.

<sup>45</sup> *Ibid.*, p8.

<sup>46</sup> *Ibid.*, p4.

<sup>47</sup> Pullar 1962, p12.

<sup>48</sup> Murton 1969, p17.

Likewise, Jones suggested that a podocarp forest which covered the wetter and heavier ground on the flats was destroyed (apart from a few remnants, such as that at the Pakowhai Scenic Reserve) prior to European arrival<sup>49</sup>. It is unlikely that all of this area was cleared by Maori because it would not have provided good soil for the cultivation of kumara. While some of this forest appears to have been cleared through human intervention, other areas undoubtedly succumbed to the changing course of the Waipaoa River and the progressive siltation of its flood plain<sup>50</sup>. The Waipaoa is a dynamic river and with tectonic uplift and, subsequently, many slips in its headwaters, it carried a high sediment load during storm events<sup>51</sup>. Floodwaters carrying this sediment would have inhibited the regeneration of trees, leading to the non-replacement of forest which died at advanced states of maturity. The large areas of such quick-growing species as Manuka and Kanuka present on the flats at the time of European arrival and settlement attest to the periodic impact of the river on lowland vegetation<sup>52</sup>.

However, this should not be seen as discounting the significant impact of Maori on lowland vegetation. It would be historically inaccurate to suggest that the removal of native trees was solely carried out by Pakeha settlers. Maori clearance of land was evident in the colonial period as well. William Williams expressed dismay at the amount of land being cleared in 1847, stating that the "natives have spread fire to an alarming extent. Square miles may be seen on fire at a glance<sup>53</sup>." While there is no doubt, therefore, that Maori contributed to the deforestation of the Poverty Bay flats, the extent of their forest clearance activities was much less significant than what was to follow. The impact of Maori settlement on native vegetation was limited to lowland and coastal areas, while the influence of Pakeha settlement was much more widespread<sup>54</sup>. More importantly, forest clearance was a discretionary *right* of local leaders – an expression of their rangatiratanga over their land. As part of this discretion, some areas of native bush were retained as food and material gathering areas, while others were cleared to become gardens<sup>55</sup>. Perhaps the important difference between Pakeha clearance and that of settler society was that there was no such discretion by the latter group.

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<sup>49</sup> Jones 1988.

<sup>50</sup> "The pre-settlement forest coverage of the Poverty Bay flats." – R. Cresswell to A. Pullar. (GisMUS Pullar).

<sup>51</sup> Pullar 1965; Pullar and Penhale 1970.

<sup>52</sup> Murton 1969, p17.

<sup>53</sup> "Notes for Challenge and Response." – J. Thompson, p5 (GisMUS Oliver and Thompson Papers).

<sup>54</sup> Clarkson and Regnier 1989.

<sup>55</sup> Pers. comm. Tom Smiler. The maintenance of small patches of bush as food gathering areas, wherein fire was deliberately withheld, was common throughout New Zealand (Park 1995).

## 2.2 Forest clearance in the colonial period

While the Maori cleared much of the coast and lower slopes, it was left to the Europeans to carry out the destruction of the native vegetation on a much larger scale<sup>56</sup>.

Information relating to forest clearance in the East Coast region is scarce, even for the time period after 1840. While the clearance and settlement of Crown land has been adequately documented, private or Maori owned land tended to be cleared without official involvement, yielding few records. If land could be cleared through timber production, settlers preferred to sell the cutting rights to millers who would clear the land quickly, allowing for an early start for agricultural production. In areas where trees could not be converted into an accessible and marketable timber resource, forests would be felled and burnt in order to yield pasture for sheep production<sup>57</sup>. In this section, policies which promoted forest clearance on both Crown and private land are reviewed. These policies have had lasting impacts in the Gisborne region because, with the potential for land instability, it was unwise to convert the upland regions of major river valleys to pastoral farms. As a result, the outcomes of Crown policies for converting indigenous forest to agricultural uses have been increased rates of upland erosion, and downstream flooding and siltation (see Chapter 3).

### Government policy

It is important to recognise that the clearance of forest from the headwaters of the Waipaoa catchment could not have taken place without central government encouragement. Early forest policies in New Zealand were almost entirely oriented towards the *clearance* of forest to facilitate the expansion of pastoral agriculture. In most cases, indigenous vegetation was rated as little more than a barrier to settlement<sup>58</sup>. The forest policy of the Lands and Survey Department, which administered Crown land prior to its disposal to settlers, fully reflected this view. The Surveyor General was quoted in 1904 as saying that it was:

...necessary to retain for the extension of settlement all areas of bush lands suitable for the purpose, and to consider conversion of forests, except where milling timber is involved or special beauty spots are to be found, as secondary to the profitable occupation and utilisation of the land<sup>59</sup>.

In the North Island, where forest resources were regarded as infinite<sup>60</sup>, land was cleared at an exceptionally fast rate with thousands of metres of utilisable timber being felled and burned in order to get to the soil<sup>61</sup>. In many respects, therefore, the

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<sup>56</sup> Rasch 1989, p6.

<sup>57</sup> Roche 1990, p300.

<sup>58</sup> *Ibid.*, p299.

<sup>59</sup> Conway 1974, p4.

<sup>60</sup> Roche 1987, p38.

deforestation of the Waipaoa catchment mimics closely the pattern which occurred elsewhere in the North Island. However, the local outcomes of forest clearance were more significant in terms of downstream environmental quality in the Gisborne case, suggesting that more care should have been taken in managing the local forest resource.

There were two types of government policy which impacted upon the rate of forest clearance: policies for timber harvesting and policies for land clearance and utilisation. Timber production was a secondary concern of the government and was given much less attention than forest clearance for pasture. Yet, central government established a policy framework which actively encouraged the felling of trees for timber. From the mid-1840s, a licensing system was established under which a milling permit could be purchased for five pounds to fell any amount of timber on a block of land, the area of which was usually defined only in vague terms. Extended in the 1860s and 1870s, the objective of this system remained to facilitate the harvest of indigenous forest and there were essentially no controls on logging during the 19<sup>th</sup> Century and few thereafter<sup>62</sup>. Although the New Zealand Forests Act 1874 represented an attempt to preserve forest in environmentally marginal landscapes, its scope was limited and, ultimately, ineffectual. Given that some of the primary objectives of this Act related to soil conservation, it is unfortunate that it was not applied in the upland area of the casebook area, wherein erosional problems were potentially more serious than other parts of the country.

The government's position on timber production and forest retention was no better encapsulated than in the findings of the Royal Commission on Forestry which investigated options for indigenous forest in the early 1900s. The main recommendation of the Commission was the "forsaking of indigenous forests for plantations<sup>63</sup>" to avert the possibility of a future timber crisis. The Commissioners argued that exotic timber grew faster and was easier to establish and recommended that:

No forest land, except if it be required for the special purposes of a climatic or scenic reserve and which is suitable for farm land, shall be permitted to remain under forest if it can be occupied and resided upon<sup>64</sup>...

Until the 1940s, there were effectively no Acts of parliament which prevented landowners from clearing forest on their property<sup>65</sup>. The introduction of the Soil Conservation and Rivers Control Act in 1941 provided some protection of erosion prone land by prohibiting the clearance of land steeper than 25 degrees. Such legislation as this came too late for the Gisborne area, however, where forest clearance and timber production reached a peak around 1900.

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<sup>61</sup> Roche 1990, p300; Cumberland 1944, p161.

<sup>62</sup> Roche 1990, p301.

<sup>63</sup> Roche 1987, p104.

<sup>64</sup> "The report of the royal commission on forestry." – AJHR 1913 C12 XX.

<sup>65</sup> Wilson 1992, p34.

Land development legislation and incentives enacted before the 1880s were directed towards developing and transferring Crown land into individual title. The Land Act of 1877 introduced a deferred payment system to encourage settlers who could not afford to buy land outright from the Crown. This system allowed settlers to purchase development rights for land for a modest deposit of 1/20<sup>th</sup> of the land price, with the balance to be paid over ten years to obtain freehold title. Development conditions – principally the ‘breaking-in’ of land – had to be fulfilled within six years for freehold title to be granted at the end of the ten year period<sup>66</sup>. Participants in this scheme received additional Crown support in the form of subsidised labour, tools and grass seed<sup>67</sup>. The combination of subsidised inputs and the requirements for land transformation led to the indiscriminate clearance of land, irrespective of whether or not the land had the capacity to support pastoral agriculture.

Settlement and land clearance reached the Waipaoa headwaters around the time of the Land Act 1892<sup>68</sup>, which introduced further subsidies for pastoral conversion. Up to that time, the upland portion of the Waipaoa was considered to be too inaccessible and steep to develop pasture. Technological advancements in bush clearance and seed dispersal, along with new markets overseas and the development of refrigerated sheep exporting, led to increasing pressure to clear the area<sup>69</sup>. In conjunction with these developments, farm settlement schemes and government advances to settlers provided cheap labour and low-interest credit for improvement capital. In other words, programmes such as these guaranteed secure conditions for landowners so that they could plan for the expensive task of land clearance and development. Without the subsidies, the mass clearances which occurred in the casebook area between 1880 and 1920 would not have eventuated<sup>70</sup>. These forms of subsidisation continued well into the 20<sup>th</sup> Century. In Poverty Bay, they were utilised extensively by farmers in the 1930s and 1940s in order to pay for the clearance of scrub and regrowth and to provide for such inputs as fertilisers<sup>71</sup>.

Following the First World War, settlement schemes for returning servicemen further accelerated forest clearance, and were especially prevalent on marginal land<sup>72</sup>. Similar programmes were implemented after the Second World War, especially under the Land Development Scheme administered by the Department of Lands<sup>73</sup>. In the Gisborne area, this scheme was often applied to regenerating land which had earlier been abandoned because of regrowth or erosion<sup>74</sup>. Another source of post-

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<sup>66</sup> Wilson 1992, p31.

<sup>67</sup> *Ibid.*, p28.

<sup>68</sup> Gage and Black 1979, p9.

<sup>69</sup> Lands and Survey 1980, p6.

<sup>70</sup> “The East Coast region: report on land utilisation survey.” – p45, Department of Lands and Survey 1964 (L&S 22/4320/7).

<sup>71</sup> “Tamatū.” – no author, no date (GisMUS Pullar Papers).

<sup>72</sup> Roche 1987, p99.

<sup>73</sup> Mackenzie 1979, p3.

War development capital to have a marked effect in the areas was the Marginal Lands Loans (MLL) scheme which was established by central government in the 1950s. Marginal land such as that in the Waipaoa headwaters was commonly brought into production through these loans, because they were only available for land which other lenders considered too risk prone for development<sup>75</sup>.

Even as late as the 1970s, central government continued to promote increased production on this type of land through subsidisation. The Livestock Incentive Scheme introduced in 1976 increased stock numbers through tax incentives<sup>76</sup>, while the Land Development Encouragement Loan Scheme (LDELS), which came two years later, offered interest free and suspensory loans to farmers if land development targets could be sustained<sup>77</sup>. There were many subscribers to these scheme in the East Coast<sup>78</sup>. Details are only available for the Gisborne and Hawke's Bay regions combined but, between 1976 and 1983, 26,200ha of formerly unproductive land was developed to a productive level using capital from the LDELS<sup>79</sup>. On the East Coast, while assistance was available for the development of the land, keeping it productive proved to be beyond the means of many landowners. Much of the land under the LDEL has since reverted to bush and bracken for the third or fourth time in 100 years<sup>80</sup>. Between 1975 and 1983, tax incentives to increase production also operated as part of government policy. Through the tax incentive structure, the Crown created an economic situation in which it was profitable to clear land well beyond its capabilities<sup>81</sup>.

The subsidisation schemes of central government were matched by a substantive lack of protection afforded by the Cook County District Scheme and other local planning mechanisms. Even when the erosional outcomes of forest clearance became manifest, the County's rules still allowed for the logging of indigenous forest on privately owned land in the upper reaches of the Waipaoa catchment<sup>82</sup>. As will be shown in Chapter 3, the combination of weak forms of local protection and government encouragement of the expansion of agriculture led to a significant degradation of the Gisborne environment. Following the destructive outcomes of Cyclone Bola in 1988, the Minister of Forests at the time, Peter Tapsell, commented that:

<sup>74</sup> *Ibid.*, p6.

<sup>75</sup> Roche 1987, p32.

<sup>76</sup> Rayner 1990, p17.

<sup>77</sup> Tyler and Lattimore 1990, p66.

<sup>78</sup> Ward 1984, p185.

<sup>79</sup> *Ibid.*

<sup>80</sup> *Ibid.*, p186.

<sup>81</sup> Wilson 1992, p33.

<sup>82</sup> "Logging operations in the Mangatu Block is major area of concern." – Department of Internal Affairs, Rotorua, to Senior Wildlife Officer, Gisborne, 7.12.1979 (WS 11/21/10).

It was an irony that the very subsidies that were introduced 10 to 30 years ago to assist with the deforestation and grassing of the headlands of the main rivers, were in part, at least, responsible for some of the flooding on the lowland today<sup>83</sup>.

The Crown's role in determining the environmental fate of the Waipaoa catchment is important. The mechanisms which were established to address the outcomes of forest clearance – the Waipaoa River Flood Control Scheme (Chapter 4) and the afforestation project which became known as the Mangatu State Forest (Chapter 5) – impacted significantly on resource spaces which were important to Maori. If the Crown had been more discerning in applying its land development policies, such mitigation measures as the flood control scheme may not have been required.

### Clearance for pastoral agriculture

The importance of Crown policy for forest clearance in the casebook area can be seen in the rapid rate at which local forest was depleted after the introduction of land development schemes during the latter quarter of the 19<sup>th</sup> Century. Once land was surveyed, felling contracts were let soon after. The general method of clearance follows the specifications laid out in the following contract for land in the upper Waipaoa catchment:

(1) All timber 3 ft in diameter, 3ft from ground to be felled clear of stumps. All tawas, Whitey Wood, Broadleaf, Tawahare, Konini, Pungas and Makomako to be felled irrespective of size...(3) Underscrub to be cleared away clean at stump or root...(5) Contractor can fell individual trees greater than 3ft if they are considered to be growing ungainly... (9) All timber as far as possible to be felled down hill on all ridges<sup>84</sup>.

The work was usually completed by gangs of up to 30 men. The groundcover and vines were slashed or chopped first, then larger trees were lowered to crush material which had already been felled. Cleared areas were left to dry over the summer then fired in early autumn<sup>85</sup>. The fires moved fast across the landscape and it was not uncommon for 1000ha or more to be burnt in as little as three hours. The smoke from these fires often remained in the hills and around Gisborne Borough for several days following burn offs<sup>86</sup>. With fires of this size, and without adequate regulations to control opportunistic landowners, burn offs often escaped into adjacent stands of indigenous forest. While these results were sometimes unintentional, the outcome was probably seen as an advantage, albeit short-lived. Fern and bracken often re-established itself before pasture could be sown. This was also the case at the sites of controlled burn offs. Additional attempts to burn this regrowth at a later date were also known to become unmanageable<sup>87</sup>, producing a cycle of uncon-

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<sup>83</sup> "Convinced of forest value as protection." – Gisborne Herald, 19.3.1988 (GisMUS VF-Forestry).

<sup>84</sup> "Copies of bushfelling agreements." – Maori lands folio, no date (GisMUS 77-116).

<sup>85</sup> Lands and Survey 1964, p38.

<sup>86</sup> Murton 1969, p112.

trolled fires. Accidental fires resulted in a significant reduction of the two remaining lowland forests of any size – Pipiwhakao and Makauri – in 1865 and 1878 respectively<sup>88</sup>.

Figure 2.6 – Burn off at Arowhana Station 1910<sup>89</sup>



In the upland areas, only small amounts of the fallen timber were utilised, mostly for fence posts and buildings. The remote location of many blocks meant that the cost of removing the logs for timber was uneconomic. As a result, almost all of the felled timber was burnt<sup>90</sup>, with landowners being more interested in the apparent fertility of the newly cleared land. Initial carrying capacity was approximately 11 sheep per hectare<sup>91</sup>. However, these rates were short-lived and soil fertility declined rapidly after the first two years, never reaching the same heights even with the advent of aerial topdressing<sup>92</sup>. In part, this was a result of low natural fertility which had been temporarily masked by the addition of organic matter and ash through burning. It was also a result of the vigorous regrowth of native and exotic species<sup>93</sup>. Bracken and ferns grew rapidly on cleared areas, as well as thistles and other weeds. Heavy stocking rates were used to keep the regrowth down, but this only further reduced soil fertility<sup>94</sup>. Run holders absorbed the decline in carrying capacity

<sup>87</sup> Gage and Black 1979, p9.

<sup>88</sup> Clarkson and Clarkson 1991, p7.

<sup>89</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>90</sup> Beaufoy 1997, p149; Howard 1976, p5.

<sup>91</sup> Lands and Survey 1964.

<sup>92</sup> Akehurst 1963, p3.

<sup>93</sup> Residents of Te Karaka, to Hon. K.S. Williams, M.P, March 1928 (L&S 31/33).

<sup>94</sup> Pullar 1962, p9.

through further expanding pasture at the expense of bush, meaning that the process of forest clearance was self-perpetuating<sup>95</sup>.

Figure 2.7 – The landscape of forest clearance: Arowhana Station in 1956<sup>96</sup>



European settlement for sheep farming started in the 1830s<sup>97</sup>. However, it was not until the late 1870s that station-sized properties were acquired for pastoral agriculture on a large scale. Between 1871 and 1875, in particular, European settlement advanced rapidly in the area. Sheep farming gradually became commonplace in the low country and, thereafter, it extended to the inland hills which were slowly being developed for this purpose<sup>98</sup>. In the 1880s, an increasing number of Hawkes Bay farmers – who were skilled and experienced in bush clearance – arrived in Poverty Bay, accelerating the rate of forest removal<sup>99</sup>. The steeper hills surrounding Poverty Bay were cleared between 1880 and 1930<sup>100</sup>. This activity reached a peak at the turn of the century and declined slowly from about 1910<sup>101</sup>.

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<sup>95</sup> Allsop 1973.

<sup>96</sup> **Source:** Gisborne Museum and Arts Centre. The photograph shows charred tree trunks which remained after burning some 30-40 years earlier.

<sup>97</sup> Lands and Survey 1964.

<sup>98</sup> Murton 1969, p84; Pullar 1962, p9.

<sup>99</sup> "Breaking in land." – H.A. Hallas, Gisborne Times, October 1929 (GisMUS 71-109).

<sup>100</sup> Rasch 1989.

<sup>101</sup> Allsop 1973, p20; Lands and Survey 1964, p13, Mackay 1949, p318; Taylor *et al.* 1970, p9; Cumberland 1944, p164.

Figure 2.8 – Pastoral land cleared of forest cover, Arowhana Station, 1951<sup>102</sup>



Landowners typically completed clearance projects on an *ad hoc* basis and the task was dependent on funds available to the farm household. As a result, and because clearance typically transpired on private land, available information on the progress of bush clearance is incomplete. Apart from the Waipaoa headwaters, for which published records are more extensive, specific details of clearance are restricted to only a few properties. For example, a large portion of the Paritu block was purchased in 1868 and subsequently cleared, before being disposed of in smaller sections between 1912 and 1918<sup>103</sup>. In the Patutahi and Whareongaonga districts, the foothills were cleared by 1915, while upland areas of the blocks were felled for pasture development up until 1928<sup>104</sup>. Land around Muriwai was purchased before 1875. Prior to settlement the land had a coverage of dense bush on the inland areas which became more sparse towards the coast. By about 1900, most of the indigenous vegetation in the coastal areas had been cleared<sup>105</sup>. An area of 9700ha, which

<sup>102</sup>Source: Gisborne Museum and Arts Centre.

<sup>103</sup>“Lot 1 DP 2313 and 2315 Subdivision 5 Paritu Block. Lot 1 DP 1328 Subdivision 6 Paritu Block.” – No author, no date (GisMUS Pullar).

<sup>104</sup>“Tamateu.” – no author, no date (GisMUS Pullar).

<sup>105</sup>“Joan Robinson memoir.” – 1942 (GisMUS VF-Natural History: Botany).

covered most of the land between the Taruheru and Waimata rivers for a distance of about 22km up the Taruheru, was leased and cleared from 1866. Although the land was mostly fern, swamp and scrub, it took a number of years to bring it into production<sup>106</sup>.

The most significant land clearances were those in the headwaters of the Waipaoa because in these areas the outcome of clearance was, inevitably, increased rates of erosion. By about 1920, almost all of the significant stands of native trees had been destroyed<sup>107</sup>. In the upper reaches of the Waipaoa, the river flats still held some timber in the 1930s but aggradation of the river bed, which was already occurring in the area as a result of headwater erosion, gradually removed any remaining trees. Some areas of the Mangatu Blocks contained untouched forest areas which were not exploited for another 20 years<sup>108</sup>, with some isolated patches remaining as late as 1980<sup>109</sup>. However, most of the upper reaches of the catchment were deforested by 1920, with almost all of this clearance occurring in the first decades of the 20<sup>th</sup> Century. Because of the isolated location, and its assorted history of ownership and management, the area went through stages of development which appeared to be dependent on the outlook of the agency in control of the land at the time. The progress of forest clearance was, therefore, intermittent, but it was, nevertheless, comprehensive.

Clearance for timber production was generally less important than clearance for farming. Pit sawing began in Poverty Bay before NZ came under British rule, supplying the timber requirements of Sydney. The Pipiwahakao forest was exploited for this purpose until it was partly destroyed by fire in 1865. The Makauri forest around Manutuke and Ormond was also valued as a timber resource<sup>110</sup>. Up until at least 1876, large patches of bush, mostly kahikatea with some matai and puriri, remained in this area<sup>111</sup>. In 1872, however, the first sawmill began operation in the Makauri area, extracting kahikatea for butter boxes. The mill did not last long as it was destroyed by fire in 1878, along with a large area of the surrounding kahikatea forest<sup>112</sup>. At least two other mills producing kahikatea operated in the area around this time, so clearance of the remaining kahikatea stands on the flats was rapid<sup>113</sup>. Several mills were located on the track between Mangatu and Puhatikotiko to take advantage of the reasonable stands of timber the road passed. Around 1900, the area behind Te Karaka was also milled for local timber supplies and, in particular, for the inland railway.

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<sup>106</sup> Mackay 1927, p87.

<sup>107</sup> Henderson and Ongley 1920, p2.

<sup>108</sup> "History of Mangatu lands." – E. Hooper, Secretary, Mangatu Blocks 1, 3 & 4 Inc. (MA Mangatu W).

<sup>109</sup> "100% appraisal Lot 17a Mangatu Blocks." – District Forest Ranger NZFS, Gisborne, to Conservator of Forests, NZFS, Rotorua, 28.10.1980 (DoC 18/2/81/17a).

<sup>110</sup> Mackay 1949, p330.

<sup>111</sup> Allingham 1959.

<sup>112</sup> Hatten 1969, p52.

<sup>113</sup> Murton 1969, p103.

Figure 2.9 – Timber milling by the East Coast Timber Co., 1905



### Maori land administration and its effect on forest clearance

Given the ecological and strategic significance of the upper reaches of the Waipaoa, where forest cover provided the best defence against erosion, the encouragement of deforestation there is of particular importance. Perhaps ironically, the actions of a Crown agent who was appointed to assist local Maori in *protecting* their land accelerated significantly the clearance of native forest in the area. The role of the East Coast Commissioner in the management of Mangatu Blocks 1-6 served to hasten the transformation of bush into pasture on land which formed a substantial proportion of the upper catchment. While some of this land was alienated by lease through the actions of the New Zealand Native Land Settlement Company (NZNLSC), much of it was cleared as a result of the management of East Coast Native Trust (ECNT) and various East Coast Commissioners (ECC)<sup>114</sup>.

<sup>114</sup> Alan Ward's 1958 thesis, *The History of the East Coast Maori Trust*, covers the history of both of these institutions and the following represents a summary of his findings about land development.

*Figure 2.10 – Salvage of timber after bush clearance, Maungahaumia 1909<sup>115</sup>*



Specific attention is directed to this issue for two reasons. First, it is shown in Chapter 5 that agencies of environmental regulation had little faith in the capacity of Maori owners to act as environmentally conscious farmers. A fuller understanding of the historical background to environmental changes in the upland parts of the Waipaoa is therefore required. Second, the transformation of the upper Waipaoa provides an important case study of the way in which social, administrative and environmental issues interacted. Tangata whenua were often forced to remove indigenous forest by an administrative structure for land which was imposed on them. In this regard, there developed a vicious cycle between landowner debt and deforestation on Maori land which should be recognised in evaluations of environmental transformation in the area.

The role of such figures as Wi Pere in the NZNLSC will be covered elsewhere in casebook evidence, so it will be mentioned only briefly in this report. In short, Wi Pere's influence through tribal rank and as a significant shareholder in Mangatu blocks delivered approximately 66,000ha of Mangatu land to the NZNLSC in 1883<sup>116</sup>. Of this land, Mangatu 5 & 6 blocks (16000ha) were used to secure development capital from the Bank of New Zealand. Many of the goals of NZNLSC

<sup>115</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>116</sup> Ward 1958, p202.

projects were, in retrospect, unattainable, resulting in severe financial difficulties for the company. Mangatu No. 2 (4600ha) was sold in 1893 to pay surveying costs which the company had incurred<sup>117</sup>. After the collapse of the NZNLSC, the debt burden of mortgages was placed back on the owners of land which had not been sold by the company. In order to avert certain foreclosure on these and other lands in the area, the Crown formed the East Coast Native Trust to manage the land and repay the debts. Under this management regime, Mangatu 5 & 6 were subdivided and sold between 1913 to 1930<sup>118</sup>. Much of the forest on these latter properties was quickly and indiscriminately removed after sale.

The Mangatu 1, 3 & 4 blocks, although vested in the NZNLSC, were made inalienable by the Native Land Court except by sale to the Crown or through lease for not more than 21 years<sup>119</sup>. As a result, the land was returned to the owners rather than to the ECNT upon the demise of the NZNLSC. After much governmental debate, the owners were given the chance to develop and farm the blocks as an incorporation<sup>120</sup>. The incorporation encountered problems in developing its land and, in particular, its inability to raise development capital was a significant impediment to its objectives. This problem was averted by vesting the land in the name of the Commissioner of Crown Lands for Hawke's Bay, making him, along with Wi Pere and H.C. Jackson, trustees. Through the CCL, finance could be arranged from the public trustee. Under this arrangement, Waitangirua Station (5000ha) was sufficiently developed to provide returns by 1908. In addition, 24,000ha of Mangatu No. 1 Block had been leased to Europeans by 1918, leaving 3200ha of undeveloped land in the hands of the trustees<sup>121</sup>.

The continued mortgaging of these lands and other management practices dismayed some owners. Eventually, disagreements within the management committee and between it and the remaining trustees resulted in a breakdown in the incorporation's leadership. A new CCL for Hawke's Bay, who had been appointed in 1916, intervened and requested an inquiry into the finances of the trust and the management of the blocks<sup>122</sup>. A group of owners led by Karaitiana Ruru petitioned parliament in 1917 to raise awareness of the problem<sup>123</sup>. As a result, the powers of the trustees and management committee were suspended and transferred to the ECC as an interim measure while a more satisfactory administrative structure was developed. However, in practice, the ECC remained in control of management decisions for a considerable period of time<sup>124</sup>, wherein the land was substantially altered for production purposes.

<sup>117</sup> "History of Mangatu lands." – E. Hooper, Secretary, Mangatu Blocks 1, 3 & 4 Inc. (MA Mangatu W).

<sup>118</sup> Ward 1958, p130.

<sup>119</sup> *Ibid.*, p202.

<sup>120</sup> *Ibid.*, p207.

<sup>121</sup> AJHR 1918 G2, p4.

<sup>122</sup> *Ibid.*, p1.

<sup>123</sup> *Ibid.* p5.

<sup>124</sup> "Minutes of evidence (MA 26/7/34)." – cited in Ward 1958, p 218.

The land temporarily vested in the ECC consisted of Mangatu No. 1 Block (24 000ha of which were leased to Europeans), 5000ha of the partially developed Waitangirua Station, a block of 3200ha which were undeveloped and unleased, Mangatu No. 3 Block (1500ha) which was leased to Europeans<sup>125</sup>, and Mangatu No. 4 Block which, in 1918, contained 24,00ha of virgin bush. In addition to these holdings, the Wi Pere blocks (8000ha) were repurchased by the ECC for the Mangatu estate in 1927 for a total of £54, 000 after being leased to European farmers by the Wi Pere Trust.

Figure 2.11 – Timber production, Toamiti Block<sup>126</sup>



These rapidly changing structures of management indicate a variety of processes through which the land was originally cleared. Waitangirua Station was partially cleared and farmed under the authority of trustees and, subsequently, a Maori management committee which was established after incorporation in 1895<sup>127</sup>. The other large portion of the No. 1 Block was leased to settlers under this management regime, with the lessee breaking in most of the land<sup>128</sup>. While the Mangatu No. 3 Block was leased and cleared in a similar manner, it was returned with 560ha of virgin bush<sup>129</sup>. The Mangatu No. 4 block (2400ha) remained undeveloped in 1958<sup>130</sup>. However, cutting rights for timber had been sold by the ECC to the Gisborne Box Company in 1946 for £10,000<sup>131</sup>. There appears to have been only minimal involvement of the owners' management committee in such decisions by the ECC<sup>132</sup>. Land parcels from Mangatu 1, 3 & 4 which had been leased by the ECC were returned in varying states of development. At least some of the remaining bush on these parcels was cleared under the direction of the ECC for farming. The ECC was responsible for the clearance and development of land from 1917, but the exact size of the areas cleared or re-cleared during this time is unknown. In 1947, the ECC transferred management of 48,500ha of Mangatu 1, 3 & 4 blocks, consisting of 14 stocked and profitable stations, to an elected management committee<sup>133</sup>.

<sup>125</sup> AJHR 1918 G2, p4.

<sup>126</sup>Source: Gisborne Museum and Arts Centre.

<sup>127</sup> Ward 1958, p207.

<sup>128</sup> AJHR 1918 G2, p4; AJHR 1937 G4, p4

<sup>129</sup> "History of the Mangatu lands." – E. Hooper, Secretary, Mangatu Blocks 1, 3 & 4 Inc, 17.1.1958 (MA Mangatu W).

<sup>130</sup> *Ibid*.

<sup>131</sup> *Ibid*.

<sup>132</sup> "Minutes of evidence (MA 26/7/34)." – cited in Ward 1958, p 218.

In addition to this, a part of Mangatu Blocks 5 & 6 was returned to its original owners when W.D. Lysnar defaulted on payments for 5600ha of land he had purchased between 1914 and 1919<sup>134</sup>. This partially improved block was fully developed and farmed by the ECC under the ECNT as Mangaotane station until it was given back in the form of shares in a trust to Te Aitangi-a-Mahaki for losses they had incurred through the sale of their lands<sup>135</sup>. It is known that approximately 4000ha of Mangaotane Station was cleared and burnt around 1913-1914 while in the hands of W.D. Lysnar<sup>136</sup>. However, the ECC received it in a partially developed state and continued to clear and farm the land until its return to Te Aitangi-a-Mahaki. Arowhana Station, to the north of Mangaotane, had also been sold to W.D. Lysnar. An area of approximately 4000ha was apparently burnt in one year around the beginning of the 1900s<sup>137</sup>. Early botanical descriptions accounted for the clearance of a similarly sized area near Maungahaumia in 1906 and 1907<sup>138</sup>. This is undoubtedly land sold from the Mangatu 5 & 6 blocks, as was Mangaotane Station.

The ECC's determination to increase the revenue of blocks under his control through farming, rather than leasing<sup>139</sup>, was an attempt to repay debts at a faster rate. While this strategy was of financial benefit to the owners, the land eventually suffered as production was increased beyond its capacity. However, the state of the land could have conceivably been worse if it had been leased. Typical leases on the East Coast were for 21 years duration with no right of renewal or compensation agreement for 'improvements'<sup>140</sup>. In this context, lessees frequently exploited the land of its fertility, removing bush even on obviously unstable gullies and spurs. In the 1960s, at the height of concern about local soil erosion, it was noted that Maori owned land south of Tolaga Bay was generally in a better condition than that further north, which had predominantly been leased. This was attributed to the land management practices of the ECC<sup>141</sup>, highlighting that, at least in some ways, the ECC can be viewed as a responsible steward of Maori land. Nevertheless, it would be erroneous to attribute blame for headwater forest clearance to Maori owners of Mangatu Blocks or other Maori properties in the area. Lessees or the ECC tended to make the decisions on land clearance, rather than the owners themselves.

<sup>133</sup> AJHR 1947 G4.

<sup>134</sup> AJHR 1931 G3, p3.

<sup>135</sup> Daly 1997, p278.

<sup>136</sup> Allsop 1973.

<sup>137</sup> "Taming Poverty Bay's rogue river." – Gisborne Herald, 15.5.1957 (GisMUS VF-Natural Events).

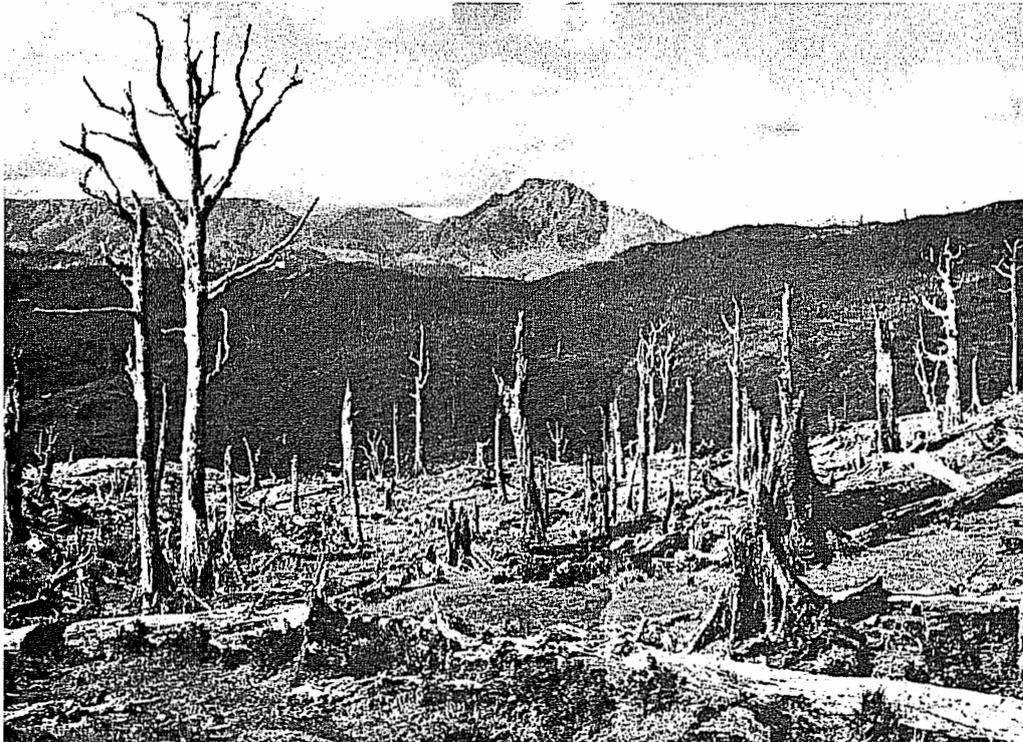
<sup>138</sup> McLean 1907, p519.

<sup>139</sup> *Ibid.*, p128.

<sup>140</sup> Lands and Survey 1964, p83.

<sup>141</sup> *Ibid.*, p82.

*Figure 2.12 – Burnover at Mangatu, c1912<sup>142</sup>*



It is also important to highlight the role of Maori land legislation in the decision-making on forest clearance. An institutional reluctance to lend money to Maori incorporations meant that the management committee was forced to vest its lands with the CCL for Hawkes Bay and use his position to obtain finance. In other situations, this reluctance often forced Maori landowners to sell some blocks of land in order to raise finance for land development. The incorporation mechanism came too late for these landowners<sup>143</sup>. The actions of the CCL and, eventually, the ECC were not always sanctioned by Maori owners and it would have been a far better situation if Maori had more clear lines of control over their land. Indubitably, the Crown's desire to open up land for settlement, and the legislative processes which facilitated this, resulted in forest clearance on areas which should have remained untouched for ecological and, perhaps, cultural reasons.

<sup>142</sup> Source: Gisborne Museum and Arts Centre.

<sup>143</sup> Ward 1984, p209.

## Erosion, valley infilling and flooding

**S**oil erosion has been an enduring feature of the landscape in the casebook area. Research has indicated that deep-seated erosion occurred on the steep hills inland from Poverty Bay prior to any anthropogenic interference<sup>1</sup>. Widespread clearance of indigenous forest for extensive pastoralism accelerated natural rates of erosion to levels greater than even those associated with natural disasters<sup>2</sup>. Subsequently, while land at the site of erosional activity has become severely degraded, the outcomes of this erosion have affected downstream areas through valley infilling and flooding. Historically, these areas, and the people who live in them, have adapted to such changes which were intrinsic components of a dynamic fluvial environment. Communal notions of land ownership allowed cultivators to relocate their activities when rivers altered their course. However, the ability of Maori to relo-

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<sup>1</sup> Akehurst 1963; Gibbs 1959; Hicks 1989.

<sup>2</sup> Pullar and Penhale 1970.

cate their activities in accordance with changing fluvial conditions has progressively diminished as western notions of land tenure became hegemonic and alienation of Maori land increased in magnitude. The rate of erosion and valley infilling has accelerated to such an extent that traditional forms of adaptation to environmental change have become ineffective and the Waipaoa flood control scheme is threatened.

This chapter examines the *impacts* of forest clearance and settlement. The rate of river channel infilling over the last 50 years far exceeds any previous rate of channel aggradation experienced in this region. Deposition of eroded sediment in river channels limits the ability of those channels to carry water. In addition, there has been a substantial decrease in the time between rainfall in the headwaters and the response of the river downstream. As a result, floods tend to peak earlier and with a more devastating impact. The combination of more rapid aggradation and a quicker response time for runoff has led to an increased impact of floods<sup>3</sup>. The outcome of these environmental changes for local Maori has been particularly severe. Sediment deposition and increased flooding have resulted in dramatic changes to Maori communities and the loss of traditional resource spaces. The increased levels of suspended sediment in river water have decreased water quality to a point where freshwater food sources, such as whitebait, eels and freshwater mussels – species which were once common in these waterways – are now difficult to find or are locally extinct<sup>4</sup>.

Figure 3.1 – Rilled hillslopes in the Waipaoa catchment



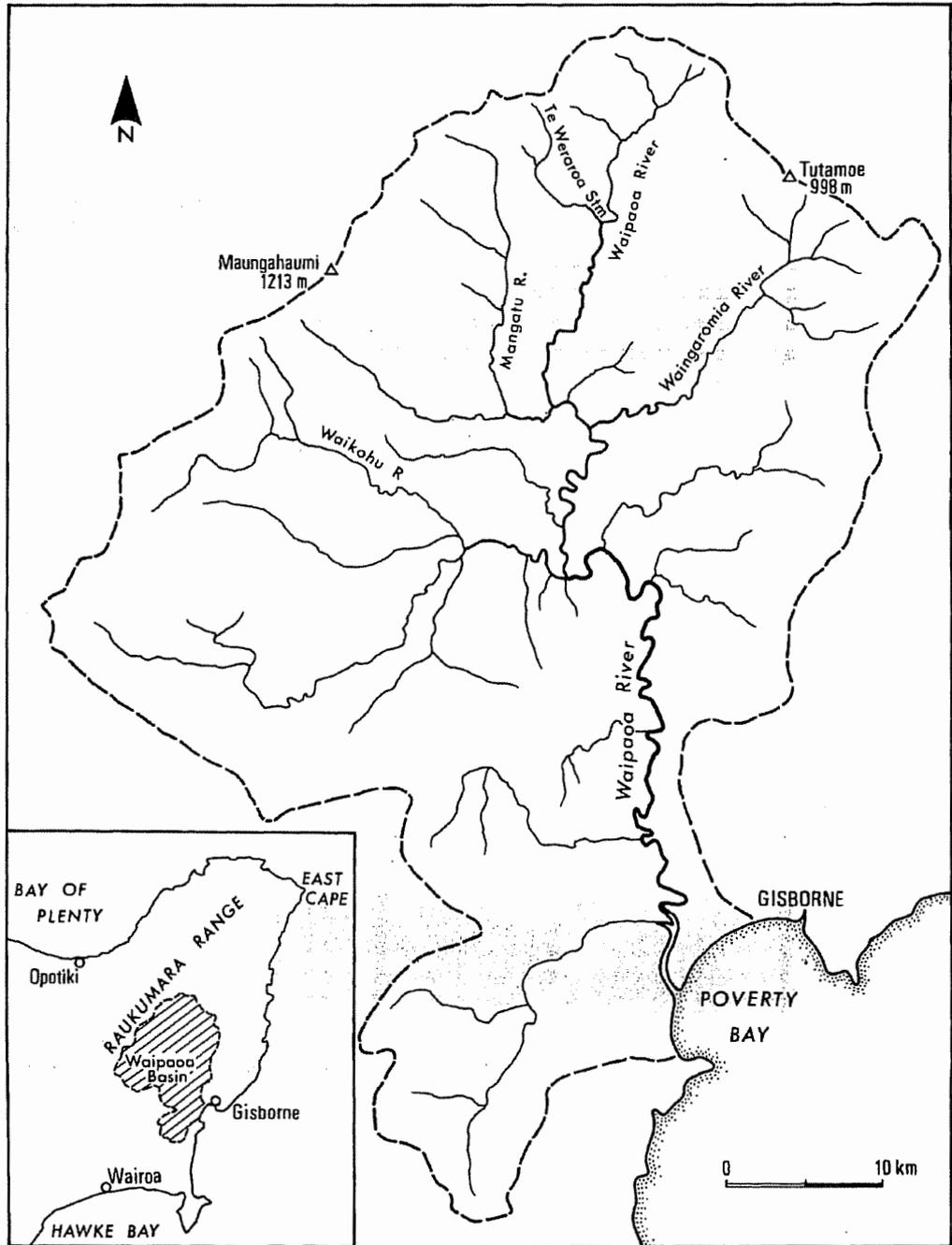
This picture may appear to depict a typical New Zealand pastoral landscape. Closer inspection, however, reveals hillslopes which are extensively rilled and unstable.

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<sup>3</sup> Akehurst, 1963.

<sup>4</sup> Smith 1977, p3; Howard 1976, p4.

Figure 3.2 – The Waipaoa catchment<sup>5</sup>



<sup>5</sup> Source: Williams 1980.

## 3.1 Land instability and erosion

### Soil movement prior to forest clearance

An analysis of erosion in the colonial period which is not placed in the geological context of pre-colonial and, even, pre-human levels of erosion would contravene the principles of good science. Research into the stability of this area has found that even under native vegetation cover, slope instability was an endemic component of local geology. Akehurst determined that the processes leading to slope instability have been relatively constant in this area over time:

...surface runoff with consequent slope instability...were comparatively rapid even when the water retaining capacity and infiltration rates of the soils were higher under a denser vegetation cover of forest species<sup>6</sup>.

Conversely, Gage and Black argued that the area was relatively stable prior to European settlement and that deforestation resulted in increased levels of erosion<sup>7</sup>. However, most studies of local erosion have argued that slope instability has been a part of the landscape for thousands of years, irrespective of the extent of forest cover<sup>8</sup>. The chief engineer of the Poverty Bay Catchment Board (PBCB) argued that even before Maori settlement "agents of erosion were in ascendancy by a small margin despite the natural cover<sup>9</sup>."

If this view is accepted, then the more important issue becomes whether or not erosion rates have increased markedly since European settlement. In the late 1950s, Gibbs – along with several of his contemporaries – developed what has become the most common theory for slope instability in the casebook area:

The native vegetation of the unstable slopes was forest and under that forest there were soil and rock movements similar to those of the present day. But the over-all rate of erosion was slower because primary movements were fewer and secondary effects (gullying) were slower over an equal period<sup>10</sup>.

The effects of pre-European land movement tended to be short lived: slips travelled *en masse* in blocks, allowing most of the forest cover on the mobile soil to survive. The bare earth exposed at the head of the slip was quickly revegetated through seed dispersal from the surrounding bush<sup>11</sup>. While erosion was a recurring feature of landscape processes when forest cover was widespread, the rate of erosion was, therefore, significantly slower than today.

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<sup>6</sup> Akehurst 1963, p45.

<sup>7</sup> Gage and Black, p3.

<sup>8</sup> Blaschke and Peterson 1994; Gibbs 1959; Akehurst 1963; Lands and Survey 1964; Taylor *et al.*, 1970; Pullar 1959; Hicks 1989; Pullar and Penhale 1970.

<sup>9</sup> Lands and Survey 1964, p27.

<sup>10</sup> Gibbs 1959, p16.

<sup>11</sup> Pullar 1956, p678.

Several physical attributes of the headwaters of major catchments need to be discussed to explain why the region has always been a site of land instability. Local geology, topography and climate, in particular, are the underlying components of slope instability in the area. The problematic substrata in the upper Waipaoa catchment are marine sediments. Episodes of geological uplift repositioned the former sea-bed at its present location to become the steep hills which characterise the region today<sup>12</sup>. As part of these tectonic processes of uplift, faults, folds, fractures and crush zones were created which have contributed to the complex and relatively unconsolidated rock structure in the area. The area is relatively young in geological time, which is evidenced by the rapid down-cutting of the region's rivers into relatively soft bed material. The predominant topography of the upper Waipaoa catchment, where the worst erosion tends to occur, is moderate to steep terrain<sup>13</sup>. The Taylor report of 1970 described the Waipaoa catchment as 9% flat, 12% rolling and 79% moderately steep to steep<sup>14</sup>. The areas underlain by mudstone and argillite are the most prone to erosion because of their unconsolidated structure. Tectonic uplift has resulted in the formation of crush zones in argillite country, further reducing the stability of this rock type. The effects of the crushing, when coupled with the influence of water, manifest themselves as large-scale soil movements such as slumping and slipping.

When exposed, the substrata weather and produce "swelling clays which retain water and shrink on drying<sup>15</sup>." This process also activates soil movement because the swelling and shrinking processes weaken the bonds between clay particles. Although median yearly levels of precipitation in the area are not high for New Zealand standards, individual rainfall events tend to be of high intensity and long duration. These high intensity events trigger significant episodes of erosion and are the result of cyclonic disturbances which carry the rainfall inland from the Pacific Ocean, especially in winter<sup>16</sup>. While the hill country experiences a higher rainfall, it also suffers from the dry summers for which the Gisborne area is reputed<sup>17</sup>. This alteration between dry and wet causes the colloidal clays, which have been produced by the weathering of the mudstone and argillite rock, to swell and shrink.

### Physical effects of clearance

The effects of forest clearance on the landscape became evident "while conversion to pasture was still in progress<sup>18</sup>." The heavy rain common in this area had a destructive impact on newly-created pasture, despite the presence of tree roots in

<sup>12</sup> Lands and Survey 1964, p6.

<sup>13</sup> Blaschke and Peterson 1994, p6.

<sup>14</sup> Taylor *et al.* 1970, p4.

<sup>15</sup> Taylor *et al.* 1970.

<sup>16</sup> SCRCC 1957, p49.

<sup>17</sup> Lands and Survey 1964.

<sup>18</sup> Allsop 1973, p20.

the freshly cleared soil<sup>19</sup>. The storm events of December 1893 and January 1894 resulted in a significant number of slips, slumps and land flows in cleared areas. A large amount of newly grassed soil was washed away and sediment build-up occurred in river channels of the area. Following these storms, Hill undertook a survey to determine their impact<sup>20</sup>. His report, which was published in 1895, stated that 3.6% of the estimated 29,000ha of pasture in the area had already suffered damage from erosion<sup>21</sup>. He concluded that “[o]pen and improved country appears to have suffered most and bush country least<sup>22</sup>.” The storm events of 1893 and 1894 were not considered excessive, but they led to considerable damage<sup>23</sup>. This example provides, therefore, a clear indication that the degree of erosion was likely to increase if forest clearance was to continue. Yet, Hill’s warnings did not lead to a reduction in the rate of forest clearance.

The Crown was aware of the soil stability and flooding problems associated with forest clearance, even in the early stages of deforestation. An 1868 debate in parliament on the survey and conservation of indigenous forests contained evidence from W.T. Locke Travers, M.P. who had previously delivered papers to “scientific audiences” on the links between deforestation and flooding<sup>24</sup>. He stated that:

The destruction of the forests in the upper portion of the larger valleys had a most pernicious effect on the drainage of the country, and by precipitating the rainfall into the rivers with great rapidity, produced the destructive floods that had become common<sup>25</sup>.

A decade later the role of forest cover as a protector of soil and water was gaining recognition. The Under-Secretary for Lands, James McKerrow, informed the Commissioners of Crown Lands that in the “disposal of Crown Lands care is to be taken to reserve from sale the forest on hill tops and at the sources of rivers and streams<sup>26</sup>. Similar conclusions were made in the Report of the Royal Commission on Forestry, which advocated for headwater forest reserves “for the purposes of protection of soil, prevention of denudation, water conservation, prevention of floods, and in addition shelter from winds<sup>27</sup>.” The report used the published work of several scientists of the time to contend that “few countries in the world are in more need of an adequate forest covering on their high lands than is New Zealand<sup>28</sup>.” It can be concluded, therefore, that the Crown had sufficient information about the erosional potential of forest clearance to act on the matter.

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<sup>19</sup> GDC 1997, p1.

<sup>20</sup> Hill 1895.

<sup>21</sup> Hill 1895; Allsop 1973, p20.

<sup>22</sup> Hill 1895, p675.

<sup>23</sup> *Ibid*.

<sup>24</sup> Roche 1987, p73.

<sup>25</sup> NZPD.1868: 4, 191; cited in Roche 1987, p73.

<sup>26</sup> Surveyor General’s Correspondence 1881, no 82; cited in Roche 1987, p92.

<sup>27</sup> “Report of the Royal Commission on forestry.” – AJHR 1913 c12, pXIV.

<sup>28</sup> *Ibid*.

Figure 3.3 – The Tarndale slip



With particular regard to the likely outcomes of deforestation in the Poverty Bay region, Sir James Hector, founder of the New Zealand Institute, warned the government in 1896 of large-scale erosion if forest clearance of hill country was allowed to continue<sup>29</sup>. Similar concerns relating to the downstream effects of bush felling were expressed in 1913 when the Waitara Harbour Board wrote to the Gisborne Harbour Board and warned of the danger of sedimentation in the harbour as result of the “reckless felling of bush upstream<sup>30</sup>.” The local Board was already aware of the problem and had already implemented an extensive dredging program in an attempt to keep the harbour clear of unwanted sediment<sup>31</sup>. This sediment had originated in the upper headwater areas of local rivers following conversion of land to pasture<sup>32</sup>.

Two geologists employed to assess the Waipaoa catchment for its oil producing capacity commented extensively on the inevitability of erosion as a result of forest clearance in a report of 1920. They warned that:

The conditions favouring the occurrence of slips and soil creeps, which after rain are likely to take place on slopes in any deforested area as soon as the

<sup>29</sup> Rasch 1989, p7.

<sup>30</sup> “Harbour Board.” – Poverty Bay Herald, 24.11.1913 (GHB CB).

<sup>31</sup> “Felling of bush upstream.” – 24.11.1913 (GHB MB).

<sup>32</sup> “Berthing at Port Gisborne.” – Publicity material, Port Gisborne Ltd., Gisborne.

Figure 3.4 – Mangatu and Tardale slips in relation to the Waipaoa River



The Tardale and Mangatu slips form the two sides of a ridge (far right), with the Tardale slip (the left of the slips) feeding the Waipaoa (far left) through Te Weraroa stream (obscured).

roots have decayed, are all present in the Gisborne district. The country is hilly; a large proportion of the underlying rock is argillaceous, and in consequence the soil over much of the area is clayey; the climate is characterised by periods of dry weather a month or 6 weeks in duration, followed by a week or fortnight of rain, which in some seasons of the year is likely to be torrential. Even without the aid of drought-cracks the water quickly penetrates to the rock, and the soil slides off. In wet seasons every hillside is scarred with slips, while on the gentler lower slopes soil-creeps are common<sup>33</sup>.

The effects of the erosion on the surrounding environment were listed in detail, along with policy prescriptions for mitigation:

...greatly increased sheet-washing of the soils; great increase in the number of slips, slumps and rain-gullies; aggradation of the stream-beds; wandering of the streams over valley-bottoms; lateral erosion of the river-banks; burying of culverts and bridges; filling-in of the Gisborne Harbour; and more severe and frequent floods<sup>34</sup>.

As before pointed out, these effects, to a greater or less extent, follow inevitably on the settlement of the country. By the exercise of reasonable precautions, however, their action could have been decidedly reduced, and there is still time to prevent, in part, the destruction of wealth it requires no prophet to foresee. To save the alluvial flats it is essential that the waste discharged

<sup>33</sup> Henderson and Ongley 1920, p29.

<sup>34</sup> *Ibid.*

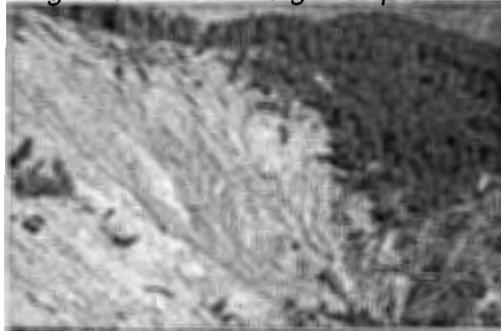
into the streams be greatly reduced. This may be done by leaving all the steeper slopes of the hills under bush, and by reforesting steep slopes that have already been cleared. To reduce the rate of runoff of the moisture precipitated on the surface, and so minimise floods, the headwater valleys of the streams should be left in bush, or, if necessary, rewooded<sup>35</sup>.

By the time these recommendations were made, vast areas of land had been cleared and developed as pasture. However, further clearance was taking place at this time and it was significant that local and national governments did not listen to their own scientific advice.

### Erosion in the 20<sup>th</sup> Century

In accord with the early scientific advice, the rate of erosion in the casebook area has accelerated during the 20<sup>th</sup> Century. The *Taylor report*, published in 1970, investigated the causes of, and potential remedies for, erosion on the East Coast<sup>36</sup>. The report clearly targets deforestation as the principal cause of the acceleration of erosion. Taylor and his colleagues contended that the loss of intermeshed root structures from indigenous forest cover weakened the soil profile, leading to erosion<sup>37</sup>.

Figure 3.5 – The Mangatu slip



In retrospect, however, it is likely that the transformation of the water regime has had a more profound impact on land stability than the loss of root systems. The argillites and mudstone present in this region are weakened considerably by the presence of water. According to Pullar, water courses were the first areas to erode because of increased runoff in river and stream channels<sup>38</sup>. Without the protective

layer of forest to intercept precipitation, there was little to impede or absorb rainfall in its journey into waterways. Today, therefore, the soil becomes saturated more quickly because there is less forest to intercept the rainfall, leading to a more rapid response in river levels. Local soil movement tends to begin in the lower levels of the soil horizon. The strength of the bond between rock and subsoil, known as shear strength, weakens quickly under the influence of water<sup>39</sup>. Reforestation or regeneration of indigenous forest is believed to be the only solution to soil stability on these areas<sup>40</sup>.

<sup>35</sup> Henderson and Ongley 1920, p29.

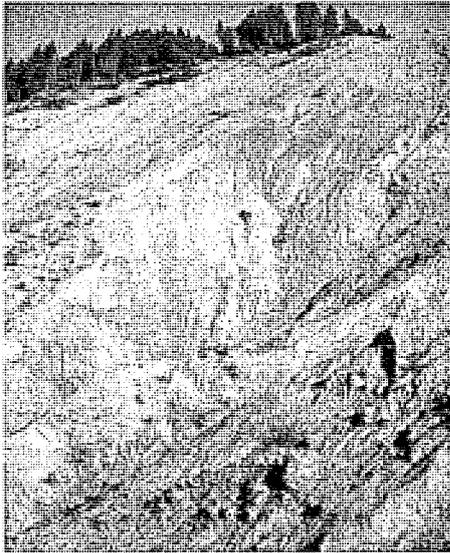
<sup>36</sup> Taylor 1970.

<sup>37</sup> *Ibid.*

<sup>38</sup> Pullar 1956.

<sup>39</sup> Zhang *et al.* 1993.

<sup>40</sup> Pullar 1956, p679.



Soil erosion varies in intensity throughout the casebook area. The worst affected areas are the steep hills which are underlain by mudstone or argillite<sup>41</sup>, especially in the Waipaoa catchment. A 1952 survey of soil conservation/erosion found that 43% of the hill country in the catchment suffered from moderate to severe erosion<sup>42</sup>. Smith found that “earthflows and gully erosion predominate in the northern, central and eastern tributaries of the Waipaoa basin while slipping is most severe in the central and south<sup>43</sup>.” Except for the areas planted by the New Zealand Forest Service in the 1950s to create the Mangatu State Forest, this pattern has not significantly changed. Erosion remains as a major problem in the headwaters of the Waipaoa catchment and will continue to be so for the foreseeable future.

Figure 3.6 – Tarnsdale slip and Te Weraroa fan in relation to Waipaoa River<sup>44</sup>



<sup>41</sup> Taylor *et al* 1970.

<sup>42</sup> Allsop 1973, p25.

<sup>43</sup> Smith 1977, p26.

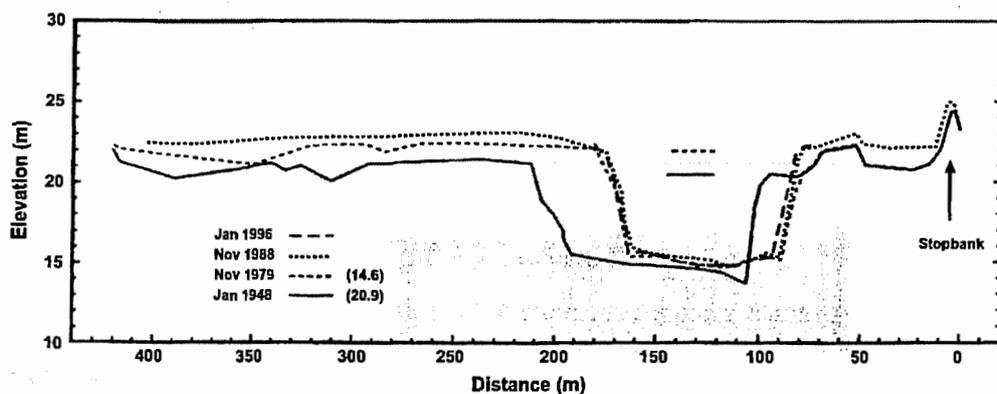
<sup>44</sup> **Source:** Akehurst 1963.

## 3.2 The impact of increased sediment entrainment

### Valley Infilling

The effects of erosion are not restricted to the land on which the activity occurs. The Waipaoa River was once remembered as a “clear and steady stream shadowed in heavy bush<sup>45</sup>,” but this is no longer the case. Shingle from the upper headwaters has choked the tributaries and middle reaches of the river<sup>46</sup>. Finer silt is transferred downstream where channel aggradation may impinge upon the effectiveness of the Waipaoa River Flood Control Scheme (WRFCS)<sup>47</sup>. Most of the heavier sediment originates from the argillite country between the Waipaoa and its main tributary, the Mangatu River. Argillite sediment is coarse and, as a soil layer, relatively infertile. The river energy required to uplift and entrain this sediment is high compared to that which is required to transport the finer mudstone sediments. As a result, most of the shingle is deposited in the channel close to its origin and is only moved downstream in times of significant flooding. Aggradation of the channel occurs because the supply of sediment from the eroding land is greater than the amount that can be transported by the river<sup>48</sup>. Erosion has progressively filled river channels with sediment and, over time, sediment will continue to build up on the floodplains in the upper and middle reaches of the catchment. The valley was once V-shaped but now the valley floor is flat-bottomed and heavily braided.

Figure 3.7 – Channel aggradation and narrowing, McPhail's bend, Waipaoa River<sup>49</sup>



While the area of severe erosion represents only a small proportion of the catchment, the results of this erosion affect the full length of the Waipaoa. 94% of the suspended sediment load in the Waipaoa originates from just 36% of the catchment

<sup>45</sup> “Taming Poverty Bay’s rogue river.” – Gisborne Herald, 15.5.1957 (GisMUS VF-Natural Events).

<sup>46</sup> Gomez *et al.* 1998.

<sup>47</sup> Smith 1977, p3. See also Chapter 4.

<sup>48</sup> Taylor *et al.* 1970, p5.

<sup>49</sup> Source: Page *et al.* 2000, p19.

area<sup>50</sup>. Of the sediment stored in the river system, 82% is stored in the upper catchment and its tributaries, while the remaining 18% is stored in the middle reaches<sup>51</sup>. The sediment deposited in the upper catchment is a storage area for the material which eventually progresses to the middle reaches. Even if erosion was to decelerate in the headwaters, therefore, the large store of sediment in the upper portions of the Waipaoa would impact upon the downstream sections of the river for decades to follow<sup>52</sup>. A significant reduction in sediment transfer from the eroding hills into the river system will require much more afforestation than the additional 6% of the catchment which was achieved between 1960 and 1987<sup>53</sup>.

Pullar and Penhale<sup>54</sup> present the most detailed account of the acceleration of erosion and valley infilling during the last 100 years. The researchers constructed a history of sedimentation on the Waipaoa floodplain by taking core samples of sediment from the floodplains and analysing their age and thickness. Five significant periods of infilling were distinguished:

Table 3.1 – Geological periods of erosion/aggradation

Kaiti Formation	c1480BC – c131AD
Waihirere Formation	c131AD – 1650
Early Matawhero Formation	c1650 – 1820
Late Matawhero Formation	c1820 – 1932
Post Matawhero Formation	c1932 – 1950

Periods one, two and three were evidently related to such catastrophic events as the Taupo eruptions and periods of intense storms which were unprecedented in geological time. Importantly, these earlier periods were longer in their duration than period four and five and, for most of their term, rates of infilling were relatively constant.

The characteristics of infilling during the fourth and fifth period differ significantly from those of periods 1-3. Period 4 (c1820 to 1932) was characterised by ten large floods which deposited thin layers of sediment on the floodplains. The floods of 1894 to 1918, for example, deposited sediment layers which were “thin but rich in matter derived from forest litter<sup>55</sup>,” and were “the result of erosion of hill land that had been cleared of forest in the 1880s<sup>56</sup>.” This sediment which had been deposited

<sup>50</sup> Jones and Howie 1970, p46.

<sup>51</sup> *Ibid.*

<sup>52</sup> Royds-Garden Ltd. *et al.* 1993.

<sup>53</sup> MOWD 1987, p36.

<sup>54</sup> Pullar and Penhale 1970.

<sup>55</sup> *Ibid.*

immediately after vegetation clearance consisted of a fertile topsoil layer of organic matter from the forest floor. This layer was soon covered by deeper layers of coarser material, marking the transition to period 5<sup>57</sup>. This period (c1932 to 1950) was a time of intense infilling which was in excess of the rates experienced in all previous eras. Indeed, the “rate of infilling for period 5 is outstanding, the volume per year being approximately 5 to 10 times that for any other period<sup>58</sup>.” Notably, during “period 5, nearly 50% of the alluvium deposited on the plains was deposited in the Waipaoa river meander trough and [this] reduced its flood-storage capacity accordingly<sup>59</sup>.” Gradually, therefore, the Waipaoa’s capacity to hold new sediment and its existing flow was reduced, at a time when there was an increase in levels of entrained sediment and when floodwaters tend to peak more rapidly.

Figure 3.8 – Aggradation of the Waipaoa River valley<sup>60</sup>



Between 1910 and 1946, it was estimated that the bed had risen 4 metres at Waipaoa station, 97 km from the river mouth, and 1 metre at the Kanakanaia

<sup>56</sup> Pullar and Penhale 1970, p424.

<sup>57</sup> Akehurst 1963, p7; Taylor *et al* 1970, p5; Todd 1960, p1.

<sup>58</sup> Pullar and Penhale 1970, p426.

<sup>59</sup> *Ibid.*

<sup>60</sup> **Source:** Akehurst 1963. This valley was once V-shaped at this point, but it is now flatter and more braided. With this new morphology, the river takes an unpredictable path across the valley flood, especially in times of flood.

bridge, 42 km downstream. In part, the difference in rates of aggradation can be attributed to the slow rate of downstream movement of the heavier shingle in river and stream channels. However, the rate of valley infilling will always be more pronounced near to the source of erosion. As a result of these processes, sediment has inundated the more expansive plains alongside the river: "all alluvial flats adjoining the Waipaoa River upstream of Waipaoa Station and those adjoining the Mangatu River above Maia Station had been buried under shingle<sup>61</sup>." Notably, many of the areas which were most affected by this inundation are Maori owned, with the upland portions of Mangatu Blocks being particularly susceptible to aggradation and sediment deposition. Average rates of aggradation have been produced for the upstream areas of the Waipaoa River, and these become progressively higher as one moves upstream towards areas which have a higher proportion of Maori land: Kaiteratahi, 2m per century; Te Karaka, 3.1m per century; Whatatutu, 5m per century; and, Mangatu, 9m per century<sup>62</sup>. As shown, some areas have suffered more aggradation than others, with the area upstream of Whatatutu experiencing severe valley infilling:

In these upper waters erosion is everywhere evident, often to a degree that is alarming. In parts of Te Weraroa River the shingle is reckoned to be 150 feet [45m] deep, and as much as five feet [1.5m] has been put down in a single year<sup>63</sup>.

Other researchers have estimated approximately 9m of net deposition at Whatatutu and 30m at Te Weraroa<sup>64</sup>. The Te Weraroa stream is severely affected by aggradation because it drains a significant zone of uplifted argillite and – through the highly publicised Tarndale slip – is well known as the site of the most severe erosion in the district.

The impact of channel aggradation has been experienced in a number of ways. As early as 1910, changes were noted in the bed conditions of the Waipaoa River – the hard, rocky base gradually became soft and boggy, as the finer, waterlogged sediment accumulated in downstream portions of river channels<sup>65</sup>. Settlers relied on the river bed as a transport route and supply line. By 1924, neither the riverbed nor many of the river terraces could be travelled and the informal road had to be shifted to the ridge tops<sup>66</sup>. Until the 1920s, flat-bottomed vessels plied the Waipaoa as far as its junction with the Te Arai River, but thereafter this mode of transport became untenable. Likewise, the original settlers' homesteads had been placed near the river but, increasingly, these were relocated to higher ground, with the floodplains upon which they once rested now covered with shingle or silt<sup>67</sup>.

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<sup>61</sup> Allsop 1973, p22.

<sup>62</sup> "Waipaoa erosion study looking for the full picture." – Gisborne Herald, 28.5.1998 (GisMUS VF-Natural Events).

<sup>63</sup> "Taming Poverty Bay's rogue river." – Gisborne Herald, 15.5.1957 (GisMUS VF-Natural Events).

<sup>64</sup> "Notes on Waipaoa catchment." – A.H. Reeves, Chair, PBCB, no date (PBCB 2/19).

<sup>65</sup> Allsop 1973, p21.

<sup>66</sup> Howard 1976, p6.

### Decreasing water quality

The increasing levels of suspended sediment in river waters have resulted in a significant reduction in water quality<sup>68</sup>:

Erosion products are not strictly limited to bedload material, in fact, by far the most sediment is in the form of suspended solids; the [Waipaoa] river having a turbid appearance all year round, making it a poor quality water resource<sup>69</sup>.

It is expected that the level of suspended sediment in the river will peak and fall with the water level in times of flood. Nevertheless, normal turbidity levels are such that the river maintains a cloudy appearance even in times of low flow<sup>70</sup>. The impacts of the increase in sediment in local rivers are, however, more serious than the aesthetic concerns of visual clarity.

Figure 3.9 – Clear water in the Waipaoa River near Kanakanaia, 1893<sup>71</sup>



As a result of the increased sediment load, the number of fish species which are present in the Waipaoa and its tributaries has declined rapidly since World War II.

<sup>67</sup> Jones and Howie 1970, p46.

<sup>68</sup> *Ibid.*

<sup>69</sup> Smith 1977, p3.

<sup>70</sup> Howard 1976, p6.

<sup>71</sup> Source: Gisborne Museum and Arts Centre.

Tuna [eels] are one of the more tolerant freshwater fish species to changes in water quality and they can survive in water which contains a relatively high sediment load. However, the sediment load in many of the region's rivers is now too high, even for the tuna<sup>72</sup>, and many pools and river bends which previously contained a reliable catch of the local delicacy are no longer used by local Maori. Fresh water lobsters and mussels were, in traditional times, valued as a freshwater supplement to their salt-water varieties. While few of these species existed in the major rivers, they were relatively easy to source in smaller streams which drained into the those rivers, especially on the Poverty Bay flats. Freshwater mussels, in particular, are susceptible to any change in sediment load and neither they nor freshwater lobsters are to be found in sufficient numbers for kai in the casebook area. Traditionally, the lower sections of the Waipaoa and Te Arai rivers were well-known for their whitebait, while the tidal sections of the Waipaoa yielded flounder, mullet and kahawai<sup>73</sup>. Today, however, these fisheries are seriously depleted because flounder and whitebait are sensitive to changes in sediment levels, with almost no whitebait successfully travelling the Waipaoa and into the Te Arai<sup>74</sup>.

*Figure 3.10 – The Mangamaia swamp with its raupo margin*



It is not only in the immediate water courses where the impact of sedimentation on food sources has been experienced. In pre-European times, the Waipaoa, Te Arai and Mangatu valleys were well-known for freshwater ponds and swamps which paralleled the course of the river. These were former river channels that had been filled with rain-water and occasional floodwaters from the rivers. As such, in geological time-scales, they would have been a temporary feature in the landscape: sometimes they would be destroyed by the river only to be reintroduced when the river changed its course. Yet, while they were present, these freshwater ponds developed an abundance of eels and freshwater mussels. The ponds were particularly important to Te Aitanga-a-Mahaki<sup>75</sup>, as

<sup>72</sup> "The effect of sediment on eels and other native fishes." – Senior Wildlife Conservator, Wildlife Service, to Field Supervisor, Wildlife Service, Gisborne, 23.5.1983 (PBCB 2/19).

<sup>73</sup> Stephens 1989; Pers. comm. Darcy Ria, Stan Pardoe and Peter Tupara.

<sup>74</sup> I.E. Jones, Chief Engineer, PBCB, to Senior Fisheries Management Officer, Fisheries Management Division, MAF, Wellington, 28.10.1975 (PBCB 5/9/2).

they provided a reliable source of tuna and other freshwater species to an inland people who were far from the sea. The margins of these ponds and lagoons, where raupo swamp provided both a safe habitat and a supply of insects and nutrients for tuna, were especially abundant. Ancestors of the Rongowhakaata iwi evidently used these ponds when exploring the back country between the Arai and Hangaroa catchments, carefully restocking the ponds with juvenile lobsters so that they would reliably provide kai for travelling parties<sup>76</sup>.

Figure 3.11 – The Mangamaia swamp by the Mangatu River



The outline of a much larger swamp can be distinguished. As is shown, the Mangatu River (foreground) is relatively close to the swamp.

Today, however, few of the ponds and swamps remain and those which can be found suffer from a much reduced quality of water. In pre-colonial times, floods would restock the pools with nutrients and water; today, however, the swamps and ponds are infilled by floodwaters which contain a higher proportion of shingle and sediment. Of five major swamps which were known to Te Aitanga-a-Mahaki in the upper reaches of the Waipaoa and Mangatu rivers, only one remains<sup>77</sup>. The four swamps which have been destroyed were entirely infilled by sediment and, today, they are indistinguishable from the surrounding pasture. The remaining swamp/pond – near the confluence of the Mangamaia and the Mangatu – is depicted in Figures 3.10 and 3.11. While it retains considerable natural beauty, it is much shallower than in the 19<sup>th</sup> Century, wherein it was an abundant source of tuna. Oral histories suggest that the Mangamaia pool was as deep as 3m<sup>78</sup>, but now the deepest areas are only 1m. The spatial extent of the pool has also reduced, with more

<sup>75</sup> Pers. comm. Rutene Irwin.

<sup>76</sup> Pers. comm. Peter Tupara.

<sup>77</sup> Pers. comm. Rutene Irwin and Charlie Pera.

<sup>78</sup> *Ibid*.

swamp areas at the margins and a much smaller pool of freshwater in the middle. Because of the reduction in water volume, along with a decline in the quality of water, few tuna are now caught in the pool at the centre of the swamp. The fate of the Mangamaia swamp represents an extreme example of the impact of sedimentation. The more substantial swamps and lagoons, such as the Wherowhero Lagoon, are not affected to the same extent as the Mangamaia swamp. Even the Wherowhero lagoon, however, is occasionally affected by floodwaters from the Waipaoa which decrease the water quality of the lagoon and have a profound impact on local wildlife<sup>79</sup>.

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<sup>79</sup>“National wetland survey: Muriwai lagoon.” – Report for Wildlife Service, 1972 (IA 3/4).

### 3.3 Flooding

Like erosion, flooding has always been a part of the Gisborne environment<sup>80</sup>. However, with the types of landscape change which have been depicted so far in this report, the *impact* of floods has increased markedly in the casebook area. As a consequence of the removal of forest cover and the resultant reduction in interception of rainfall, floodwaters peak much earlier and typically higher than at the turn of the 20<sup>th</sup> Century<sup>81</sup>. Previously, the forest cover could not prevent floods from occurring, but it did slow down the movement of water from the hills to the rivers. In those times, river channels were of sufficient capacity to transport all the water draining into them because the rate at which water entered channels was comparatively slow. The reduction in the carrying capacity of stream and river channels, as described above, further elevated the speed at which floodwaters top river banks. The combination of these two sets of processes – increased runoff and decreased channel capacity – has increased the severity of flood events. Episodes of rainfall which would not normally have triggered a flood began to produce an inundation of the Poverty Bay flats<sup>82</sup>. Likewise, when comparing storms from before 1900 with those of similar dimensions later in the century, a far greater impact is typically in evidence<sup>83</sup>.

#### Flood events

Published descriptions of flood events show the change in extent and regularity of flooding. This section examines the changing outcomes of flood conditions over time with particular regard to the effect on local iwi. The first flood for which there is a written record – the ‘King Hori’ flood – occurred in the 1820s, but there is a more substantial written record of flood impacts after the arrival of European missionaries, with floods in 1841, 1847, and 1853 being well-documented. The 1853 flood – then known as ‘Wikitoria’ – was “much heavier than the oldest Maori remembers<sup>84</sup>.” The waters spread from Gisborne to Waerenga-a-hika cutting off all land-based transport routes to and from the settlement at Turanga<sup>85</sup>. While this was a substantial inundation, the 1876 flood which followed was of more significant proportions. The flood took place after more than half a metre of rain fell on ground which had been primed by five months of drought<sup>86</sup>. The human impact was substantial and the force of the floodwaters created a new river mouth from

<sup>80</sup> Lands and Survey 1964, p14.

<sup>81</sup> Pullar 1962, p14.

<sup>82</sup> “Waipaoa River flood control proposals.” – Engineer, PBCB, to Chair, PBCB, 3.3.1949 (PBCB 2/19).

<sup>83</sup> Today, the Waipaoa River flood control scheme manages the water flow of most rainfall events. Yet, there remains the potential for a flash flood to top the stopbanks of the scheme and, when this occurs, the flood will be particularly devastating. Although the scheme managed the floodwaters of Cyclone Bola in 1989 reasonably well, the floodwaters rose quicker than in rainfall events of a similar magnitude prior to 1900.

<sup>84</sup> Gage and Black 1979, p11; Mackay 1949, p367.

<sup>85</sup> SCRCC 1957, p49.

<sup>86</sup> Gage and Black 1979, p11.

the Awapuni lagoon to the sea<sup>87</sup>. These early flood records serve to show that the impact of flooding was extreme, even before deforestation and human-induced aggradation.

After relatively minor floods in the 1890s, the next major flood occurred in July 1906, again after a long period without rain. Heavy rainfall which melted the snow in the hills caused "one of the heaviest floods in the district<sup>88</sup>." Reports from the time indicate that the floodwaters extended from Makaraka towards Ormond on one side and almost to Te Arai on the other. Three metres of water covered paddocks at Ormond, and Nelson's bridge near the freezing works was washed out. Some of the deepest water was experienced from Makauri down the railway line to Taruheru. Residents who had lived in the district for forty years had never seen floodwaters in this area before<sup>89</sup>. Only four years later there was another flood of major proportions. In March, 1910 after exceptionally heavy rainfall, the river rose suddenly and substantially to break its banks at Ormond and between Waerenga-a-hika and Bushmere. It was estimated that at its peak, the Waipaoa was several metres higher than its normal level<sup>90</sup>, and 0.3m higher than in the flood of 1906<sup>91</sup>.

Another four year interval passed before the next serious flood in 1914. The flood levels were lower than 1906 and 1910 but a larger area was inundated. Again the river rose quickly and substantially. After 190mm of rainfall fell at Whatatutu before 8.30 pm on the 18<sup>th</sup>, the Waipaoa river rose 1.2 m in one and a half hours, while an increase of 4.8m in the river level was measured between 7 and 11 pm<sup>92</sup>. By this stage, residents on the Poverty Bay flats were beginning to recognise that the effects of the floods were becoming more serious but, while they were better prepared for floods, the damage from each flood event was becoming more substantial, with the floodwaters covering a greater area on the flats. The estimated discharge of the 1876 flood was greater than the 1910 flood. Yet, the spatial extent of the resultant flood waters in 1910 was more substantial. Moreover, the material which was deposited on the plains after the 1914 flood was no longer fine grained with a high organic content, but heavier and less-fertile silt<sup>93</sup>.

A common characteristic of these floods appears to be the speed at which the river broke its banks. In May 1916, "another flood occurred when the river rose faster than ever previously known<sup>94</sup>." The pattern of fast rising rivers and a greater severity of flooding became particularly evident in 1930s and early 1940s, wherein there

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<sup>87</sup> "Waipaoa River has long commanded attention." – Gisborne Herald, p16, 11.4.1986 (GisMUS VF-Natural Events).

<sup>88</sup> SCRCC 1957, p50.

<sup>89</sup> *Ibid.*

<sup>90</sup> Mackay 1949, p367.

<sup>91</sup> SCRCC 1957, p50.

<sup>92</sup> *Ibid.*

<sup>93</sup> Gage and Black 1979, p11; "Waipaoa River flood control proposals." – Engineer, PBCB, to Chair, PBCB, 3.3.1949 (PBCB 2/19).

<sup>94</sup> SCRCC 1957, p50.

were 30 floods of significance in the Poverty Bay area<sup>95</sup>. The flood of 1932 caused widespread damage on the Gisborne flats. Rainfall was heavy, but the floodwaters increased more quickly than expected and stayed high for a considerable period of time. The township of Patutahi suffered surprisingly severe damage with water up to the windows of many houses and a 0.6m layer of silt deposited on the ground<sup>96</sup>, while residents of Kaiteratahi were forced to move into the freezing works and the bridge at Kanakanaia was swept away. Patutahi had sustained only moderate damage in the floods of 1910 and had been almost unaffected in 1914<sup>97</sup>. Some of the local Maori who were interviewed for this research project had been told stories of the 1932 flood by their parents<sup>98</sup>. In particular, these recollections point to the unprecedented nature of flooding at Patutahi and Manutuke, with the location of the latter settlement having been chosen centuries before because of its flood-free position. Records suggest that from the early 1930s the area between Patutahi and Manutuke was regularly inundated by floods of all sizes<sup>99</sup>.

The flood of February 1938 was particularly disastrous. Most of the deluge fell in the upper headwaters on land which had been cleared and grassed for farming. The resultant flood created widespread damage in areas which, according to published records, had not been affected prior to 1938<sup>100</sup>. A personal memoir from a long time resident of Muriwai, Joan Robinson, described the devastation left by this event<sup>101</sup>. She writes of three bridges being swept away at Muriwai, as well as approximately half a metre of sediment and large piles of timber being deposited on the flats by the flood waters. Maori crop growing areas were also severely affected by this flood. Kumara and maize, grown by local Maori on the lower terraces at Manutuke were destroyed. The flood waters stretched from Manutuke to the sea on one bank and from the Willows settlement to the sea on the other<sup>102</sup>. Only two months later a flood once more affected the low-lying areas on the true-right of the Waipaoa, with Maori farm land at Muriwai inundated by 3.6m of floodwaters<sup>103</sup>.

The floods of the 1940s were also severe. By this time sedimentation of the Waipaoa River channel was in full effect, so the capacity of the channel had been reduced. On one day in March 1944, 166mm of rainfall fell at Te Karaka within 24 hours, thereby producing a flood of proportions unseen since 1916<sup>104</sup>. 4800ha were flooded, 1200 of which were covered in silt. Large areas of land up to Ormond

<sup>95</sup> "Much pioneering work in the Board's 41 year history." – Gisborne Herald, p15, 11.4.1986 (GisMUS VF-Natural Events).

<sup>96</sup> SCRCC 1957, p50.

<sup>97</sup> "Waipaoa River flood control proposals." – Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

<sup>98</sup> Pers. comm. Tom Smiler, Darcy Ria, Peter Tupara and Stan Pardoe.

<sup>99</sup> SCRCC 1957, p50.

<sup>100</sup> *Ibid.*, p54.

<sup>101</sup> "Joan Robinson. 1942, Muriwai." – Personal memoir, no date (GisMUS VF-Natural History: Botany)

<sup>102</sup> *Ibid.*

<sup>103</sup> SCRCC 1957, p55.

<sup>104</sup> "Waipaoa River flood control proposals." – Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

were inundated and houses as far up as Te Karaka were evacuated. Further rain later in the month caused more flooding especially at Waerenga-a-hika, where a cut had been made in the banks to allow water to drain away after the earlier flood<sup>105</sup>. 1948 produced two significant floods, the first of which spread over 8500ha including the Gisborne township. This flood deposited heavy silt over the Poverty Bay flats and caused losses of £165,000 on local farms. A second flood occurred in early July and, of recorded floods to that date, was smaller only than those of 1876, 1906, 1910 and May 1948. A total of 8000ha were flooded and a heavy layer of silt covered 1200ha<sup>106</sup>. Again, the lowlands on the true-right of the Waipaoa – areas which were historically flood free and which included a significant proportion of Maori land – were significantly affected by the floodwaters. As shown in Section 4.1, this flood was particularly devastating for Ngai Tamanuhiri who lost a considerable amount of dairying land at Muriwai to floodwaters.

The pattern of rapid and long-lasting floods which increasingly came to affect the area from Patutahi to Muriwai continued even after the development of the WRFCs. Major floods in 1967 and 1974 were only partially contained by the scheme. Cyclone Bola produced the largest recorded flood on the East Coast in March 1988. The cyclonic weather system produced a deep depression off the East Coast which resulted in prolonged, heavy rains and gale force winds. Some areas received up to 900mm of rain in 72 hours, while most sites received at least 600mm, yielding a flood which more than rivalled that of 1876. Flood damage on the flats was of a level similar to that of the 1948 flood which occurred prior to the construction of the WRFCs<sup>107</sup>.

Extensive damage was reported in the hill country and some upland properties lost up to 30% of their grazing area. The published accounts of Cyclone Bola concentrate on the economic cost to communications and farming. However, this and other floods also yield a substantial ecological cost. As has already been mentioned in the case of the Mangamaia swamp, floods typically decrease the water quality in swamps and wetlands and sometimes infill these water-bodies with sediment. Bola substantially damaged many types of habitat and, as a result, led to the near extinction of some species of avifauna. For example, the local weka population declined markedly after the 1967 flood<sup>108</sup> and, in particular, the flood coinciding with Cyclone Bola<sup>109</sup>. While there is debate as to whether this was brought about by flood-induced 'fowl brood' or through the destruction of the scraggy vegetation in which weka thrive, the ultimate cause of this decline was the flood itself.

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<sup>105</sup> SCRCC 1957, p56.

<sup>106</sup> *Ibid.*, p57.

<sup>107</sup> Hicks 1989, p1.

<sup>108</sup> "Weka enclosure. Gisborne." – Department of Internal Affairs, Rotorua, to the Conservator of Wildlife, Rotorua, 20.1970 (IA 5/1/3).

<sup>109</sup> "Decline in weka numbers blamed on Bola." – Gisborne Herald, 23.4.92 (GisMUS VF-Natural Events).

Researchers have since written of the inevitability of the event in that land use in the hills remained oriented towards pastoral farming. The afforestation which had taken place up to 1988 was relatively inconsequential in comparison to the scale of the erosion problem<sup>110</sup>. The impetus for afforestation in the upper headwaters had been lost as subsidies for soil conservation were cut and there was a lack of a unified effort to afforest the more marginal land. There had not been a major flood event for some years and complacency existed on the part of landowners, especially on the flats, where some had expressed over-confidence in the flood control scheme<sup>111</sup>. However, it should be noted that Bola was considered to have a return period<sup>112</sup> of over 100 years. An event of this magnitude would have caused severe damage regardless of the engineering structures in place.

### Case study: impacts of landscape change on Mangatu

The processes of erosion, valley infilling, and flooding are considered to be 'natural' and, as such, part of the expected evolution of a dynamic landscape. However, human acceleration of these processes has created environmental problems which have had a lasting impact on the district. It has become apparent that Maori have been affected by these processes in a qualitatively and quantitatively different manner than European settlers. From a European perspective, the deterioration of farmland from mass wasting processes and the downstream implications of deteriorating water quality and increased flooding have been labelled an economic disaster for the region<sup>113</sup>. While Maori have been affected by these outcomes, they have also suffered from the deterioration or disappearance of their traditional housing, food gathering and land resources. As *tangata whenua*, local Maori had learned over centuries to adapt to the changing fluvial environment: their systems of land use changed with the evolving landscape. However, the alienation of Maori land and the westernisation of the tenure of remaining land has rendered these traditional coping mechanisms unviable. It would be impossible to detail examples of the impact of landscape change for the entire casebook area. Rather, a case study of one location – Mangatu Pa – is provided to highlight the specific outcomes of erosion, aggradation and flooding for Maori communities.

The *kainga* at Mangatu was located close to the Mangatu river, about 3.2 km upstream from the confluence of the Waipaoa and Mangatu rivers. Built on land owned by Mangatu Blocks 1, 3 & 4 Inc., the *kainga* was comprised of a *marae* and a reserve of approximately 500 acres. It was set apart from Mangatu No. 1 Block for the use of its owners<sup>114</sup>. In the early 1950s, approximately fourteen homes were

<sup>110</sup> See Chapter 5.

<sup>111</sup> Trotter 1988.

<sup>112</sup> *Return period* is the likelihood of a flood event of this magnitude occurring in any given year. In this case it is a little above a 1 in 100 chance in any given year.

<sup>113</sup> Taylor *et al.* 1970.

<sup>114</sup> "Report. Housing at Mangatu." – Field Supervisor, Maori Affairs, Gisborne, to Registrar, Gisborne, 19.3.1948 (MA 30/5/55).

located on the reserve with three more on the marae<sup>115</sup>. The condition of these houses concerned representatives of the departments of Maori Affairs and Health. Complaints of overcrowding, unhygienic conditions and the dilapidated state of many dwellings prompted government agencies to undertake surveys of the housing and to search for alternatives. Most of the residents of Mangatu were owners in Mangatu Blocks and received rent payments from the East Coast Commissioner (ECC) while incorporation land was under his management. At the end of his tenure, dividends were paid by the management committee as they took control of farm stations. While this money supplemented Maori income, it was not enough to purchase new houses and more suitable land for the village. One of the few institutions from which money could be obtained, the Department of Maori Affairs, could not give housing grants to build houses on land for which no exclusive title was held:

Formerly loans were granted to build houses wherever an applicant owned a section on which it was possible to place a house. Earlier loans were even approved on an undivided interest in a block. Housing policy has, however, changed and present requirements are not only that the title is held in [the] applicants name (or applicant and spouse), but that it should have access by a legal road maintained by a local authority, should be reasonably close to shopping, postal and at least a primary school facilities. If not reasonably near, even though not remote, the board may now require a substantial deposit. It is also required that the family breadwinner has satisfactory employment prospects and preferably that these exist for the children also, when they reach earning capacity<sup>116</sup>.

The result of this policy was that the people of Mangatu could not obtain finance for housing because of both its location and the tenure of the land. It was becoming difficult to source full-time employment in the area at that time because of the declining productivity of local agriculture – itself an outcome of the acceleration of erosional processes<sup>117</sup>.

The ECC controlled the Mangatu lands from 1917 to 1947<sup>118</sup>, during which time the housing problem became apparent:

The area (Mangatu) has not been partitioned out from the main block (Mangatu No 1). Until the passing of the 1947 Maori Purposes Act, the legal title was vested in the East Coast Commissioner. Now it is vested in the Mangatu Body Corporate. The East Coast Commissioner had issued occupation licenses to some of the beneficial owners but these tenures were considered to be inadequate for security purposes for housing loans. About ten years ago

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<sup>115</sup> *Ibid*

<sup>116</sup> "Housing Te Karaka and adjoining areas." – Welfare Section, Department of Maori Affairs, Gisborne, to Housing Officer, Department of Maori Affairs, Gisborne, 7.6.1957 (MA 30/3/38).

<sup>117</sup> Taylor *et al* 1970; "Housing Te Karaka and adjoining areas." – Welfare Section, Department of Maori Affairs, Gisborne, to Housing Officer, Department of Maori Affairs, Gisborne, 7.6.1957 (MA 30/3/38).

<sup>118</sup> Ward 1958, p218.

the Commissioner erected three new dwellings apparently on the security of the occupiers' dividends from Mangatu No.1 Block<sup>119</sup>.

Figure 3.12 – A dwelling at Mangatu<sup>120</sup>



The ECC did not have the power to give individual titles while he had control of the land<sup>121</sup>. It appears that attempts by the ECC to improve the housing situation for the beneficiaries had been thwarted by the Department of Maori Affairs. While the land was under his control, owners of the Mangatu Blocks had called on him to supply new homes to Maori living in unhealthy conditions

at Mangatu<sup>122</sup>. The ECC accepted in principle a plan to use money from the Mangatu 1, 3 & 4 Blocks Inc. to provide timber and supply houses to beneficiaries. However, he was blocked by the Maori Affairs Department which believed that such actions were outside his jurisdiction and that disadvantaged Maori could be provided for under the Native Housing Act 1935<sup>123</sup>. As described above, this Act was not applicable to the situation at Mangatu. The ECC did build some houses for those who were particularly affected by housing problems at the kainga, but these were exceptions which were barely tolerated by the Maori Affairs Department<sup>124</sup>.

In addition to, and *contributing to*, the physical state of the houses, an increasing problem of flooding emerged from the 1930s, with heavy sediment being deposited after each flood. Over time, these deposits made the Mangatu kainga physically uninhabitable. While Maori owned the surrounding land, there were few areas suitable for housing development around the kainga and, in any case, access to this land was effectively denied by the ECC. In earlier times, the locations of kainga in the headwaters of the Waipaoa and up the Mangatu were dynamic: the fluvial environment was ever shifting, requiring a flexible relationship among local inhabitants and rivers. However, the alienation of large parcels of land, the westernisation of tenure of remaining Maori land and the actions of the ECC prevented the residents of Mangatu from shifting with the new environmental conditions, effectively restricting them to an increasingly hazardous environment.

<sup>119</sup> "Mangatu Pa housing conditions." – Registrar, Maori Affairs, Gisborne, to Under-Secretary, Maori Affairs, Wellington, 23.3.1948 (MA 30/3/55).

<sup>120</sup> Source: Rutene Irwin.

<sup>121</sup> "Report. Housing at Mangatu." – Field Supervisor, Maori Affairs, Gisborne, to Registrar, Maori Affairs, Gisborne, 19.3.1948 (MA 30/3/55).

<sup>122</sup> Papers of the East Coast Commissioner no. 161, cited in Ward 1958, p 150.

<sup>123</sup> MA 26/7/33, cited in Ward 1958, p150.

<sup>124</sup> Ward 1958, p151.

Figure 3.13 – The meeting house at Mangatu, 1956<sup>125</sup>



When the inhabitants were finally relocated to the high terrace at Whatatutu, flood free land had to be purchased from Europeans because by this stage they owned all the land which was free from inundation in the area<sup>126</sup>. Initially, the inhabitants of Mangatu were hesitant about relocating – After all, Mangatu had been a thriving community, with access to a clear, abundant river which had provided for all community needs.



An elder who was raised in the area recollected childhood experiences of diving into nearly two metres of clear water from a high river bank alongside the village<sup>127</sup>. He also recalled the ease with which locals collected eels from beneath this bank and how the river provided clean drinking and bathing water. Today, the bank no longer exists – the river channel has been infilled with coarse shingle and floodwaters regularly spill onto a steadily aggrading flood plain.

<sup>125</sup> **Source:** Rutene Irwin. **Inset:** Three members of Te Aitanga-a-Mahaki outside of the now ruined meeting house which remains at Mangatu.

<sup>126</sup> “Section purchase: Maori housing, Whatatutu report.” – District Officer, Maori Affairs, Gisborne, to Under Secretary, Maori Affairs, Wellington, 4.12.1961 (MA 6/7/19).

<sup>127</sup> Pers. comm. Rutene Irwin.

Figure 3.14 – The meeting house which remains at Mangatu<sup>128</sup>



Several government agencies and civil servants expressed the opinion that the body corporate of Mangatu Blocks 1, 3 & 4 Inc. should either provide titles for land or provide money for the building of houses<sup>129</sup>. By the time the management committee agreed to provide separate titles to parcels of land for the beneficiaries, however, the river had aggraded to such an extent that the proposed sites were no longer suitable for housing of any kind:

In addition [to] the steady aggradation of the Waipaoa river bed, it is evident that the area is becoming unsuitable as a residential area, and the sites of existing dwellings most of sub-standard construction, will probably be inundated by the river within the next decade.

As a result, the residents concerned are now agreeable to consider re building homes in the Whatatutu village area which is on high ground, well above the river, and is served by two shops, post office, hotel, and a good primary school. Several new homes have been built under Maori housing recently, and while interest is maintained, we wish to speed up the removal of other

<sup>128</sup> **Source:** Rutene Irwin. The extent of valley infilling can be seen by comparing these photos to Figure 3.13.

<sup>129</sup> "Mangatu pa housing conditions." – Registrar, Maori Affairs, Gisborne, to Under-Secretary, Maori Affairs, Wellington, 23.3.1948 (MA 30/3/55); "Notes of report to Minister of Maori Affairs at Poho-a-Rawiri meeting house." – E. Hooper, Secretary Mangatu Blocks 1, 3 & 4 Inc., 11.4.1951 (MA 30/3/55).

residents from the Mangatu Pa area, into the village proper. The Mangatu Inc. and the Waikohu County Council support this proposal<sup>130</sup>.

After 1962, all new housing development was to be located on the high terrace at Whatatutu<sup>131</sup>. Later, one of two meeting houses at Mangatu was also shifted as a result of flooding and valley infilling<sup>132</sup>. As can be seen in Figure 3.14, the abandoned meeting house – the only remaining evidence of the once thriving community at Mangatu – has deteriorated rapidly since that time. The meeting house now forms a visual benchmark of aggradation and flooding and a solemn reminder of the impact of these processes on local Maori.

Whatatutu itself was originally located on the floodplain directly below its present position. However, valley infilling and constant flooding caused the houses and other buildings situated there to become uninhabitable<sup>133</sup>. Every small flood that occurred in the area affected the village and the more significant floods destroyed individual homes on a regular basis. In this case, houses were not shifted *en masse* to the higher terrace, but rather the residents gradually shifted as conditions worsened over time. Whatatutu was also a community which, at one time, housed a relatively significant number of Maori<sup>134</sup>. The case studies of Mangatu, in particular, and Whatatutu, to a lesser extent, highlight the powerful relationship between environmental change and change in land ownership and management. It is probable that this relationship will not come through strongly in casebook evidence for the Gisborne inquiry district wherein research has been compartmentalised into 'social', 'traditional', 'land alienation' and 'environmental' spheres. Yet, it is a shibboleth of Maori culture that land, community health and environment are closely related. Therefore, the gross landscape changes which have been depicted in this chapter necessarily yield a number of social, cultural and economic outcomes which should not be ignored by the Tribunal.

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<sup>130</sup> "Section purchase: Maori housing. Whatatutu report." – District Officer, Maori Affairs, Gisborne, to Under-Secretary, Maori Affairs, Wellington, 4.12.1961 (MA 6/7/19).

<sup>131</sup> "Open homes at Whatatutu." – Gisborne Herald, 17.11.1962 (MA 6/7/19).

<sup>132</sup> Allsop 1973, p23.

<sup>133</sup> Poole 1983, p68.

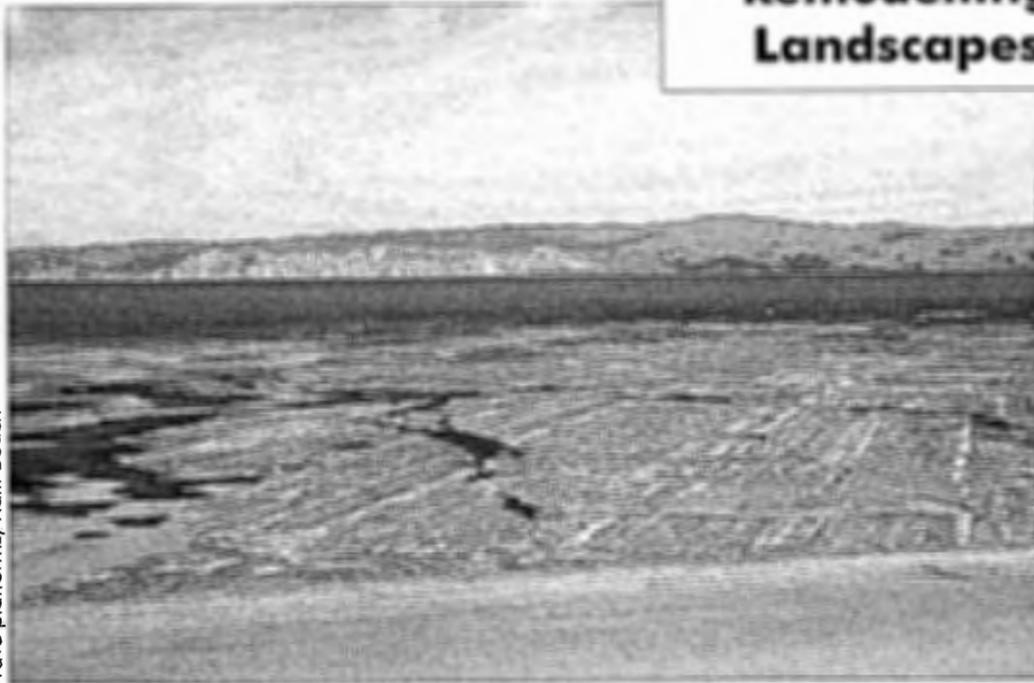
<sup>134</sup> Pers. comm. Rutene Irwin and Charlie Pera.

Orongo Lagoon



**Part Two**  
**Remodelling**  
**Landscapes**

Wave platforms, Kaiti Beach





17  
18  
19  
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## Waipaoa River flood control scheme

In 1990, the Waipaoa River flood control scheme (WRFCS) received official recognition from the *Institution of Professional Engineers* as one of 70 nationally significant achievements for the engineering fraternity. A newspaper article about this award reported that:

The Waipaoa scheme was a good example of the art of directing and controlling the forces of nature for the benefit of mankind, which was what engineering was all about...In the words of the present engineer of the GDC, 'Many far sighted farmers were involved in the scheme's origins and development!'

Many of these sentiments are, indeed, correct. The Waipaoa has functioned reliably since the late 1950s as a flood control mechanism, and farmers played a significant role in its development. Yet, the rudi-

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<sup>1</sup> "Keeping forces of nature at bay." – Gisborne Herald, 7.12.1990 (GisMUS VF-Natural Events).

ments of three notable infractions can be found in these relatively innocuous words. First, all attempts at 'directing and controlling the forces of nature' will inevitably lead to a questioning of the authority of agents to transform the environment. This question – *Whose nature?* – is increasingly pertinent to the Waitangi Tribunal's task of understanding Treaty principles as they apply to rivers<sup>2</sup>. The WRFCS provides another perplexing example of a clash between Article I and Article II of the Treaty. This first question readily leads to a second: *who benefits* and *who loses* in attempts to direct and control the forces of nature? As will be shown in this Chapter, 'mankind' [sic.] in Poverty Bay appears to have been reduced to 'far sighted farmers' in the case of the decision-making for the WRFCS. Third, *what* and *who defines success* in retrospective assessments of a project's merit? The WRFCS has indeed been successful in protecting farmland, yet few of the scheme's advocates appear to have reflected on whether this outcome could have been achieved without negative impacts on local Maori and their resources.

The types of environmental change outlined in Part I required a response from local authorities which were responsible for environmental protection. Not only did such changes as an increased frequency of flooding affect the pakeha community, but they also affected local Maori. The implementation of a flood control scheme on the Waipaoa River was well within the Crown's kawanatanga mandate, as formulated within Article I of the Treaty. However, the initiation of any such scheme inevitably conflicts with at least some of the Article II rights of Maori. Flood protection schemes require the realignment of rivers and a variety of other alterations to the hydrological system which may, for example, impact upon Maori fisheries and wahi tapu. The way in which this potential conflict was managed by the Poverty Bay Catchment Board and its governing body, the Soil Conservation and Rivers Control Council, is the focus of this Chapter. It is contended that there were few attempts to ascertain Maori environmental interests nor, therefore, to reconcile these interests within the flood protection scheme. Consequently, the WRFCS had a more negative impact upon local Maori than might have been the case.

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<sup>2</sup> Ward 1999, p70.

## 4.1 The Poverty Bay River Board

While some might consider any change to a river system to be a potential Treaty grievance, it is not necessarily the case that Maori disagree with all hydrological transformations. After all, local Maori themselves altered significantly the mouth of the Waipaoa River. In 1840, a series of recurring floods threatened to destroy an important burial site, and local iwi cut through the sand dunes near the Awapuni Lagoon in the hope that the river would take a new course<sup>3</sup>. Indeed, in the years before World War Two, it could be argued that it was a *lack* of action to protect Maori interests from flooding which potentially forms an iwi grievance against the Crown. In those years, the increasing severity of floods had a particularly significant impact on Maori communities from Te Arai to Muriwai but there were few attempts to lessen the impact of these events. Local requests for Crown assistance in the construction of a flood protection scheme were evident from the 1870s<sup>4</sup>, but there were only partial attempts at flood control before 1949. The activities of the Poverty Bay River Board which operated from 1912 to 1949 are evaluated briefly because they unveil a recurring theme in historical debates about flood control: the dominance of *ratepayer* concerns in local authorities' pursuit of flood mitigation.

### Activities of the Board

Public demand for flood protection followed significant floods in 1906 and 1910. In 1912, the Poverty Bay River Board (PBRB) was established to authorise and coordinate the flood protection measures of private individuals and to carry out such work where it was beyond the financial and administrative capacities of land-owners<sup>5</sup>. This narrow focus was reflected in the authorising legislation for river boards – the Rivers Board Act 1908 – which was similarly focused on protecting the interests of farmers. The very factors which led to the creation of the Board are indicative of its bias towards property owners. Floods...

...which occurred in 1906 and 1910, although not the largest recorded up to that time, caused far greater damage because of the growing density of population, and agitation for flood protection resulted in the creation of the Poverty Bay River Board in 1912<sup>6</sup>.

The problem of flooding and the need for a response to it was perceived within a narrow framework of property protection which led to an incremental approach to river management. For example, the Harbour Board had made a request to the River Board that "every reasonable step should be taken by river works and stop

<sup>3</sup> "Waipaoa River flood control proposals." – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

<sup>4</sup> "Waipaoa River encroachment." – P. McDonald, Undersecretary for Public Works, Wellington, to Chairman, CCC, 16.10.1877 (GisMUS 72-122); "Waipaoa encroachment." – River committee, CCC, to Chairman, CCC, 20.9.1877 (GisMUS 72-122).

<sup>5</sup> PBRB to SCRCC, 4.9.1946 (PBRB 17/3); NZ Gazette 29.8.1912, p2593.

<sup>6</sup> *Ibid.*

banks on the Waipaoa to prevent any flood waters from reaching the Turanganui by overflow into either the Taruheru River or the Waikanae Creek<sup>7</sup>." The logic of this request was that the Borough of Gisborne should be protected at all costs. The focus of river management was to be the protection of pakeha residential and commercial development, while the protection of kainga on the true right of the Waipaoa was not, therefore, guaranteed.

The initial activities of the Board were restricted to relatively minor but potentially contradictory tasks. One of the first published reports of the Board outlined a long list of such minor projects as protecting individual properties and bridges, clearing willow on the Poverty Bay flats and clearing the river channel on an *ad hoc* basis<sup>8</sup>. There appeared to be no integrated policy for catchment management and, in this context of fragmented and piecemeal decisions, Maori interests were subverted by the loud and clear voice of individual pakeha farmers and residential pressure groups. In some places the Board recommended the planting of willows on stream margins in order to slow the flow of the Waipaoa and to reduce the lateral movement of river banks. It also adopted a case by case basis for the stopbanking of private property, permitting such works on the merits of public petition rather than an integrated policy<sup>9</sup>. Embankments and willow planting lead to an increased frequency of flooding both upstream and downstream of their origin, so in other areas the Board retracted its permission for willow planting, reflecting its lack of strategic intent<sup>10</sup>.

The minutes of the River Board<sup>11</sup> indicate the reactive nature of the decision-making: in almost all of its decisions the Board was responding to ratepayer petition rather than the researched needs of *all* residents. One example of note was that the Board only started to consider headwater erosion control after landowners on the Poverty Bay flats complained of downstream siltation<sup>12</sup>. Not only did this reactive stance mean that the Board's activities were limited to minor attempts to mitigate flooding on individuals' properties, it also meant that the Board did not communicate with all affected parties when it made decisions to alter the course of the river. Put simply, the Board was not interested in avoidance of, nor compensation for, the outcomes of its policy, as is evident in one of its first attempts at flood control:

I do not anticipate any claims for severance, either here or above, as it is apparent that the works must be of great benefit to the owners, while the inconvenience to [others] will be temporary and not serious, the benefits being security from flood, prevention of loss by erosion, saving in bank protection and acquisition of land as riparian owners<sup>13</sup>.

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<sup>7</sup> "Waipaoa River stopbanks for flood protection." – 15.1.1917 (GHB MB).

<sup>8</sup> Kennedy 1912.

<sup>9</sup> Minutes of a meeting of the Poverty Bay River Board – 16.7.1914 (GisMUS 79-02).

<sup>10</sup> Minutes of a meeting of the Poverty Bay River Board – 26.10.1912 (GisMUS 79-02).

<sup>11</sup> **File:** GisMUS 79-02.

<sup>12</sup> Minutes of a meeting of the Poverty Bay River Board – 10.8.1938 (GisMUS 79-02).

It is clear from such statements that the Board would only consider compensation for loss of property; loss of fisheries or other non-financial losses would neither be compensated nor taken into account in decision-making.

With increasing levels of erosion in the headwaters of the catchment, such protective measures as willow planting would not successfully contain the Waipaoa. Almost from the inception of the PBRB, therefore, a focal issue for the Board was whether or not it should adopt a wide-scale flood control scheme<sup>14</sup>. The Minister of Land's office played a significant part in these deliberations<sup>15</sup>, preparing a proposal for such a scheme in 1918<sup>16</sup>. A number of other proposals were developed in the years 1914 to 1918. The most comprehensive suggested the need to straighten the river by removing oxbows in the lower reaches<sup>17</sup>, yet the reports do not mention the possibility of negative outcomes from this type of work. There was some question within the reports themselves as to whether Poverty Bay could afford even a minor flood control scheme<sup>18</sup>, so it was not surprising that none of these initial proposals were implemented. Ultimately, the one accomplishment of any note of the PBRB was its first completed task: the implementation of a flood warning scheme<sup>19</sup>.

### Ineffective organisation

The Board's lack of finances was a principle cause of its ineffectiveness. Although it could recuperate expenses for prevention works which had been requested by land-owners, its ability to impose a rating regime on the wider population was at best ambiguous<sup>20</sup>. As a consequence, it was rarely in a position to carry out work which had been recommended by local or Wellington-based engineers<sup>21</sup>. By the early 1940s when the need for a flood protection scheme had become more obvious, the Board was left with no cash reserves to initiate such a scheme. Although it attempted to obtain funds from the Cook County Council (CCC), the Council refused<sup>22</sup> and central government also declined financial contributions. Subsequently, it has been suggested that this inability to raise finance was the main reason for the lack of progress towards an integrated programme of flood control<sup>23</sup>.

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<sup>13</sup> Kennedy 1912, p4.

<sup>14</sup> Minutes of a meeting of the Poverty Bay River Board – 23.4.1914 (GisMUS 79-02).

<sup>15</sup> Minutes of a meeting of the Poverty Bay River Board – 12.6.1915 and 10.6.1916 (GisMUS 79-02).

<sup>16</sup> Thompson 1918.

<sup>17</sup> Kennedy 1912.

<sup>18</sup> Laing-Meason 1914.

<sup>19</sup> "Waipaoa River flood control scheme." – PBCB, to members, 12.11.1952 (PBCB 2/19).

<sup>20</sup> Minutes of a meeting of the Poverty Bay River Board – 7.5.1932 (GisMUS 79-02).

<sup>21</sup> Minutes of a meeting of the Poverty Bay River Board – 18.5.1933 (GisMUS 79-02).

<sup>22</sup> "Big River cut. Payment of cost, proposal shelved, awaiting erosion plan." – Poverty Bay Herald, 29.5.1941 (GisMUS 79-02).

<sup>23</sup> "Waipaoa River Flood Control Scheme." – PBCB, to members, 12.11.1952 (PBCB 2/19).

While the financial incapacity of the Board was an important determinant of its lack of action, the most problematic feature of its operation was its restricted boundaries. The Board had no control over the headwaters of the Waipaoa River and, strangely, only a limited mandate on the true right (western side) of the river. The outcomes of this “absurd position<sup>24</sup>” were particularly detrimental to the integrated management of flooding and erosion:

A most unusual feature of the River Board was that the boundary of its district proceeded along the middle of the river for part of its length – no doubt the result of a quarrel as to who should pay rates! The only effective work the Board could do was to locate flood overflows along the banks and put up short lengths of stopbanks in attempts to contain them. It was able to do little work in the face of peak floods that drowned land from one side of the flats to the other<sup>25</sup>.

The majority of ratepayers on the true right of the river had refused by petition to be incorporated into the PBRB’s jurisdiction<sup>26</sup>. That such important decisions as these were decided solely on the basis of *ratepayer* petition was unfortunate for local Maori. While they were a numerically significant grouping on the western bank of the river, collective ownership of land as well as land alienation meant that they were only a small percentage of the ratepaying public. Rivers of the volume of the Waipaoa pay scant regard to administrative boundaries which do not follow catchment topography and, as a result, the PBRB was a predestined failure.

From the time of its establishment, many locals criticised the spatial extent of the Board’s mandate. As early as 1918, the local member of parliament requested that the Board be abolished and replaced by one which comprised the whole of the Waipaoa catchment<sup>27</sup>. In 1932, the Patutahi relief committee wrote to the PBRB “asking the Board to use every effort to obtain relief<sup>28</sup>” from flooding in the Waituhi area. While the River District included Patutahi, the PBRB had no authority at Waituhi, which was only a few miles north. The Board itself was often frustrated by its lack of influence on the area from Manutuke to Muriwai. From the confluence of the Te Arai River to the sea, the boundary of the river district ran down the middle of the Waipaoa. In 1924, the public works engineer of the CCC drew the Board’s attention to serious erosional problems on the southern side of the river mouth. The Board could only “thank the Council for the information and state that as the erosion is not in the River District it has no jurisdiction in the matter<sup>29</sup>.” This lack of a mandate to address erosion to the south of the river mouth was to be particularly expensive for Ngai Tamunhiri. A 500m wide strip of pastoral land was lost to that iwi in the years after World War Two, principally through Waipaoa floodwa-

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<sup>24</sup> Thompson 1918, p5.

<sup>25</sup> Poole 1983, p15.

<sup>26</sup> Extract from NZ Gazette, 1921 (PBRB 17/3).

<sup>27</sup> Minutes of a meeting of the Poverty Bay River Board – 18.5.1918 (GisMUS 79-02).

<sup>28</sup> Minutes of a meeting of the Poverty Bay River Board – 3.3.1932 (GisMUS 79-02).

<sup>29</sup> Minutes of a meeting of the Poverty Bay River Board – 10.6.1924 (GisMUS 79-02).

ters which washed Muriwai soils into the sea<sup>30</sup>. The administrative deficiencies of the PBRB had failed Maori on one side of the river while, on the other, flood protection works which might have saved agricultural land around Gisborne township served only to divert water southwards and westwards, towards the unprotected parts of the catchment. As a result of both newly available legislation – the Soil Conservation and Rivers Control Act 1941 – and the overall failure of the Board, the PBRB was abolished in early 1947, having achieved little in its 35 year history for local Maori<sup>31</sup>.

### Ministry of Works alterations to the Waipaoa River mouth

In the final years of its administration, the PBRB lobbied parliament for assistance in mitigating the impacts of flooding at the Waipaoa River mouth. Between 1925 and 1946, the river mouth gradually shifted southwards and, with the establishment of an off-shore bar which blocked its course to the sea, a noticeable increase in flooding had occurred in that time<sup>32</sup>. With neither the financial capacity nor authorisation to carry out the required works itself, in 1938 the Board requested the Minister of Public Works to intervene<sup>33</sup>. The logic of the request was twofold: first, to hold the contemporary location of the river mouth in a fixed position in order to prevent its drift southwards; and, second, to straighten the final miles of the Waipaoa to expedite its course to the sea<sup>34</sup>. Initially, the Public Works Department paid little regard to the request, even though an internal report of 1940 had shown that, if left unchecked, the Waipaoa would erode much of the Maori land around Muriwai<sup>35</sup>.

With a series of new floods in the mid-1940s, the Department began to plan for a significant works programme near the Wherowhero Lagoon<sup>36</sup>. However, the nature of the Department's new stance on local intervention had little to do with protecting Maori interests:

[W]orking constantly towards Young Nick's Head, the mouth of the river had eaten up a big area of land and threatened to create still further damage. The indirect effect of this movement was worse than its direct effect, however,

<sup>30</sup> "Compensation claims.Waipaoa River flood damages." – D.C. Purdie, to H.Vickerman, Vickerman and Lancaster, 28.8.1949 (PBCB 2/19).

<sup>31</sup> Department of Internal Affairs to PBRB, 17.2.1947 (PBRB 17/3).

<sup>32</sup> Pullar and Penhale 1970, p425.

<sup>33</sup> Minutes of a meeting of the Poverty Bay River Board – 10.8.1938 (GisMUS 79-02).

<sup>34</sup> "Big River cut. Payment of cost, proposal shelved, awaiting erosion plan." – Poverty Bay Herald, 29.5.1941 (GisMUS 79-02).

<sup>35</sup> "Waipaoa River. Shifting of mouth to southwards and attendant erosion." – District Engineer, Public Works Department, to Engineer in Chief, Public Works Department, 10.9.1940 (W1 48/159); "Waipaoa River – erosion near mouth." – Engineer in Chief, Public Works Department, to District Engineer, Gisborne, 20.2.1941 (W1 48/159).

<sup>36</sup> Editorial – Poverty Bay Herald, 19.3.1944 (GisMUS 79-02).

because for 3.5 miles the river was practically at sea level, which meant that flood waters lost their velocity and banked up to overflow point in short order. One of the district's assets most closely threatened was the railway bridge and the line itself<sup>37</sup>.

It was only when the Crown-owned railway was threatened by the Waipaoa that agents of the Crown decided to intervene.

*Figure 4.1 – Construction of training wall at the mouth of the Waipaoa, 1946<sup>38</sup>*



In fact, the initial actions of the Works Department only exacerbated the erosion of Maori land at Muriwai<sup>39</sup>. Efforts to stabilise the railway bridge over the Waipaoa through the creation of a sizable embankment forced the river to breach Te Wairau

<sup>37</sup> "Waipaoa River flood control scheme." – E McKillop, Commissioner of Works, MoW, to Resident Engineer, Gisborne, n.d. (PBCB 2/19/7); Poverty Bay Herald, 29.3.1944 (GisMUS 79-02).

<sup>38</sup> Source: National Archives (W1 48/159).

bend, leading floodwaters through the Wherowhero Lagoon and over low-lying land to the sea<sup>40</sup>. The erosion of Maori land at Muriwai was rapidly accelerated by this diversion and it also suffered from inundation by a tidal wave in 1947<sup>41</sup>. In 1949, after the loss of a significant area of this land to that time, local Maori owners as well as Pakeha farmers sought financial compensation from the government. This claim was rejected by the Crown, even though the Works Department accepted that the railway embankment was responsible for the loss of land at Muriwai. The response of the Crown lawyer in this regard was to...

...recommend [the claimants] offering to reduce the claims to the minimum or even to forego them very largely, or in some cases wholly... if the Government will undertake... temporary protective measures<sup>42</sup>.

This appears to be a scarcely veiled attempt to reduce the threat of action against the Crown, with the Crown assuring locals that it would only carry out its obligation to protect individuals from flood damage if they abandoned their claim. The loss of land was greatly reduced after the construction of a training wall at the river mouth by the Works Department in 1946, which began to take effect late in the 1940s<sup>43</sup>.

<sup>39</sup> Careful interpretation of the impact of Crown policy on the Muriwai pasture lands is required. These lands had developed through progradation many hundreds of years previously, when the Waipaoa River exited below Te Kuri a Paoa. The Muriwai area is in the lee of prevailing sea currents, meaning that it receives little in the way of sediment transported up the coast from the south because Te Kuri a Paoa blocks this transport. When the river shifted north, Muriwai and Brown's beaches were starved of sediment and the high energy of the coastal wave environment slowly began to erode the pasture lands of Ngai Tamanuhiri. This process was accelerated as the river began to move south again, especially after 1925. At most, therefore, Crown actions accelerated natural processes or, alternatively, the Crown can be seen as negligent in that it failed to protect the area south of the river mouth with sufficient speed.

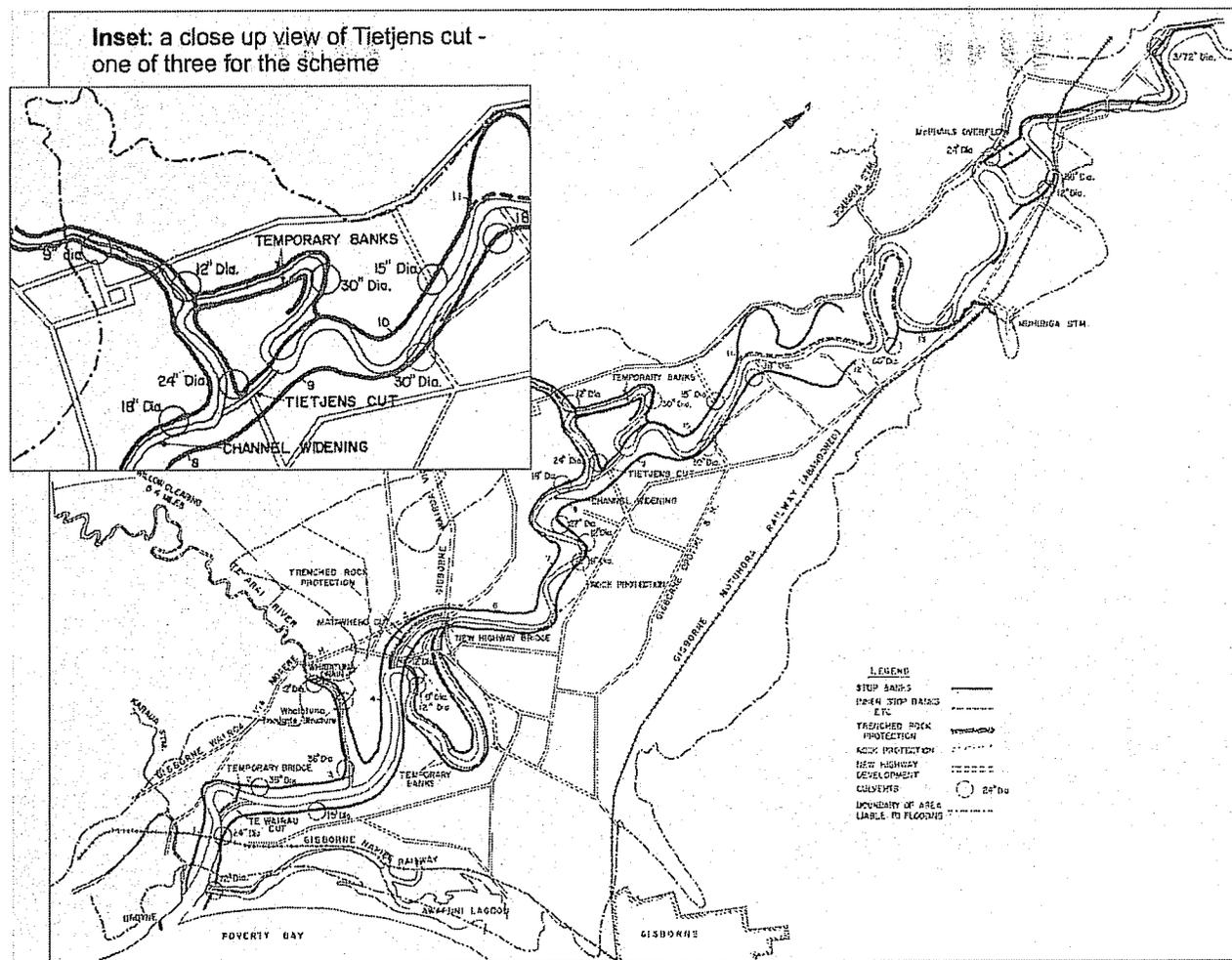
<sup>40</sup> "Compensation claims. Waipaoa River flood damages." – D.C. Purdie, to H. Vickerman, Vickerman and Lancaster, 28.8.1949 (PBCB 2/19).

<sup>41</sup> "Muriwai Lagoon. Core samples at margin." – W.A. Pullar, to A.D. Todd, 22.14.1960 (GisMUS Pullar)

<sup>42</sup> *Ibid.*

<sup>43</sup> "Waipaoa River Flood Control proposals" – Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

Figure 4.2 – Plan of the WRFCS, 1949



## 4.2 Towards the development of a control scheme

The Poverty Bay Catchment Board (PBCB) was established in 1944, three years after the enactment of the Soil Conservation and Rivers Control Act. As soon as the new local authority had been formed it contacted the Soil Conservation and Rivers Control Council (SCRCC) – its governing authority in Wellington, which had been established under the 1941 Act – and requested its chairman to visit Gisborne “at once with a view to formulating a scheme that will be a benefit to the district as a whole for flood prevention<sup>44</sup>.” In the context of this haste, the Waipaoa River flood control scheme (WRFCS) was a *fait accompli* of landowner agitation for flood protection. As early as 1946, staff of the PBCB engaged in surveys to determine the requirements for a control scheme<sup>45</sup>. The resultant proposal had been accepted by the Board as early as 1949 and was implemented from 1953<sup>46</sup>, representing a relatively rapid development and implementation of a proposal of this size. The development of the proposed scheme was undoubtedly accelerated by the major flood of 1948 which equalled and possibly exceeded in magnitude the previous ‘100-year’ flood of 1876<sup>47</sup>. The urgency with which the WRFCS was established meant that there was little opportunity for public involvement in its design, and no recorded attempts were made to mitigate the scheme’s environmental impacts on Maori. The development, public objection and governmental examination phases of the proposal are henceforth examined in detail because there were few opportunities to redress Maori concerns after the proposal had been accepted.

### The emergence of a proposal

Described in brief, the WRFCS is a series of earthworks to restrain the Waipaoa River over the final 45km of its course<sup>48</sup>. Upstream from the river mouth, the first 27km were to be stopbanked continuously up to a height of 3.5m in some places, with additional protection in the form of loose rockfill to line the riverbanks up to the point of maximum salt-water influence<sup>49</sup>. The stopbanking also continued for a considerable distance up Te Arai River and the Whakaahu Stream to manage back-ponding. The outcome of these earthworks was to provide at least 300m minimum floodway between the stopbanks, which was supposedly sufficient to protect against a flood up to the proportions of those in 1876 and 1948. Possibly the most transformative of the scheme’s many components was the decision to straighten the river by eliminating three large oxbows<sup>50</sup> at Te Wairau bend, Matawhero loop and at the confluence of the Whakaahu and the Waipaoa. The ‘cuts’ through these oxbows

<sup>44</sup> Editorial – Poverty Bay Herald, 23.3.1944 (GisMUS 79-02).

<sup>45</sup> “Waipaoa River flood control scheme.” – PBCB to members, 12.11.1952 (PBCB 2/19).

<sup>46</sup> The scheme took many years to construct and some of the river straightening work was not finalised until the late 1960s.

<sup>47</sup> “Waipaoa River flood control scheme.” – A.D. Todd, Chief Engineer, PBCB, 14.7.1964 (PBCB 2/19).

<sup>48</sup> “Waipaoa River flood control proposals.” – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

<sup>49</sup> Todd 1962; Refer to Figure 4.2.

reduced the river's length by 6.7km. Figure 4.3 on page 83 highlights the significant impact of the WRFCS on the course of the Waipaoa. The main purpose of this straightening exercise was to increase the energy of the river in its channel by confining it to a less obstructed course. In turn, this has forced the river to degrade its bed, yielding an additional gravitational force which carries floodwaters to the sea with greater velocity<sup>51</sup>.

By New Zealand standards, the WRFCS was considered to be a significant undertaking<sup>52</sup>. In some ways, its design was speculative: first, the scheme would inevitably be counteracted by aggradation between the stopbanks; second, the river straightening work increased the potential force of the river, leading to the risk of volatile and unpredictable outcomes if the stopbanks were breached. Yet, the attitude of the PBCB engineer to the relationship between river channel aggradation and the long-term effectiveness of the scheme was particularly ambiguous. On one occasion he noted that "the threat of aggradation (of the river bed) is apparently unlimited making it absolutely necessary to regard erosion control in the upper reaches as complementary to flood control works in the lower reaches<sup>53</sup>." However, he contradicted this accurate declaration with a number of competing interpretations of the needs of catchment management. Two of these statements are quoted in full, because they reveal the limited scientific input into the design of the WRFCS:

The idea that 'lack of vegetation causes floods' is widely and tenaciously held and its corollary that re-forestation will prevent flooding follows naturally. There is a germ of truth in this idea but it must be applied with extreme caution... [W]e are not interested in small storms. It is the 'old man flood' resulting from the rare major storm against which we have protected our Flats. It should not be overlooked that the flood of 1876 was shed from a catchment completely clothed in native bush and scrub, yet it equalled the flood of 1948 in peak flow and exceeded it in total volume of runoff. Is it, therefore, prudent to suggest that we re-forest 500,000 acres of some of the best pastoral hill country in New Zealand for the sake of an added degree of flood protection which could be gained more certainly by raising the proposed flood banks a couple of inches?... The extremely high economic potential of the Poverty Bay Flats in itself warrants complete flood prevention, but to achieve this at the expense of the highly productive hill country would be foolish. Happily, this is quite unnecessary because there are other means at hand<sup>54</sup>.

Many of you must be wondering... whether the aggradation of the rivers [in the headwaters] is not a sure sign that some day the bed of the river will rise in the lower reaches, after the scheme has been bought and paid for or before

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<sup>50</sup> Significant meanders in a river which take on the appearance of a horseshoe. Oxbows are frequently the escape point for rivers in flood because their tight bends come under immense pressure as river volumes increase.

<sup>51</sup> Todd 1964.

<sup>52</sup> Acheson 1962.

<sup>53</sup> "Report submitted to the PBCB for approval and produced for the information of the Minister of Works." – Report No. 260, 8.9.1958 (PBCB MB).

<sup>54</sup> Engineer, PBCB, to President, Junior Chamber of Commerce, 31.5.1951 (PBCB 2/19/7).

its paid for which would be worse. This matter has of course been examined pretty closely and we find (to our amazement, it must be admitted) that there has only been a foot or two rise which occurred between 1912 and 1935 and no rise since 1935 at least from Kaiteratahi downstream. The river in the last 15 years appears to have reached a new equilibrium following the increase in erosion debris issuing from gullies in the head-waters... The conclusion we have reached is that rising of bed levels is not likely to be an immediate threat, in fact the concentration of all the flood water in one channel and the 2 cuts will have the effect of scouring the channel deeper than it is now<sup>55</sup>.

In both these statements, it is clear that the potential negative impacts of aggradation on the success of the WRFCS were not fully investigated. In retrospect, aggradation has not impacted significantly on the effectiveness of the scheme. However, it should have been investigated more satisfactorily because there was considerable potential for the landscape alterations brought by the scheme to have achieved little more than environmental disruption. Regular sampling of aggradation rates in the lower Waipaoa was only initiated in 1947<sup>56</sup>, so the PBCB did not have sufficient scientific backing for some of its bolder claims about the likely effectiveness of its plans. From the general correspondence of the engineers who designed the WRFCS, it is also apparent that a full geotechnical study of the effectiveness of the river straightening work was never completed. A control scheme which is as dependent on straightening as the WRFCS remains a novelty in the New Zealand context. For a variety of reasons, therefore, more research was required before the plan was accepted.

The designers of the WRFCS believed it was necessary to take title to all land within the stopbanks up to the limit of continuous stopbanking – 27km upstream of the river mouth. In this regard, an important statement of intent was made at the commissioning of the works:

Title will be taken to all land within the stopbanks up to 17 miles at Waerenga-a-hika. The reason for this step is the necessity to ensure that the berms and channel banks are kept in grass and as closely grazed as possible at all times. This is the most practical way to minimize deposition of silt...

Compensation for the land to be taken will be paid for out of Scheme funds as will all claims for injurious affections of all sorts whether or not title is taken. The land taken for the floodway will as far as possible be leased to the adjoining owners<sup>57</sup>.

The main purpose of securing this land – 1,500 acres in total<sup>58</sup>, of which at least 330 acres were Maori-owned<sup>59</sup> – was to keep the floodpath free of such potential

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<sup>55</sup> Notes for a speech to the ratepayers association – A.D. Todd, Engineer, PBCB, 9.5.1951 (PBCB 2/19/7).

<sup>56</sup> "Waipaoa River flood control proposals." – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

<sup>57</sup> "Waipaoa River flood control scheme." – PBCB to members, 12.11.1952 (PBCB 2/19).

<sup>58</sup> "Waipaoa River flood control proposals." – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

obstructions as fences and shelter belts. However, there were other, less legitimate reasons for the PBCB's insistence on securing title to the floodway:

The ideal picture is the [control of] land from end to end. It is undesirable to have any cross fences, any obstruction whatsoever on that [land] and, with the multiplicity of owners, you are going to have cross fences and every cross fence would be completed with a row of poplars and willows... The Waimacirere [sic.] River Trust has control of the banks of the Waimacirere and it is a profitable venture for them, in that it pays for the maintenance<sup>60</sup>.

At least in part, therefore, the PBCB used the claim that obstructions had to be minimised to legitimise the taking of what was effectively to become endowment land to pay for scheme maintenance.

In any case, not all of the land between the stopbanks was kept free of obstructions and few of the Maori owners who lost title to land were subsequently able to lease the land back for grazing<sup>61</sup>. Not long after the stopbanks had been completed, the PBCB began to lease the floodway lands to local farmers. At first, the lessees were restricted to grazing activities and the lands were popular for stock finishing and winter grazing. Eventually, however, the PBCB, and later the GDC, loosened its stipulations on land use between the stopbanks. Today, crops can be seen growing at several places between the banks, perhaps calling into question the real need to acquire this land in the 1950s<sup>62</sup>. Two interviewees for this study commented that Maori have struggled to attain lease rights within the floodway<sup>63</sup>, suggesting that the promise to, 'as far as possible,' lease this land back to those who lost it has been unfulfilled. Leases have been offered to the highest bidder, and no favouritism has been shown to original Maori owners. Moreover, some local Maori have even been prevented from obtaining access through the land to traditional fishing locations on the river<sup>64</sup>. Lessees of the floodway occasionally block access for fishers. In retrospect, therefore, it is not surprising that acquisition of floodway land was to be "the fundamental cause of all opposition to the proposals<sup>65</sup>."

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<sup>59</sup> 330 acres were assessed by the Maori Land Court in 1957 ("Judgement on the application of the PBCB for assessment of compensation for lands taken for soil conservation and rivers control purposes." – N. Smith, Judge, Tairāwhiti Maori Land Court, 6.9.1957 (PBCB 2/19/5)). This is likely to be most, but not all, of the Maori land which was affected. More accurate data cannot be sourced because only some types of Maori land had to be assessed by the Court and the records for other types of Maori land are indistinguishable from records for pakeha-owned land.

<sup>60</sup> "Special meeting of the Poverty Bay Catchment Board to discuss the Report on the Waipaoa Flood Control Scheme." – PBCB, 15.3.1949 (PBCB 2/19).

<sup>61</sup> The catchment board even sold some of this land, with the permission of the Commissioner of Crown Lands ("Crown land Block IX Waimata Survey District. 15.6 hectares at Kaiteratahi." – G.W. Boggs for Commissioner of Crown Lands, Department of Lands and Survey, to ECCB, 7.1.1983 (PBCB 2/19).

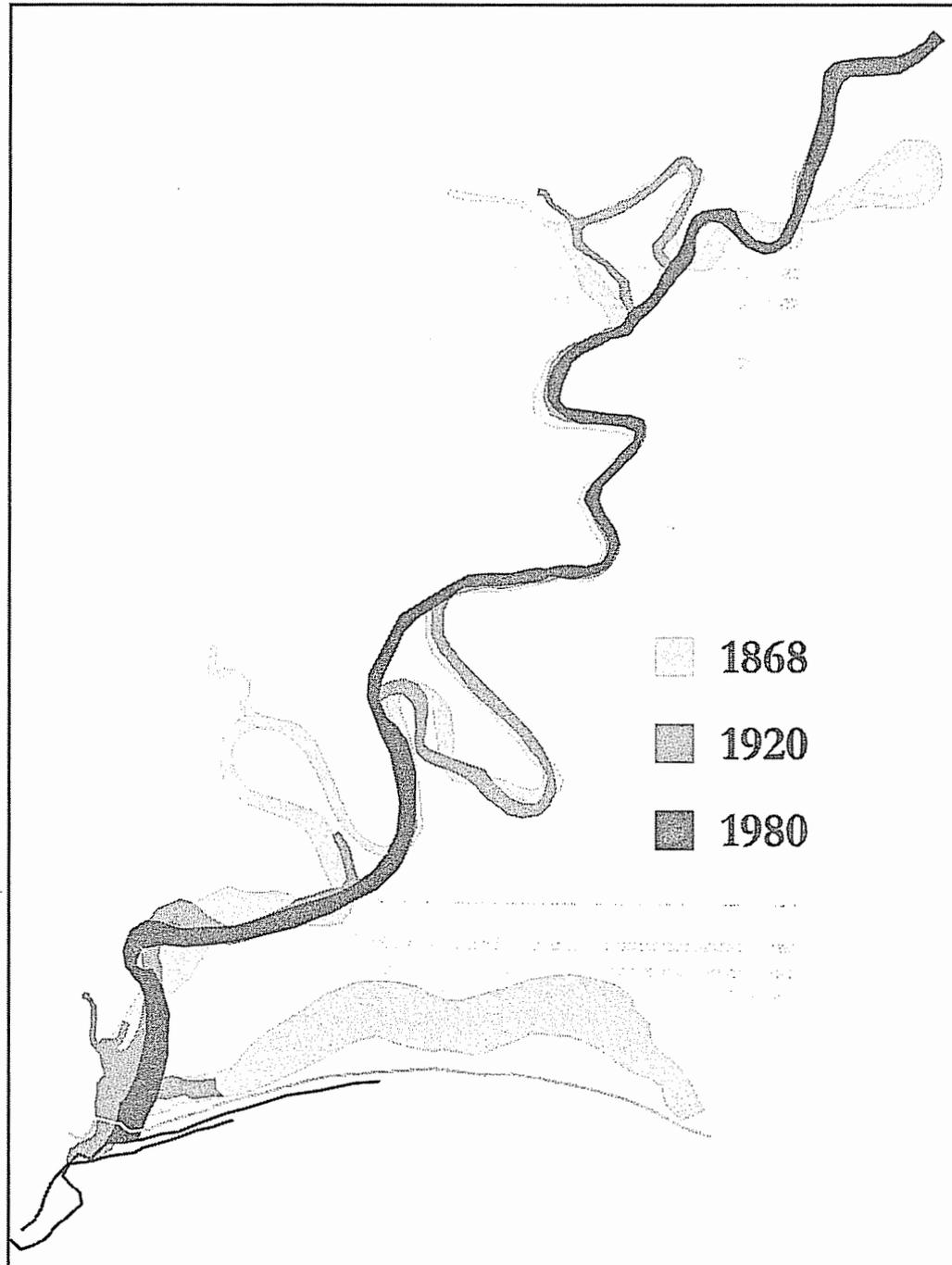
<sup>62</sup> It is conceivable that the floodway could have been kept clear through PBCB management regulations of land use rather than PBCB ownership of the land.

<sup>63</sup> Pers. comm. Stan Pardoe and George Ria.

<sup>64</sup> Pers. comm. Stan Pardoe.

<sup>65</sup> "Waipaoa flood control scheme. Objections to loan." – Chief Engineer, PBCB, 10.8.1952 (PBCB 2/19).

Figure 4.3 – Historical courses of the Waipaoa River<sup>66</sup>



### The loan poll – public participation?

The SCRCC had pre-approved a 3 for 1 subsidy for the project in 1950<sup>67</sup>. Few conditions were associated with this subsidy and it could be argued that the SCRCC should have better ensured that its money was spent in a way which reflected the Treaty. However, the only significant point of controversy in public debate about the WRFCS proposal was related to who should pay for the local contribution of £199,000 towards construction costs. A decision was made to establish a special rating area, the extent of which was to be based on the 9,700ha of the Poverty Bay flats which had been flooded in 1948 as well as Gisborne Borough and the town of Patutahi<sup>68</sup>. Ratepayers in this area determined whether the PBCB should receive authority to loan the £199,000 and, subsequently, to impose a levy on the scheme's benefactors to pay for the loan. The configuration of the proposed scheme was never directly submitted to public scrutiny and only *ratepayers* were given this opportunity to indirectly affect the parameters of the scheme by voting for or against the amount which the PBCB desired to borrow. Classification of the rating area to determine the rates share of individual landowners had been finalised near the end of 1951 and, while residents could object to this classification, they could not necessarily object to components of the proposal itself<sup>69</sup>. In other words, there were few formal opportunities to advocate for even small changes to the scheme – changes which might have, for example, been implemented to protect wahi tapu with little or no detriment to the objectives of the project.

The chairman of the PBCB questioned whether his Board should even submit to a loan poll. Amendments to the Soil Conservation and Rivers Control Act had provided catchment boards with an enabling power to extract rates for local residents without first obtaining their approval. While the recency of these provisions persuaded most members of the Board to seek the public legitimacy of a consenting poll result, the chairman argued that the poll was an inconvenience:

**Member Graham:** Are the ratepayers going to have a say on these proposals. I presume we will have to have meetings throughout the flats.

**Chairman:** In this we feel that we were doing something for the benefit of the District...It is for the Board to make up its mind to proceed, in spite of the devious vote and unless the Board felt it was doing something for the District it would not carry on...The people who go to the poll today are those who are sort of anti<sup>70</sup>.

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<sup>66</sup> **Source:** Gomez *et al* 1998.

<sup>67</sup> "PBCB Waipaoa River." – Treasury, to SCRCC, 4.7.1950 (W1 48/159); "£3 for £1 subsidy granted on Waipaoa Flood Control Plan." – Poverty Bay Herald, 1.8.1950 (W1 48/159).

<sup>68</sup> "Waipaoa River flood control proposals. Queries from ratepayers." – Chairman, PBCB, 12.11.1952 (PBCB 2/19).

<sup>69</sup> Secretary, PBCB, to Chairman, PBCB, 28.7.1950 (PBCB 2/19/7).

<sup>70</sup> "Special meeting of the Poverty Bay Catchment Board to discuss the report on the Waipaoa flood control scheme." – 15.3.1949 (PBCB 2/19).

These sentiments suggest that important decision-makers within the PBCB did not value public input on the scheme. In this philosophical climate, there was almost no opportunity for tangata whenua to have their values heard in the decision-making process.

Despite the relatively limited purpose of the loan poll, it was preceded by concerted disapproval. The "opposition to the loan (poll) was organised by some of the property owners from whom land was to be taken for river control purposes<sup>71</sup>." In fact, many of the locals who objected to the proposal included sound engineering reasons in their submissions. In a letter addressed to the local member of parliament, the secretary of the *Waipaoa flood relief committee* – the main opposition group – contended that headwater erosion in the Waipaoa catchment would negate the scheme's principal benefits<sup>72</sup>. This finding was supported by geological studies which had been published to that time. The failure of the PBCB to consider the potentially negative impact of aggradation on the effectiveness of the WRFCS reflects the haste with which the scheme was developed. This haste was also the subject for criticism in the letter of the *relief committee* to the Works Department, which suggested that there had not been sufficient publicity of the scheme for the public to know of its full impact. Representatives of the Works Department who vetted the PBCB's proposal appeared to accept this view, but this did not alter the Department's decision to support the proposal<sup>73</sup>.

In order to establish the WRFCS as quickly as possible, the PBCB imposed a rigorous timeframe on the requisite activities between design and implementation. This list highlights the confidence of PBCB staff that the WRFCS plan could be fast-tracked through the design and objection phase of its development:

Estimate 8 months necessary to:

- complete the plan (2 weeks);
- check and print it (4 weeks);
- do land title searches (3 weeks);
- notices of intention to take land (2 weeks);
- 40 days advertisement (6 weeks);
- objections to be heard by board (4 weeks);
- to ...[Public Works Department] (4 weeks);
- to Wellington for Proclamation (4 weeks)<sup>74</sup>.

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<sup>71</sup> Notes on the history of the WRFCS, June 1968 (PBCB 2/19).

<sup>72</sup> "Waipaoa River control scheme." – O.J.M. Alley, Secretary, Waipaoa Flood Relief Committee, to H. Duffield, MP 16.10.1952 (PBCB 2/19/7).

<sup>73</sup> "Waipaoa River flood control scheme." – E. McKillop, Commissioner of Works, MoW, to Resident Engineer, Gisborne, n.d. (PBCB 2/19/7).

<sup>74</sup> "River survey and section from Main Highway to Ngatapa Railway." – E.L. Glanville, PBCB, to Chief Engineer, PBCB, 4.6.1953 (PBCB 2/19/3).

It was inevitable that this time-frame would prove too ambitious and that opportunities for public involvement would be compromised.

In its haste to implement a scheme, the PBCB was unprepared for the level of public opposition to its plans. It had not allocated sufficient time for a programme of public consultation/education which could have answered and incorporated the concerns of local people. As a result, public liaison activities for the WRFCS were limited to a 'publicity' campaign, but even this was compromised by lack of sufficient time:

The time available for preparation of material is short and a considerable concentration of effort is required to have all the publicity arrangements in hand and material prepared<sup>75</sup>.

The principal components of this campaign included newspaper and radio articles and advertisements for the five days preceding the poll as well as a direct mail-out of an 8-page information brochure entitled. The cost of the campaign was £251<sup>76</sup>, a ridiculously small expenditure in comparison to the short and long term costs of the WRFCS itself. Moreover, as an example in public communication, this was an entirely passive and uni-directional exercise. Essentially, the package was comprised of propaganda about the scheme's benefits mixed with attempts to capitalise on landowners' irrational fears about the impact of flooding. There were no opportunities for the public to respond to these pamphlets, nor for public interest groups and tangata whenua to influence the decision on the loan or the design of the scheme.

Ultimately, ratepayers in the special rating area voted overwhelmingly for the proposed scheme, probably because a heavy flood had occurred not long before the loan poll itself<sup>77</sup>. The poll was carried with an 80% majority, but only 16% of those who were eligible had voted. The size of the majority also reflected the 'success' of the PBCB's advertising campaign. This campaign was supplemented by the propaganda of the *Waipaoa flood control promotion committee* – a pressure group comprised mainly of Poverty Bay farmers who had close relationships with members of the PBCB. It also published a mail-out – *Remember this* (Figure 4.4) – which carefully detailed floods since 1876 and told of their catastrophic consequences. These scare tactics undoubtedly would have led many locals to accept without question *any* proposal which had been laid before them. This bias in publicly available information reinforced the lack of public opportunity to contest elements of the WRFCS. In turn, it reflected the enabling legislation for river control works. The Soil Conservation and Rivers Control Act 1941 contained almost no provisions for consultation

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<sup>75</sup> "Waipaoa flood scheme. Proposals for publicity campaign." – A.D. Todd, Engineer, PBCB, no date (PBCB 2/19/7).

<sup>76</sup> *Ibid.*

<sup>77</sup> "New bridge's safety tied to flood control." – Poverty Bay Herald, 5.11.1959 (GisMUS VF-Natural Events).

of affected parties, nor for public participation. It also failed to recognise the special rights of iwi to waterways which are guaranteed under the Treaty.

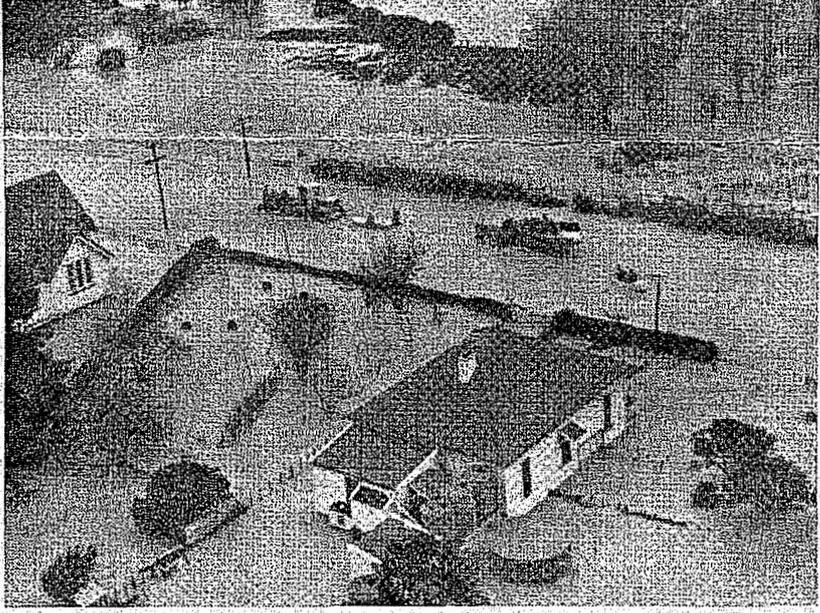
Figure 4.4 – The publicity campaign of a local pressure group for flood relief

**HOUSEHOLDER.**

Postage Paid at  
Gisborne.  
Permit No. 54

**TO THE RATEPAYERS** of the Waipaoa River Flood Control  
Scheme Special Rating Area.

**REMEMBER THIS**



MAKARAKA, 1950.

ISSUED BY the Waipaoa Flood Control Promotion Committee, a voluntary organisation comprising representatives of all parts of the P.B. Flats and the Borough of Gisborne.

## 4.3 Implementing the WRFCS

### Design alterations for ratepayers, not Maori

When the loan poll had been accepted, the principles of the scheme were also, by default, publicly adopted. Because the plan for the scheme was more of a statement of intent than it was a definitive list of works to be completed<sup>78</sup>, however, there remained significant opportunity to influence minor choices in the formulation and location of public works. While there were no formal opportunities to re-shape the plan, a number of landowners successfully persuaded the PBCB to alter the position of stopbanks or culverts by small proportions. In this manner, houses, barns, private roads and, even, fences and shelter-belts were safeguarded through minor redrafting of the scheme. Indeed, it was the *lack* of a formal process for this redrafting which might be seen as an injustice. In this context, those landowners who possessed technical and financial resources, or were familiar with the politics of public objection, were successful in obtaining a plan change. Many of the potentially affected parties would not have known about the possibility of scheme variations or, alternatively, may not have had the resources or political skills to influence that scheme. In keeping with the origin and evolution of the WRFCS, variations to the publicly notified plan reflected the whims of the larger landowners.

There is no doubt that the evolution of a proposal for the WRFCS was inextricably linked to local desires for economic development. The scheme was said to be designed explicitly to facilitate and encourage “the maximum intensive development and utilisation of the Poverty Bay flats upon which the future progress of the district depends<sup>79</sup>.” With these objectives, it naturally followed that the owners of large farms were to be given more say in late changes to the scheme than were those with smaller properties. Indeed, some of the larger landowners had been particularly vocal in their demand for subtle changes to the scheme<sup>80</sup>. The relevant archives<sup>81</sup> for this stage in the development of the WRFCS include many examples of landowners successfully petitioning the PBCB engineer to adjust the location of stopbanks and earthworks so that the land under farm assets could be saved from compulsory acquisition.

The hegemony of landowners, in particular, and ratepayers, in general, in the process of river control was reflected in public meetings held both before and after the

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<sup>78</sup> The PBCB engineer’s plan of 1949 contained 18 types of work which would be carried out as well as a map of their likely location. (“Waipaoa River flood control proposals.” – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19)). However, there was sufficient flexibility in most of these designations to allow for relocation if a need was subsequently proven.

<sup>79</sup> “Waipaoa River flood control scheme. Ministerial inquiry.” – D.B. Dallas, Resident Engineer, MoW, Gisborne, to Commissioner of Works, MoW, 27.5.1952 (PBCB 2/19/7).

<sup>80</sup> See, for example, “Letter of objection.” – Cook County ratepayers committee, to PBCB, 17.7.1950 (PBCB 2/19).

<sup>81</sup> PBCB 2/19.

loan poll. The types of organisation with which the PBCB met to discuss the WRFCS included the Cook County Rate-payers Committee<sup>82</sup>, the Junior Chamber of Commerce<sup>83</sup>, Rotary<sup>84</sup>, and a pressure group comprised of supportive farmers<sup>85</sup>. Given that iwi groups faced extensive requisition of their lands in the floodway, it would have been prudent for representatives of the PBCB to meet with them. However, there was no such meeting: the PBCB had pre-determined who were the important publics in the Gisborne district and, accordingly, it selected an elite group of representative interests for involvement. Typically, these interest groups reflected landowner, ratepayer and business elites.

There was considerable support for the scheme amongst these groups because of its potential to bring economic growth to the district<sup>86</sup>. At a meeting called by the PBCB of stock and station agents, and farm accountants, merchandisers and banking representatives – groups which again reflect the types people with whom the Board would liaise – this resolution was unanimously adopted:

That this meeting supports the Poverty Bay Catchment Board in its endeavour to provide protection from floods and is of the opinion that the undertaking of the Waipaoa Flood Control Scheme is necessary for the continued productivity of the Poverty Bay Flats and the prosperity of Gisborne and Districts<sup>87</sup>.

It was widely known at the time that J. Wattie Cannery Ltd. had shown considerable interest in establishing a cannery in Gisborne, but it would only do so with a guaranteed supply of produce. The company effectively delivered an ultimatum to the region: it would only contemplate the development of a cannery, if the PBCB would protect local horticulture through establishment of a control scheme<sup>88</sup>.

These influences on the WRFCS meant that Maori were effectively displaced as an affected party in the deliberations. The one significant opportunity for local Maori to influence the direction of the WRFCS was through membership on the PBCB itself. During 1949 – the year in which many of the important decisions were made – there was a Maori member of the Board. However, his involvement in Board meetings was particularly subdued, with only one published record of his opinion of the scheme. This was the important meeting wherein the PBCB ultimately decided to adopt the engineer's plans:

<sup>82</sup> Secretary, PBCB, to Chairman, PBCB, 28.7.1950 (PBCB 2/19/7).

<sup>83</sup> A.D. Todd, Engineer, PBCB, to President, Junior Chamber of Commerce, 31.5.1951 (PBCB 2/19/7).

<sup>84</sup> "Waipaoa River Flood Control Scheme." – Notes from an address by A.D. Todd, Engineer, PBCB, to the Gisborne Rotary Club, 10.11.1952 (PBCB 2/19/7).

<sup>85</sup> A.D. Todd, Engineer, PBCB, to Waipaoa Flood Control Promotion Committee, 17.11.1952 (PBCB 2/19/7).

<sup>86</sup> "Waipaoa flood control scheme economic report." – Engineer, PBCB, to Chairman, PBCB, 12.8.1949 (PBCB 2/19/4).

<sup>87</sup> Secretary, PBCB, to Chairman, PBCB, 2.10.1950 (PBCB 2/19/7)

<sup>88</sup> Todd 1964, p10.

**Member Ngata:** I would like to express my appreciation of the report put before the Board. Also for the plans made available to the members.

...[On that,] member Ngata retired at 2.30pm<sup>89</sup>.

It is unclear exactly who this particular Mr. Ngata was or who he represented – there were, of course, many Maori leaders with that surname in the district. Regardless, the involvement of this individual only partially balanced the membership of the Board and the groups which it chose to represent the public interest. Generally, the membership of the Board and other local agencies of environmental administration was overwhelmingly pakeha. Throughout New Zealand, the membership of catchment boards were generally comprised of, and elected by, farmers and it is not surprising that their decisions reflected agricultural concerns.

Tangata whenua were concerned about the scheme for many reasons. One such cause of complaint related to the three cuts through the Waipaoa's oxbows which, because they included substantial areas of slack and deeper water, included some of the better fishing spaces on the river<sup>90</sup>. The Matawhero and Te Wairau meanders, in particular, were abundant sources of flounder, mullet and, occasionally, kahawai. The engineer of the PBCB was to admit that the principal reason for removing the three oxbows was to cut costs<sup>91</sup>. With a straighter course, the river would cut downwards more rapidly, meaning that lower and, therefore, less costly stopbanks could be implemented. In confirming this assertion, the chairman also concluded that "the layout adopted was chosen because it was cheapest<sup>92</sup>." The engineer proffered a supplementary and related reason for the extensive use of cuts in the WRFCS:

After considering a number of possible routes for the river channel and a number of possible overflow channels or 'flood escapes' it became apparent that any radical departure from the existing course would result in serious conflict with the existing pattern of settlement, and of roads, railways, drainage and so on. This is of course reflected in high costs arising out of compensation, road and railway deviations, bridging etc., so that, while there are no insuperable engineering difficulties in carrying out such alternatives, they are not economically justifiable<sup>93</sup>.

The designers of the WRFCS were fixated with the requirement of inconveniencing landowners and communications as little as possible, while at the same time protecting those same properties and communications. With these concerns established as the primary objectives, such *non-property* resources as wetlands, oxbows or archaeological sites were to be considered expendable. Likewise, the broader con-

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<sup>89</sup> "Special meeting of the Poverty Bay Catchment Board to discuss the report on the Waipaoa Flood Control Scheme." – 15.3.1949 (PBCB 2/19).

<sup>90</sup> Pers. comm. Darcy Ria.

<sup>91</sup> "Waipaoa River flood control proposals." – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

<sup>92</sup> "Waipaoa River flood control scheme." – PBCB to members, 12.11.1952 (PBCB 2/19).

<sup>93</sup> "Waipaoa River flood control proposals." – Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

cerns of Maori were given a low priority because they were not the principal land-owners on the Poverty Bay flats. The failure of the PBCB to elicit these concerns also related to its desire to pursue the least cost option for flood control. Yet, financial expediency and Treaty obligations are not compatible.

In relation to the prospect of upgrading the WRFCS in the late 1990s, Haapu argued that replacement stopbanks would have a considerable impact on Maori archaeological sites<sup>94</sup>. This potential impact was based on the contention that:

It is a known fact that our ancestors lived in settlements which littered the Waipaoa river. It was a major resource for kai and water; it was the lifeblood of iwi. Our ancestors also ritualistically buried their dead near the river courses<sup>95</sup>.

While disturbance of archaeological sites was more significant in the upgrade proposal, which led to an inner ring of stopbanks near Patutahi/Waituhi being replaced with stopbanks on higher ground, similar impacts were evident in the initial earthworks for the WRFCS. The stopbanks built in the 1950s and 1960s were set back far enough from the river that their construction interfered with a number of old pa sites and, even, some burial sites. In traditional times, local iwi built their kainga as close as possible to the river and Jones records a substantial number of archaeological sites within a short distance of the Waipaoa and Te Arai rivers<sup>96</sup>. Stopbanks were usually constructed by mounding local earth with heavy machinery, so they often led to disruption of archaeological sites. One particular example from the archives is noteworthy:

One of my digger operators encountered pre-historical [sic.] structures today while forming a bank. They did not seem to be anything special, so I told him to go on. I thought you should know about this because other teams working in the area might find similar structures<sup>97</sup>.

A marginalised comment to this hand-written letter states that:

Noted 10/8/57. The owner of the land is not a Maori chap himself, so I don't think he'll mind if we continue the work.

The assumption of the PBCB staff member is evident: Maori have no rights on ancestral lands which have been sold. Today, s 6(e) of the Resource Management Act requires that decision-makers "recognise and provide for"...

The relationship of Maori and their culture and traditions with their ancestral lands, water, sites and waahi tapu, and other taonga.

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<sup>94</sup> Haapu 1997.

<sup>95</sup> *Ibid.*

<sup>96</sup> Jones 1988.

<sup>97</sup> "Unearthed structures." – R. Roberts, Contractor, to Engineer, PBCB, 8.8.1957 (PBCB 2/19).

This requirement applies irrespective of whether Maori own the land, but there was no equivalent in the Soil Conservation and Rivers Control Act 1941. The Act contained no directive for catchment boards to pay attention to Maori spiritual and Treaty concerns relating to either waterways or archaeological sites. Consequently, there were no opportunities for iwi to obtain through consultation subtle alterations to the locations of earthworks to thereby reduce the impact on wahi tapu.

Another concern which was to prove controversial for local Maori related to the location of overflows or 'flood escapes' for the scheme. Because flood control schemes cannot be constructed to survive all floods, they always include release points from which water is allowed to flow in times of particularly severe rainfall. Thus, some areas are designated for controlled flooding and accept more floodwaters than would naturally be the case. The two major overflows on the WRFCS are at Waerenga-a-hika on the true left and Patutahi on the true right<sup>98</sup>. Although both areas were prone to flooding before the advent of the WRFCS, there is no doubt that Patutahi is more susceptible to major floods than at times in the past. Indeed, the engineer for the PBCB had always been open about the *choice* involved in making Patutahi the overflow point for the true right of the Waipaoa<sup>99</sup>. For example, a response to a question about the relationship of the WRFCS to the Taruheru River and, hence, Gisborne Borough reveals considerable bias:

The effect of the Waipaoa scheme on the Taruheru River will be beneficial. At present all the floodwater escaping from the Ormond dip and more than half of it escaping from Waerenga-a-hika finds its way into the Taruheru. In floods which exceed the scheme's design, more of the escaping floodwaters will be sent west rather than east, which is not the case today. Gisborne Borough will be better protected from the Waipaoa flooding the town via the Taruheru. Floodwaters will head towards the less-populated areas<sup>100</sup>.

The 'less-populated areas' – Patutahi and, to a lesser extent, Manutuke – were then, as now, occupied predominantly by Maori.

Records suggest that the river broke its banks at Patutahi and ponded behind the stopbanks in the 1965, 1967, 1974, 1981 and 1988 floods<sup>101</sup>. Because there were only a limited number of places where the river could break free of the stopbanks, a much larger volume of water went through Patutahi, especially in the flood brought about by Cyclone Bola in 1988. Although topographic and hydrological conditions would have meant that there were only a few places where the spillway on the true

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<sup>98</sup> "Special meeting of the Poverty Bay Catchment Board to discuss the report on the Waipaoa flood control scheme." – 15.3.1949 (PBCB 2/19).

<sup>99</sup> "Waipaoa River flood control scheme." – Address by A.D. Todd, PBCB Engineer, to Rotary Club" 10.11.1952 (PBCB 2/19).

<sup>100</sup> A.D. Todd to Waipaoa Flood Control Promotion Committee, 17.11.1952 (PBCB 2/19/7).

<sup>101</sup> "WRFCS Flood damage restoration. August 1965 flood." – I.E. Jones, Engineer, to Chairman, PBCB, 5.10.1965 (PBCB 2/19); "The Waipaoa River regime. Middle reaches." – R. Koutsos, Senior Engineer, ECCB, to ECCB, 4.11.1981 (PBCB 2/19).

right could have been located, local iwi were given no opportunity to object to Patutahi – a Maori community of considerable size and importance – becoming the receiving environment for major flood events. This problem is accentuated by the pursuit of financial expediency in the design of the WRFCS. Unlike the situation on the true left of the river, the drainage pattern on the true right is towards the Waipaoa. Moreover, the Arai and Whakaahu/Waikakariki waterways drain sizable sub-catchments. When these waterways flood, it is now impossible for the floodwaters to enter the Waipaoa because of the location of stopbanks. Consequently, floodwaters build up in the Patutahi and Waituhi areas and pond for days before they can drain into the river. Simple engineering bypasses and subtle positioning of the stopbanks could have prevented this back-ponding; these measures were not implemented because the PBCB did not think the extent of assets in this area warranted the expense.

Similar concerns were to be voiced in the late 1950s when the Wi Pere Trust requested additional stopbanking on the true right of the Waipaoa at Tangihanga Station. The initial design of the scheme at this point on the river included a higher stopbank on the true right than on the true left because, if the river was to breakout at Tangihanga Station or Waituhi, the floodwaters would not have returned to the river, but rather would have ponded around Repongaere<sup>102</sup>. Farmers on the true left were outraged by the disparity in the level of the stopbanks and called for consistent protection. Eventually, the PBCB succumbed to these demands for a higher stopbank to protect the Ormond side of the river, leading to the expectation that in times of major flooding an additional water load would be returned to the true right, through Tangihanga Station<sup>103</sup>. The Board also implemented a minor spillway at an identical height to this raised stopbank in its equivalent on the true right<sup>104</sup>. As a result, Tangihanga Station was threatened considerably by two sets of alterations which were the result of direct bequests from pakeha farmers. Throughout the 1960s, the PBCB engineer attempted to reverse these variations, recognising that the marae at Waituhi was threatened and that a flood would extend “possibly to levels not previously reached<sup>105</sup>.”

This controversy was also related to the curious decision not to drive a cut through the Ormond loop – a sizable oxbow of the Waipaoa and, now, a considerable pressure point in times of flood. A study of the effectiveness of the WRFCS was commissioned in 1993 and it concluded that the failure to implement a cut through the Ormond loop could lead to a volatile break out of floodwaters which will affect his-

<sup>102</sup> “Raising stopbanks Waerenga-a-Hika and Repongaere.” – A.D. Todd, Engineer, PBCB, to Chairman PBCB, 9.12.1957 (PBCB 2/19).

<sup>103</sup> “Wi Pere Trust Estate.” – K.R. Norman, Wi Pere Trust, to Secretary, PBCB, 15.10.1957 (PBCB 2/19).

<sup>104</sup> “Waipaoa River Flood Control Scheme. Stopbanking Waerenga-a-Hika and Repongaere.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 18.1.1958 (PBCB 2/19).

<sup>105</sup> “WRFCS stopbanking Patutahi and Wairenga-a-hika.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 8.2.1961 (PBCB 2/19).

toric sites and valuable horticultural land on Tangihanga Station<sup>106</sup>. In the 1970s and 1980s, there had been a considerable number of minor floods which caused relatively significant damage north of Waituhi<sup>107</sup>. During the design of the scheme in 1949, the PBCB engineer had wanted to remove the loop. The particularly strong voice of farmers on the Ormond side of the river prevented this and they fought vigorously to retain land within the loop.

The debate about the Ormond loop continues today and an upgrade to the stopbanks on either side of the river at Tangihanga Station in 1998 led to an appeal to the Environment Court by Wi Pere Trust<sup>108</sup>. Although the outcome of this appeal provides for increased attention to the archaeological sites on the Station, the matter has never been resolved satisfactorily for the Trust<sup>109</sup>, nor for Te Whanau a Kai who are principally affected. As part of the upgrade, a series of minor alterations were made to stopbanks at Waituhi and, "although the GDC consulted with individual landowners, the iwi and hapu had not been consulted<sup>110</sup>." From the 1950s to the 1990s, therefore, the history of river control at the Ormond loop/Tangihanga Station indicates that Maori concerns were given considerably less attention than those of owners of larger properties, even to the point where poor engineering decisions were made at the bequest of hydrologically ignorant farmers.

### Compensation of Maori landowners

It is beyond the scope of this report to provide detail on the fairness of individual compensation settlements with Maori landowners who were affected by the WRFCS. First, many of the records for these settlements are not specific enough to identify whether the land in question was Maori-owned. Second, the payments for Maori owners were ordinarily small and, even if an individual settlement was miscalculated by a considerable margin, the injustice would still represent a small monetary value. Third, the information recorded on correspondence relating to these settlements was minimal, meaning that it is often impossible to determine the purpose of the compensation payment. Rather than a detailed analysis of individual settlements, this section describes the *process* for compensating Maori owners and the way in which this departed from its equivalent for pakeha farmers.

Land between stopbanks was usually acquired by proclamation under the Public Works Act, with assessments for compensation carried out sometime thereafter. The delay in the assessment reflected the significant number of properties which were affected by the scheme. The District Land Purchase Officer of the Ministry of

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<sup>106</sup> Royds-Garden Ltd. *et al* 1993.

<sup>107</sup> "Subsidy for river control works." – ECCB, to Wi Pere Trust Estate, 10.10.1983 (PBCB 2/19).

<sup>108</sup> "Re. Waipaoa River scheme." – Wilson, Barber and Co. to Secretary, Wi Pere Trust, 6.5.1998; "Schedule of conditions to resource consent." – March 1998 (Both documents supplied courtesy of Tom Smiler).

<sup>109</sup> Pers. comm. Tom Smiler.

<sup>110</sup> Haapu 1997, p8.

Works – who was located in Napier – acted as an overseer in the assessment of compensation for land and injurious effects arising from the WRFCS<sup>111</sup>. Despite the scope of the task of assessment and the involvement of the Land Purchase Officer, the compensation archives<sup>112</sup> show extensive and personal liaison between the staff of the PBCB and affected landowners. Most landowners contracted their own valuers to assess the loss, with this value subsequently vetted through on-site assessment by representatives of the Catchment Board and valuers who had been contracted by the Board. In this way, farmers were given considerable liberty to convince the Board's assessors of the specific merits of their claims for compensation<sup>113</sup>.

However, this personal approach was not necessarily open to all. It was the stated preference of the PBCB to manage compensation issues for Maori land both formally and collectively<sup>114</sup>. The formality reflected the Board's concern to avoid the appearance of intimidating owners of smaller properties. While Maori landowners represented a considerable proportion of compensated owners, their affected properties tended to be much smaller than the average. The fact that Maori owners were many in number but represented only a small amount of land convinced the PBCB that, where possible, it would be better to encourage Maori petitioners to amalgamate their claims for compensation. A Maori Land Court judge was later to commend this strategy because the collective approach was "in accord with the practice of the Maori people in cases of a like nature<sup>115</sup>." In reality, however, the amalgamation of interests diluted the impact of individual petitions as well as specific evidence of injurious effects. Maori landowners were not given the same opportunity to establish a case in front of an assessor and, consequently, their claims were evaluated without sufficient regard to detail. In this respect, it is significant that a summary of likely land compensation deals for the WRFCS included an individual line for each pakeha property but, listed under 'M' in this ledger, a line read "all Maoris £23,000<sup>116</sup>."

Another significant difference in the processes for assessment of Maori and pakeha claims related to the grounds for compensation. In most cases, pakeha farmers obtained separate accounts for the value of requisitioned land and for injurious affection<sup>117</sup>. The former value was subjectively assessed in accordance with market

<sup>111</sup> "Results of ratepayers poll for LALB." – Secretary, PBCB, to Chairman, SCRCC, Wellington, 15.12.1952 (PBCB 2/19/3).

<sup>112</sup> **File:** PBCB 2/19/5.

<sup>113</sup> See, for example, "Estate of Eric Kenneth Finlater Cameron: WRFCS." – C.M. Williamson, District Public Trustee, to Secretary, PBCB, 11.2.1955 (PBCB 2/19/5); "WRFCS: Estate of E.K.F. Cameron." – Engineer, PBCB, to Public Trust Office, Gisborne, 26.5.1955 (PBCB 2/19/5).

<sup>114</sup> "WRFCS claims Waituhi area. Maori lands; Waituhi area; claims injurious affection." – Secretary, PBCB, to Nolan and Skeet, Barristers and Solicitors, 2.10.1959 (PBCB 2/19/5).

<sup>115</sup> "Judgement on the application of the PBCB for assessment of compensation for lands taken for soil conservation and rivers control purposes." – N. Smith, Judge, Tairāwhiti Maori Land Court, p1, 6.9.1957 (PBCB 2/19/5).

<sup>116</sup> "PBCB WRFCS schedule of taking of land." – April 1957 (PBCB 2/19/5).

value while the latter was determined even more subjectively in that it was based on a valuer's opinion of property disturbance, loss of crops, and such other factors as loss of access to the river. Because of this heightened subjectivity and the personal contact between assessor and landowner, the process for valuing pakeha claims was particularly sensitive to the reasoning of the landowner. On the other hand, Maori compensation settlements tended to provide a single calculation, with land value and injurious affection assessed simultaneously<sup>118</sup>. The PBCB justified this difference through a claim that Maori land typically had fewer improvements than pakeha land<sup>119</sup>, so it should, therefore, be assessed differently. This appears to have been racially-charged assumption rather than fact. Moreover, the value of assessments of Maori land was usually driven down by the Board's assessors on the basis that the WRFCS would bring additional benefits to Maori owners. Because the Maori land in question was often close to the river, and therefore flood-prone, it was suggested that the portion of this land which remained after requisition was more likely to be affected beneficially by the scheme<sup>120</sup>. Although this process of off-setting the benefits of flood protection against affection was also applied to pakeha claimants, it appears to have been cited disproportionately in settlements for Maori land.

A third significant difference in the compensation process as applied to pakeha and Maori landowners was undoubtedly beneficial for the latter: the involvement of the Maori Land Court as an assessor of the value of land requisitioned from Maori. From 1954, in accordance with the Finance Act 1944 and the Maori Affairs Act 1953, the Land Purchase Officer usually applied to the Court to determine the value of these lands<sup>121</sup>. In total, 63 parcels of Maori land were brought before the Court for assessment. However, only 20 of these blocks were eventually assessed in Court proceedings. The claims in respect of the remaining 43 parcels of land were settled out of court for a combined payment of £8,610, just in advance of the Court hearing<sup>122</sup>. This was, perhaps, an unfairly small payment, especially in relation to the value of the 20 parcels of land which did go through the Court – £15,365<sup>123</sup>. Although these parcels were generally larger than those in the group of 43, it was typical for smaller parcels of general land to attain a higher rating for injurious

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<sup>117</sup> "WRFCS compensation claims." – Nolan and Skeet, Barristers and Solicitors, Gisborne, to Secretary, PBCB, 31.1.1957 (PBCB 2/19/5).

<sup>118</sup> "Peddle's settlement: Compensation claim, WRFCS." – Engineer, PBCB, to Chairman, PBCB, 9.12.1954 (PBCB 2/19/5).

<sup>119</sup> "Waipaoa scheme compensation claims committee." – Secretary, PBCB, to Chairman, PBCB, 13.8.1959 (PBCB 2/19/5).

<sup>120</sup> "Rural valuation report on Waituhi catchment board compensations." – R.L. Bell, Registered Valuer, to Secretary, PBCB, 1.1.1960 (PBCB 2/19/5); "Waipaoa scheme compensation claims committee." – Secretary, PBCB, to Chairman, PBCB, 3.7.1959 (PBCB 2/19/5).

<sup>121</sup> "Waipaoa River control scheme. Maori-owned land acquisition: Maori Land Court hearing." – L.G. McMullan, District Land Purchase Officer, MoW, to Secretary, PBCB (PBCB 2/19).

<sup>122</sup> "WRFCS. Assessment of compensation for the taking of Maori lands." – Nolan and Skeet, Barristers and Solicitors, to Secretary, PBCB, 9.9.1957 (PBCB 2/19/5).

<sup>123</sup> "Judgement on the application of the PBCB for assessment of compensation for lands taken for soil conservation and rivers control purposes." – N. Smith, Judge, Tairarwhiti Maori Land Court, 6.9.1957 (PBCB 2/19/5).

effects. Proof that the owners of the 43 smaller parcels did not receive a fair return for their lost land would require research which was well beyond the scope of this study<sup>124</sup>.

The owners of the other 20 parcels also had reason for complaint. They had assessed the value of their land at £18,398 while the valuers for the PBCB had determined a collective value of £12,484. Faced with these opposing valuations, the judge decided to "split the difference"<sup>125</sup>:

And after giving the best consideration I can to the evidence, and having seen and listened carefully to the various witnesses; I am of [the] opinion that the values which the court is required to find in accordance with the Statute must surely lie somewhere between the sets of figures given on either side<sup>126</sup>.

This decision, which determined the value of £15,365 for the 20 land parcels, appears to have been based on little in the way of substantive reasoning. Again, the *specific* merits of evidence as to the value of land and affection for each parcel appear to have received insufficient attention.

While the use of the Maori Land Court elevated the impartiality of settlements, there appear to have been several occasions where settlements did not reach this level of proceedings. Essentially, the PBCB adopted a reactive approach to settling Maori claims: if Maori owners obtained representation by valuers or lawyers and then lodged a claim with the Board, their case was settled relatively quickly. The Board made all haste to encourage pakeha owners who were slow to lodge a claim, even helping some of them with the paper work in order settle early. However, if Maori owners failed to lodge a claim, the Board was not so encouraging. In October of 1959, the PBCB advised the District Land Purchase Officer not to take any action to resolve potential claims from Maori owners unless those owners lodged formal claims<sup>127</sup>. Up to that time, the Land Purchase Officer had provided considerable assistance to Maori claimants who were too poor to obtain representation. Without such assistance, some Maori claimants found it difficult to make any progress with their claim.

There are many examples where compensation was delayed or, less often, never finalised because the owners could not afford to appoint a negotiator. One of the most long standing of grievances of this type related to a group of Maori owners on

<sup>124</sup> In terms of £ per acre, the mean settlement value for the group of 43 parcels was similar to that for the group of 20 parcels. However, it was almost always the case that smaller parcels of affected land attained a higher settlement for injurious affection. Because the records of settlement do not separate land loss from injurious affection, it would be impossible to test this theory without obtaining the receipts sent to individual landowners.

<sup>125</sup> "WRFCS. Assessment of compensation for the taking of Maori lands." – Nolan and Skeet, Barristers and Solicitors, to Secretary, PBCB, p4, 9.9.1957 (PBCB 2/19/5).

<sup>126</sup> "Judgement on the application of the PBCB for assessment of compensation for lands taken for soil conservation and rivers control purposes." – N. Smith, Judge, Tairāwhiti Maori Land Court, 6.9.1957 (PBCB 2/19/5).

<sup>127</sup> Secretary, PBCB, to District Land Purchase Officer, MoW, Napier, 16.10.1959 (PBCB 2/19/5).

18 blocks of land near Waituhi<sup>128</sup>, including the Wi Pere Trust. Eventually, the Wi Pere Trust settled with the Board and it then assisted some of the remaining owners in obtaining representation<sup>129</sup>. Evidently, however, not all of the remaining owners received compensation because, even after intervention by the Maori Land Court, suitable negotiators could not be found<sup>130</sup>. There are numerous examples which suggest, therefore, that the compensation process was managed unfairly and with insufficient regard to the needs and socio-economic context of local Maori.

### Ecological outcomes

Principally, flood control schemes are an attempt to radically alter the drainage rates and drainage patterns of catchments and, as such, they alter river catchments in profound ways. These alterations are not only related to the functioning of the river itself but also relate to other environments which are dependent on the river. Stopbanks, for example, can disrupt the flow of tributaries into primary rivers and may also transform the fragile relationship between rivers and such other water systems as wetlands. Apart from the Awapuni and Waerenga-a-hika lagoons, which are considered below, there was little disturbance to drainage patterns on the eastern side of the river. This was because the peculiar drainage pattern between the Waipaoa and Taruheru rivers flowed predominantly from west to east, away from the Waipaoa<sup>131</sup>. As a result, there were few creeks which required culverting through stopbanks in order to drain back into the river on the true left of the Waipaoa.

The same was not true, however, on the true right, where the predominant flow was towards the Waipaoa. Around the Wherowhero Lagoon, in particular, several creeks were diverted, perhaps unnecessarily, because their flow was impeded by stopbanks for the Waipaoa. Stopbanks were drafted to cut across the extant course of the Karaua Creek and its flow was sent more directly into the Waipaoa. As a result, some of the freshwater pools at the head of the Wherowhero Lagoon have been starved of a water supply and have, subsequently, receded in their extent. Other than the high cost of culverting the Karaua through the stopbank, no other reason was given for this radical transformation<sup>132</sup>. If more recognition had been taken of the cultural importance of the Wherowhero Lagoon, and of the ecological importance of the flow of the Karaua into that lagoon, the cost of culverting the Creek may have appeared worthwhile.

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<sup>128</sup> See, for example, "PBCB-WRFCS outstanding claims." – District Land Purchase Officer, MoW, Napier, to PBCB, 1.6.1960 (PBCB 2/19/5); "PBCB-WRFCS outstanding claims." – L.L. McLintock, Land Purchase Officer, MoW, Napier, to Secretary, PBCB, 1.7.1960 (PBCB 2/19/5).

<sup>129</sup> "WRFCS Wi Pere Trust." – L.L. McLintock, Land Purchase Officer, MoW, Napier, to Secretary, PBCB, 12.6.1961 (PBCB 2/19/5).

<sup>130</sup> "WRFCS report. Maori claims." – District Land Purchase Officer, MoW, Napier, to Tairāwhiti District Maori Land Court, 3.2.1961 (PBCB 2/19/5).

<sup>131</sup> "Waipaoa River flood control scheme." – PBCB, to Members, PBCB, 12.11.1952 (PBCB 2/19).

<sup>132</sup> "Waipaoa River flood control proposals." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

Generally, the implementation of the WRFCS led to significant transformation of both lagoons at its mouth. To the north/east, the development of the flood control scheme hastened the total demise of the Awapuni Lagoon – a traditionally important resource gathering area for Maori – which was drained in the mid-1950s<sup>133</sup>. As shown in Figure 4.5, a stopbank was placed across the channel between the Waipaoa and Awapuni Moana. The location of a stopbank at this location did not have to lead to the lagoon's drainage, but it became a convenient excuse for the lagoon's reclamation. To the south/west, the complex and dynamic interface between Wherowhero Lagoon and the Waipaoa has been interrupted by stopbanks and associated drainage changes. The spillover of the sediment-laden and voluminous floodwaters of the latter 20<sup>th</sup> Century into the Lagoon would have had a negative impact on Wherowhero's ecological and resource values. In pre-European times, however, the wetland and estuary would have been dependent on periodic and light floods which refreshed water, flushed out naturally-occurring toxins and supplied nutrients<sup>134</sup>. The much-reduced transfer of water from the river to the lagoon has altered the balance between salt and fresh water and, consequently, transformed the species mix within the lagoon<sup>135</sup>. These types of change could have been partially mitigated through engineering solutions but an undervaluing of the wetland environment and Maori cultural values towards wetlands meant that no such solutions were implemented.

Figure 4.5 – The floodgate and stopbank across the Awapuni Creek



Where the cost of providing floodgates or culverting creeks through stopbanks was considered to be *financially* justifiable, landowner and catchment board opportunism often led, in any case, to negative ecological impacts. The Lavenham, Pipiwahakao and Whatatuna creeks had already been transformed through drainage by 1953, but the prospect of forced alterations brought about by the WRFCS acted as a catalyst for further drainage activities<sup>136</sup>. The Torries Lagoon, for example, would have endured considerable impact from the scheme no matter how it was configured. How-

<sup>133</sup> Refer to Section 8.1.

<sup>134</sup> "Town and Country Planning Act 1977. Review of Cook County District Scheme." – Wildlife Service, Department of Internal Affairs, July 1980 (WS 11/21/10).

<sup>135</sup> Clarkson and Clarkson 1991.

<sup>136</sup> A.D. Todd, Engineer, PBCB, to Waipaoa Flood Control Promotion Committee, 17.11.1952 (PBCB 2/19/7).

ever, the manager of the farm on which the lagoon was located convinced the PBCB that, because the WRFCS would alter the lagoon, he should be allowed to drain the lagoon by culvert before works on the scheme progressed<sup>137</sup>. This led to the total elimination of the lagoon, rather than a more modest impact.

Traditionally, the Waerenga-a-hika Lagoon was periodically refreshed by floodwaters from the Waipaoa River. In 1898, it had been partially cut-off from the river by a stopbank authorised by the Cook County Council<sup>138</sup>, but this small stopbank allowed some water to periodically enter the lagoon. While it markedly reduced in size, the lagoon was maintained in some form. Through the implementation of WRFCS stopbanks which did not have floodgates, it gradually retreated into a stagnant pond<sup>139</sup>. Rather than remedy the situation, the PBCB permitted the landowner to drain the lagoon<sup>140</sup>. These wetlands had once served as abundant resource spaces, providing raupo for crafts and decorations, as well as eels in considerable number.

Figure 4.6 – A stopbank on the Whakaahu Stream



The stopbanking of Te Arai River and the Whakaahu Stream altered these waterways significantly and, in conjunction with the taking of irrigation water from Te Arai<sup>141</sup>, altered the ecological functioning of the waterbodies. As a result, the abundant fish life which was once to be found in these streams has disappeared. Many of the fish species which inhabited the lower reaches of the Waipaoa and Te Arai Rivers required free migration paths

from the sea to fresh or slack water. Elvers, for example, need to find suitable habitat upstream from the Waipaoa River mouth so that they can develop fully into adult eels. With transformation of so many of the confluences of the Waipaoa and its tributaries, this migration path has become more obstructed. With the removal of the Matawhero oxbow and the partial blocking of the mouth of the Awapuni and Karaua Creeks, there are now fewer zones of slack water in the tidal reaches of the Waipaoa. This statement, which relates to the floodgate between the Waipaoa and

<sup>137</sup> S.V. Green to Secretary, PBCB, 9.9.1953 (PBCB 2/19); Engineer, PBCB, to S.V. Green, 4.2.1954 (PBCB 2/19).

<sup>138</sup> "Lagoon wall, Waerenga-a-hika." – A. Brown, to CCC, 16.12.1898 (GisMUS 72-122).

<sup>139</sup> "Flood of 14th August 1965. Poverty Bay Flats and Waipaoa River." – I.E. Jones, Chief Engineer, PBCB, to Chairman, PBCB, 3.9.1965 (PBCB 2/19);

<sup>140</sup> "WRFCS flood damage to Waerenga-a-hika Lagoon." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 1.2.1961 (PBCB 2/19).

<sup>141</sup> Refer to Section 7.3.

the former Matawhero oxbow, indicates the outcomes of these transformations on eels:

During summer months when elvers are migrating there is often a concentration of these young eels below the floodgates. I have observed the concrete pad covered to a depth of 6 inches with eels. I have frequently found the steel shutters jammed open with wood and I presume that some well meaning person has been assisting the migration<sup>142</sup>.

Initially, the catchment board believed that Wildlife Service staff were carrying out these clandestine activities<sup>143</sup>. Later, however, it was discovered that local Maori were allowing the passage of elvers into the former oxbow<sup>144</sup>. This was undoubtedly a response to a declining number of eeleries which, in turn, reflects the impacts of the WRFCS.

Initially, the PBCB had hoped that the Matawhero and Patutahi loops would rapidly disappear through floodwater siltation, but this was not to be the case and wetlands formed in the middle of each<sup>145</sup>. The Wildlife Service wanted to register the former oxbows as wildlife reserves, but their intentions were thwarted for many years by the PBCB and its desire to make profitable use out of the wetlands through drainage and conversion to pasture<sup>146</sup>. With the permission of the Board, neighbouring owners drained and reclaimed the Patutahi wetland before the wildlife authorities could act<sup>147</sup>. The Wildlife Service bought the Matawhero site in 1975, planting a number of species including puriri, karamu, koromiko, kohukohu, kahikatea, manuka, cabbage trees and flax<sup>148</sup>. Later, it was hoped that the nursery at this reserve "would play a part in providing materials for Maori arts and crafts<sup>149</sup>." Apart from the nursery, the former oxbow includes a waterfowl area of regional importance<sup>150</sup>. This restoration of native flora and fauna represents a positive outcome for tangata whenua and their kaitiakitanga relationship with indigenous species. In a broader context, however, it represents a minor attempt to mitigate the environmental transformation of resource spaces once important to local Maori.

<sup>142</sup> "Floodgates on Matawhero loop." – Wildlife Service, Department of Internal Affairs, to ECCB, 30.5.1981 (PBCB 2/19).

<sup>143</sup> "Matawhero loop floodgates." – ECCB, to Senior Wildlife Officer, Wildlife Service, Gisborne, 31.8.1981 (PBCB 2/19).

<sup>144</sup> "Matawhero dam and spillway." – MoWD, to ECCB, 5.5.1981 (PBCB 2/19).

<sup>145</sup> "Proposed wildlife refuges." – L.C. Bell, Field Supervisor, Wildlife Division, Internal Affairs, to Senior Field Supervisor, Wildlife Division, Internal Affairs, 29.6.1956 (IA 46-29-270).

<sup>146</sup> Gisborne-East Coast Acclimatisation Society to Internal Affairs, 24.2.1958 (IA 46-29-270).

<sup>147</sup> "Drainage of Patutahi loop." – ECCB, to R.M. Newman, M.T. Judd, G. Hair, A.R. Judd, E.C. Tietjen, 30.10.1981 (PBCB 2/19).

<sup>148</sup> "From wilderness to bush." – Gisborne Herald, p4, 6.8.1987 (GisMUS VF-Natural History: Botany).

<sup>149</sup> "Gateway opens way to new co-operation." – 26.8.1987 (GisMUS VF-Cultural Topics).

<sup>150</sup> "Cook County District Scheme review. Inclusion in District Scheme." – Department of Internal Affairs, Gisborne, to Conservator of Wildlife, Rotorua, 4.12.1979 (WS 11/21/10).

There is no doubt that the flood control scheme operates successfully within its limited design parameters. In 1960, for example, the most significant local deluge since 1917 failed to breach the new stopbanks, except for in areas where the banks were unfinished<sup>151</sup>. Although the stopbanks could not retain the floodwaters of Cyclone Bola, that particular event had a return period of 120 years as opposed to the 50 year flood for which the WRFCS was designed, producing a river flow which was 20% beyond the design criteria for the scheme<sup>152</sup>. Yet, in 1988 “[d]amage from flooding on the Gisborne flats was greatly reduced by the protection works<sup>153</sup>.” While the scheme will not always prevent flooding from major storms, its principal merit is that it prevents small storms from having any impact on valuable agricultural and horticultural land<sup>154</sup>. As a result of the relief from flooding, “the scheme has precipitated an intensification of land use on the Gisborne plains, and contributed towards the wealth and stability of the Gisborne area<sup>155</sup>.” Apart from the failure of some of the cuts to develop without substantial and costly assistance<sup>156</sup>, the WRFCS must, therefore, be considered a success within the context of its initial objectives.

However, the advocates, designers, and benefactors of the scheme appear never to have asked simple questions which should have been evaluated in the design phase:

- What were the potential negative social and ecological impacts of the scheme’s design?
- How could the objectives of the WRFCS be attained through alternative designs with reduced social and ecological impact?

In the environmental context, these questions are seminal in the reconciliation of Article I and II of the Treaty of Waitangi. The Crown does have a Treaty right to manage the environment. At the very least, however, the Crown has Treaty obligations to Maori to construct policies which ensure that agencies like the PBCB manage the environment at least cost to Maori interests. Such outcomes can only be guaranteed if Maori are given opportunities to voice their concerns about major projects of environmental transformation. As has been suggested in this Chapter, this was not the case in the decision-making for the WRFCS. Pakeha landowners, ratepayers and businesses were allowed significant, if informal, scope to seek variations to the final design of the scheme; Maori were given no rights beyond those vested in them as ratepayers and landowners.

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<sup>151</sup> “Flood control proves worth.” – Gisborne Herald, 21.11.1960 (GisMUS VF-Natural Events).

<sup>152</sup> “Keeping forces of nature at bay.” – Gisborne Herald, 7.12.1990 (GisMUS VF-Natural Events).

<sup>153</sup> Harris 1988, p1.

<sup>154</sup> Todd 1962.

<sup>155</sup> Harris 1988, p1.

<sup>156</sup> It was intended that the oxbow diversions be implemented through excavation of pilot cuts which would become the new course of the river with the subsequent gouging force of floodwaters. This never eventuated and the creation of the Matawhero cut, in particular, required expensive excavation by explosives.

## Afforestation

Chapters 2 and 3 evaluated the acceleration of flooding and erosion as a consequence of deforestation. Because of the increasing severity of flooding, the Waipaoa River flood control scheme (WRFCS) was constructed in the lower reaches of the Waipaoa River (Chapter 4) to protect agricultural land on the Poverty Bay flats. However, the prospect of continued erosion in the upper catchment, and hence aggradation in the middle and lower reaches of the valley, jeopardised the effectiveness of the WRFCS. The straightening of the river coerced the Waipaoa to degrade its channel but, without other forms of catchment management, this down-cutting could have been counteracted by aggradation<sup>1</sup>. In 1958, only five years after the initial earthworks for the scheme, a Poverty Bay Catchment Board (PBCB) report suggested that the WRFCS was likely to fail in its objectives to provide protection from a 100 year flood<sup>2</sup>. It was accepted soon after the implementation of the scheme that unless something was done to combat the amount

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<sup>1</sup> GDC 1991, p2.

<sup>2</sup> "Report no.260." – 8.9.1958, p316 (PBCB MB).

of sediment which entered the river channel, the scheme's effectiveness and life span would be curtailed. In 1956, the PBCB engineer stated that in the absence of management in the upper catchment, the WRFCS would lose its effectiveness after 30 years<sup>3</sup>.

Subsequently, an afforestation program was mooted for the headwaters of the Waipaoa and a governmental organization – the New Zealand Forest Service (NZFS) – acquired land for exotic plantations. Planting began in the early 1960s and continued into the mid-1970s, with minor additions thereafter under other projects. Although these forests were initially promoted for soil conservation, production forestry has come to dominate these objectives over time. The downstream implications of the change from protection to production forestry are discussed in this Chapter with particular reference to the Mangatu State Forest – the first state afforestation project in Tairāwhiti.

The way in which the Crown came to own the Mangatu State Forest is of equal importance to the ecological outcomes of production forestry in the area. Three groups possessed the land which was acquired to create the Mangatu State Forest: the Maori beneficiaries of Mangatu Blocks 1, 3 & 4 Inc., and the pakeha owners of Waipaoa Station and Tawhiti Station. Initially, at least, none of these property owners were willing to sell the land to the Forest Service. As will be shown, the Crown negotiators employed a different approach for pakeha and Maori landowners, with the latter offered fewer options than the former. During the negotiations, an orchestrated public campaign pressurised local Maori to act 'in the public interest' while, at the same time, these owners were forced to contemplate the veiled threat of compulsory acquisition of the land under the Public Works Act. The necessity of soil conservation was a central focus of the negotiations, in which Maori were encouraged to view the sale as a benefit to the wider community. Given that the conservation objectives have now receded from public view, it can be argued that the Crown did not negotiate for the sale of Mangatu lands in the spirit of Treaty partnership.

### **Afforestation for soil conservation**

The afforestation of unstable slopes for erosion protection is an attempt to regain the original protection of the indigenous forest cover, as described in Chapter 2. The concept was based on the simple assumption that "if the land had been reasonably stable under native forest then, perhaps, it would return to stability under exotic forest<sup>4</sup>." The interception of rainfall by the canopy, the absorption of moisture and retardation of throughflow by litter on the forest floor, and the stabilising

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<sup>3</sup> "Waipaoa River. Possible channel reduction." – A.D. Todd, Chief Engineer, PBCB, to Chairman, PBCB, 3.3.1956 (PBCB 2/19).

<sup>4</sup> Poole 1983, p66.

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influence of an inter-meshed root structure on the upper layers of the soil horizon<sup>5</sup> all work in unison to decrease the risk of mass movement on steep slopes.

Research has indicated that the incidence of mass movement under afforested slopes is less than that on hill slopes in pasture<sup>6</sup>. In seriously eroded areas, however, gullies and water courses draining steep slopes do not respond to afforestation. In these areas, erosion tends to spread regardless of the forest or pasture cover on adjacent slopes<sup>7</sup>. Nevertheless, on major earthflows and blocks of unstable terrain, afforestation can reduce soil movement at its source, several metres below the root zone<sup>8</sup>. The primary benefit of afforestation for erosion control is the dewatering of soil through increased interception of rainfall<sup>9</sup>. Transpiration of soil moisture through leaves and evaporation of intercepted moisture reduce percolation of water into the soil horizons where slips originate<sup>10</sup>.

In terms of flood control, afforestation slows the rate of water transfer to rivers and tributary streams, meaning that the 'peak' of floodwaters is later and lower – Rivers remain high for longer periods of time but the same volume of water is spread over this time, sometimes preventing flash-floods and, at the least, lessening the severity of downstream floods. It has been found that a land use change from pasture to pine plantation reduces water yield by between 30% and 50%<sup>11</sup>. Research has shown that afforestation reduced runoff by approximately 30% in the Mangatu sub-catchment<sup>12</sup>. In the Waipaoa headwaters, reduced stream and river response are also related to a reduction in erosion. Gully erosion provides about half of the sediment yield to rivers and there is substantial erosion from these gullies during and after heavy rainfall<sup>13</sup>. In the late 1950s, it was believed that afforestation would reduce gully erosion in storm events by spreading the supply of water to streams in gullies over a longer time-period. This beneficial reduction in the rate of stream response to rainfall is dependent on the steepness of the slope, the age of the pine plantations and the extensive formation of a forest canopy. After Cyclone Bola in 1988, land in mature pine trees was over 90% free of visible erosion. Areas planted in trees younger than 6 years old were almost as susceptible to erosion as pasture<sup>14</sup>.

These statistics suggest that, while there are sound reasons for afforestation as a soil conservation measure, it is also an insecure management proposition with a considerable degree of risk. It is, perhaps, the only strategy for controlling erosional problems over a significant area of land, but it is also a form of environmental man-

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<sup>5</sup> Hicks 1991, p21; Peacock 1986, p14.

<sup>6</sup> Hicks 1991, p22; Peacock 1986, p17; Zhang *et al* 1993, p186.

<sup>7</sup> Hicks 1991, p21.

<sup>8</sup> Zhang *et al* 1993, p186.

<sup>9</sup> Peacock 1986, p16.

<sup>10</sup> FRI 1990, p2.

<sup>11</sup> Blaschke and Peterson 1994, p71.

<sup>12</sup> Pearce *et al* 1987, p493. These figures are typically contested in other studies which yield results of +/- 20%.

<sup>13</sup> Page *et al* 2000, p15.

<sup>14</sup> FRI 1990, p2.

agement which requires caution and a considerable margin for error. This is especially the case when conservation goals are mixed with production and profit objectives. The harvesting of trees yields a period of time in which a renewal of erosion is likely because a second cycle of planting will not have the desired impact in the short term. For this reason, the protection-production continuum in forestry requires careful management and the movement towards increased use of the Waipaoa forests for *production* is cause for concern.

## 5.1 The evolution of Mangatu State Forest

### Initial reports

As indicated in Chapter 3, geologists had suggested the need for afforestation in the Waipaoa catchment as early as 1920. These suggestions were not taken seriously until the 1950s and, even then, afforestation was conceptualised as an *ad hoc* series of small-scale forests located in such areas of extreme erosion as the Tarndale-Mangatu slip complex. A soil conservation survey of 1952 found that the source of most debris in the Waipaoa River was the actively eroding gullies in the upper catchments, particularly in the Mangatu, Te Weraroa and the upper Waipaoa rivers<sup>15</sup>. At the time of the report, 43% of the hill country in the upper Waipaoa suffered from moderate to severe erosion. Of this, the authors recommended that 8% was too infertile or steep for farming and should be allowed to regenerate or be planted in trees<sup>16</sup>. From this report, the PBCB decided that the answer to the aggradation problem was to plant only the crushed argillite zones, theoretically decreasing the amount of sediment flowing into river channels from these areas<sup>17</sup>. While the report had also recommended widespread afforestation on some of the less eroded areas, the PBCB believed that it should only afforest those catchments which now, or in the near future, were likely to cause downstream problems<sup>18</sup>.

In view of the magnitude of the erosional problem, the PBCB approached the Soil Conservation and Rivers Control Council (SCRCC) to appoint a panel of experts to evaluate the situation in the Waipaoa catchment<sup>19</sup>. A report commissioned by the SCRCC concluded that afforestation should occur only on the crushed argillite area, with other forms of erosion control to be used in the less-eroded parts of the catchment<sup>20</sup>. The initial areas of land which were recommended for afforestation included: 3557ha from Mangatu Blocks 1, 3 & 4 Inc. (including an experimental erosion control site in Te Weraroa catchment), 1232ha from Tawhiti Station, 169ha from Te Rata Station and 642ha from Waipaoa Station. 2400ha were designated for production forest and 2800ha were to be solely for protection forestry.

Landowners who were potentially affected by these proposals criticised the haste with which the plan had been prepared. Public opinion on the Poverty Bay flats swayed heavily towards some form of erosion control in the upper headwaters to protect property owners from floods which were threatening to overtake the WRFCS. To implement the extensive programme of work which would be required for afforestation, the Crown was lobbied to purchase the land and to instruct the

<sup>15</sup> Hamilton and Kelman 1952.

<sup>16</sup> Allsop 1973, p26.

<sup>17</sup> "Report on soil conservation survey of the Waipaoa catchment by D. Hamilton and E.H. Kelman – October 1952." – A.D. Todd, Engineer, PBCB, to J.B. Hair, Chairman, PBCB, 13.5.1954 (GisMUS Pullar Papers).

<sup>18</sup> *Ibid.*

<sup>19</sup> "Waipaoa catchment." – PBCB, to SCRCC, 30.3.1955 (PBCB 21/10).

<sup>20</sup> "Report no.260." – 8.9.1958, p316 (PBCB MB).

NZFS to carry out the planting<sup>21</sup>. The PBCB was the principal advocate for afforestation and its submissions to central government contended that afforestation would reduce the transfer of sediment from gullied areas:

It has been established beyond doubt that the aggradation which is proceeding in the Waipaoa River is a real and increasing threat to the safety of the valley and that it is due entirely to gully erosion in what is known as the crushed argillite area, and not to erosion occurring elsewhere in the catchment. It has been demonstrated that afforestation in this area will in fact cure existing gully erosion and it can be inferred from the evidence available that afforestation will prevent the formation of new gullies. It has been learned by repeated and varied trials that there is no alternative to afforestation as a practical and economical method of doing both those things<sup>22</sup>.

Later, however, it has been discovered that the limitation of afforestation to argillaceous areas was not sufficient as a soil conservation mechanism and that the only successful strategy would be to afforest almost all of the upper catchment<sup>23</sup>. As was the case for the WRFCs, the catchment board advocated for a significant transformation of the environment without first having completed sufficient scientific investigation.

Given the potential for aggradation to limit the effectiveness of the WRFCs, it was not surprising that the PBCB led the call for afforestation in the upper Waipaoa but, initially at least, afforestation was not the centrepiece of its erosion control programme. Up until the late 1950s, afforestation had been a minor component of research which had been commissioned by the PBCB. The catchment board had evaluated several forms of erosion barrier on an experimental block of 480ha in the gully of Te Weraroa stream<sup>24</sup>. This site was leased from Mangatu Blocks 1, 3 & 4 Inc. for research purposes and was situated between the Waipaoa and Mangatu rivers in the most severely eroded part of the catchment. Debris dams, sediment retards in stream beds, sediment fences and a variety of other physical obstructions to land movement were employed on this land, but none were successful in preventing eroded material from entering the river system<sup>25</sup>. A smaller block of land within Te Weraroa catchment was close-planted with exotic tree species. This exercise was more successful in reducing run-off and soil movement<sup>26</sup> and, as a result, close planting of trees over the whole area was considered to be the only effective measure for stabilising hill slopes around gullies<sup>27</sup>. While these results were promising, they did not represent sufficient research to determine whether afforestation should be universal on pastoral land in the headwaters or whether it should be limited to only a few areas.

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<sup>21</sup> Allsop 1973, p26.

<sup>22</sup> "Submission to Ministers of Lands and Works." – J.B. Hair, Chairman, PBCB, 30.3.1959, p574 (PBCB MB).

<sup>23</sup> Hicks 1991, p21; Page *et al* 2000.

<sup>24</sup> "Inspection and report on Te Weraroa." – Central Standing Sub-Committee, SCRCC, 28.10.1954 (PBCB 4/45).

<sup>25</sup> *Ibid*.

<sup>26</sup> "Pilot plantings check run off at Te Weraroa gully." – Gisborne Herald, 12.8.1959 (PBCB 4/45).

<sup>27</sup> "Inspection and report on Te Weraroa" – Central Standing Sub-Committee, SCRCC, 28.10.1954 (PBCB 4/45).

The scientific basis for afforestation on different scales was one of many types of information which the PBCB and the SCRCC should have gathered. As was the case for the WRFCS, the PBCB did not investigate satisfactorily the potential negative impacts of afforestation. Again, the heightened perception of the need to protect Poverty Bay *farmers* is likely to be the reason for this. In discussions of the concept of upper catchment afforestation, the benefits to downstream users were considered paramount:

[I]t cannot be too strongly emphasised that the benefit to be derived from this sort of planting in so far as erosion control is concerned is predominantly an off-site benefit. The immediate loss to the farmer of the acres involved in gullying and its attendant slumping is not great considering the total size of the holdings concerned, far more serious is the effect of erosion debris accumulating in the streams and rivers downstream of this boundary<sup>28</sup>.

In this way, the total loss of land for Maori or individual farmers in the headwaters could be justified on the basis of the 'common good' benefits for a wider number of farmers on the flats. This justification, of course, was entirely economic but, as will be shown, Maori wanted to retain their lands for cultural rather than economic reasons.

The PBCB lobbied ardently for government involvement in establishing a programme of afforestation:

The Board... recommends strongly that urgent action be taken to acquire the land comprising the crushed argillite area and to initiate afforestation of this area by the NZFS so that in due course the balance of nature will be restored<sup>29</sup>.

In addition to such appeals, a ministerial visit was organised to support the PBCB's application for assistance<sup>30</sup>. During this visit, emotional appeals were made to the Minister of Crown Lands from landowners on the Poverty Bay flats, but there were few opportunities for the Minister to learn about the values of those landowners who would lose their property.

### **Maori as agri-environmental managers: the public perception**

In order to determine whether the negotiated sale of Maori land for afforestation was fair, it is important to account for the pressure placed on the Crown to divest Maori of their land. The ideological context at the time of the land purchases marginalized Maori in a process which was primarily designed to benefit landowners downstream. Maori and their attitude to land retention were seen as an impediment

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<sup>28</sup> "Afforestation as a subsidised soil conservation measure." – Report No.244, A.D. Todd, Engineer, PBCB, to Soil Conservation Committee, PBCB, 5.8.1958 (PBCB MB).

<sup>29</sup> "Submission to Ministers of Lands and Works." – J.B. Hair, Chairman, PBCB, 30.3.1959, p574 (PBCB MB).

<sup>30</sup> "Resolution." – 10.7.1958, p329 (PBCB MB).

to the necessary task of erosion control. Moreover, vocal pressure groups in the Gisborne area depicted Maori in particular ways which irrefutably influenced the decision-making and land negotiation processes for upland afforestation. These depictions presented Maori as unworthy landowners who neither had capacity nor legitimacy as farmers. The common conclusion of newspaper reports of the time was that Maori were unable to farm to European standards and that this was the cause of erosion. These conclusions ignored the fact that land instability was a problem for Maori *and* pakeha farmers. Many locals also overlooked such evidence as that presented in Section 2.2, which suggests that Maori owners of land were not necessarily responsible for the removal of forest cover and, therefore, erosion on their properties. The combined weight of these false images – that Maori were both the cause of land instability and a recalcitrant minority who were resistant to the common good requirement of erosion control – influenced the range of alternatives which were offered to Maori.

In the 1950s and early 1960s, the structure of farming in the Gisborne area was significantly transformed, with a reduction in the number of farm properties and out-migration of many of the district's youth<sup>31</sup>. Employment opportunities in agriculture were declining and local agricultural productivity had started to fall. Economic factors were the primary causes of these changes but, in some part, the outcomes of erosion were also responsible. As a result of these structural changes, opinions voiced in local media clamoured for action, with protection against flooding and land instability seen as an economic necessity<sup>32</sup>. The afforestation scheme in the upper Waipaoa catchment was contemporaneous with these changes and it became inter-meshed with public debate about falling rates of agricultural production and the economic future of the district. These ideological exchanges led to contradictory outcomes: protagonists argued for increased agricultural production and erosion control at the same time, even though these activities are potentially in conflict. At the time, Mangatu Blocks 1,3 & 4 Inc. was one of the largest farming enterprises in the country and its potential involvement in the scheme created expectations in the community which affected the outcome of the acquisition process. The unwillingness of Mangatu Blocks to sell pastoral land for afforestation created anxiety amongst European residents who believed that the incorporation was forestalling the development of the region and exposing properties on the flats to unnecessary risk.

The media campaign to highlight Maori inefficiencies in farming was principally fought in the far off *New Zealand Herald* which ran a special series on the land management problems of the East Coast. The editorials in this series condemned Maori landowners and their farming practices as the cause of erosion and aggradation:

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<sup>31</sup> MOWD 1987, p9.

<sup>32</sup> "Survey shows a decline in production." – *New Zealand Herald*, 26.6.1959 (PBCB 5/18).

[T]he practice and principles of farming do not come easily to the Maori... Often the Maori has not yet acquired the confidence of the European in agricultural management, and sheep farming may appear too much like big business<sup>33</sup>.

Prominent leaders in Poverty Bay society provided official endorsement of the views expressed in the newspaper campaign. R.H. Barker, the Mayor of Gisborne City at the time, clearly indicated that Maori should give up their land to 'more responsible' land users:

They are the greatest landowners. Because the land belongs to the Maori, we feel the Maori must belong to the land. The remedy is to face up to the fact that land brings obligations as well as rights. Anyone not farming properly should give way to someone who can<sup>34</sup>.

The local member of parliament, R.A. Keeling, was equally vehement in his attack on Maori land use practices, concluding his commentary with a statement that, "Any land not being fully used by Maori or pakeha is a sin<sup>35</sup>." The context of this statement made it clear that Maori were the target of this article and not pakeha.

This common theme of 'Maori wastage' of land was particularly ironic: heavier stocking rates in the hill country would have undoubtedly increased the rate of erosion, thereby threatening agricultural productivity through deterioration of soil resources. Yet, any land which was not developed to the fullest extent was considered to be lying idle. It was contended that Maori land had potential for further development but the public belief was that Maori were not capable of engaging successfully in this development. In some respects, it was true that some Maori land, especially land which was further north of Gisborne, had not been developed to the extent of European properties. The growing paternalism of the Maori Land Court after World War II and the difficulty of obtaining development capital for Maori land has been well-documented by a number of authors<sup>36</sup>. In public discourse, however, lack of developmental progress on Maori land was attributed to racial and cultural disposition rather than to structural underdevelopment, as can be seen in a commentary provided by the Department of Lands and Survey:

The reasons usually given for the quite evident deterioration in Maori land in this part of the region include the difficult nature of the land itself, the unfavourable climate, the extensive erosion, the granting of leases to Europeans without right of compensation for improvements and without rights of renewal and the difficult title position of most of the land. All these reasons are valid but the most important of all is the personal factor. With some notable exceptions the Maori has yet to become a good farmer under present day conditions... Many Maoris seem to lack some essential attribute for a

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<sup>33</sup> "Ngati Porou appeal for aid from the Government. Need for simpler land laws." – New Zealand Herald, 30.6.1959 (PBCB 5/18).

<sup>34</sup> "Farm decay is spreading." – New Zealand Herald, 25.6.1959 (PBCB 5/18).

<sup>35</sup> *Ibid*

<sup>36</sup> Refer, for example, to Boast 1999; Kawharu 1977.

business of this type. They do not generally show the needed ability to plan ahead and budget for essential requirements such as maintenance, topdressing, and stock replacement. They are usually good workers but not good managers<sup>37</sup>.

While the first part of this statement accurately portrayed difficulties for local Maori, the latter half of the quotation represents paternalism mixed with cultural bias. In the 1940s, large blocks of Maori land on the East Coast were leased to pakeha farmers for 21 year periods. The typical conditions on these leases did not allow for compensation of capital improvements by the lessees. Often, the rental was not sufficient to justify such payments and, without the prospect of compensation, lessees would not develop the land for long-term usage. As a result, the land would deteriorate, especially in the last years of the lease, wherein farmers would exploit remaining soil fertility while failing to replenish soil through top-dressing or to carry out maintenance and weed control. Rather than develop existing pasture land in more satisfactory ways, these lessees were often seen to extend agriculture to land which was not previously used for pasture. Invariably, the result of this extensification was more erosion and land was seldom returned to Maori in a good condition<sup>38</sup>. After such abuse, the original owners were often reticent to lease the land again: "When Maoris get their lands back in the sorry condition already described, is it wrong for them to refuse to renew leases to occupants who have used it so unmercifully<sup>39</sup>?" This hesitancy to renew leases only heightened pakeha contentions that Maori were undeserving of land.

A number of solutions to 'the Maori land question' were proposed in these articles. Like the Mayor of Gisborne, there were many others who thought that Maori land which was under-utilised should be handed to 'experienced farmers.' One author wrote approvingly of the fact that "Counties can begin actions to have Maori land leased where rates are unpaid and where the property is badly farmed, weed-infested or unoccupied<sup>40</sup>." It was also suggested in official reports on the lack of development in the region that Maori should sell their shares in communally-owned land so it could be run more effectively. A committee appointed to investigate the "problems on Maori land," contended that the only appropriate form of tenure for the East Coast was single title:

The committee is fully appreciative of the difficulties which may arise with the owners in implementing this recommendation but are of the opinion that the time has arrived when the position of all Maori owned land should be thoroughly investigated with the object of having Maori land placed on the same basis as European land<sup>41</sup>.

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<sup>37</sup> Lands and Survey 1964, p83.

<sup>38</sup> Mete-Kingi 1978, p28; "Survey shows a decline in production." – New Zealand Herald, 26.6.1959 (PBCB 5/18).

<sup>39</sup> "Publicised criticism prompts sharp reaction on East Coast." – Gisborne Herald, 7.8.1959 (PBCB 5/18).

<sup>40</sup> "Maori in need of help. New methods and new capital." – New Zealand Herald, 1.7.1959 (PBCB 5/18).

<sup>41</sup> Carson *et al.* 1960, p15.

Alternatively, some commentators suggested that a “lasting solution will probably lie largely with the Maori himself. Mediocre farmers may have to accept a greater measure of European supervision<sup>42</sup>.” This highly paternalistic suggestion reflected the lack of pakeha trust in Maori as agri-environmental managers.

The most racially-charged of these critiques of Maori farmers were targeted to areas further north than the present casebook area. However, such sentiments were also common in Turanganui-a-Kiwa and its catchments. Maori-owned land south of Tolaga Bay was recognised as being in a better condition than that further north. This was attributed to the beneficial influence of the East Coast Commissioner and, therefore, was an example of ‘good fortune’ rather than ‘good management’:

It is still generally true to say that south of Tolaga Bay the pastures on Maori land are not noticeably in worse condition than pastures on land of the same soil type and similar topography controlled by Europeans. Most of the Maori land south of Tolaga Bay was until about 1950 under the control of the East Coast Commissioner who had full control of its farming and development. This may be the reason why the land is in so much better heart<sup>43</sup>.

A common theme throughout the debate was the payment of dividends from profits and whether they should have been used to fund on-farm development<sup>44</sup>. While beneficiaries of incorporations expected payments and often received them when the money may have been better invested elsewhere<sup>45</sup>, this practice was not limited to Maori incorporations. It would have been possible to highlight examples of poor land management on both Maori *and* pakeha land, but the media campaigns of the day focused exclusively on the misfortune of one cultural group<sup>46</sup>. While examples of good management of land by Maori were readily available, they received no attention in the local or national media.

## Targeting of land for afforestation

Prior to government approval of the programme, the farms of Mangatu Blocks appear to have been targeted for public acquisition and afforestation beyond the level of attention directed to similar properties in the crushed argillite area. Other blocks in this terrain were inspected and assessed at the time to classify the erosional problems on private land in the area<sup>47</sup>. However, the proprietors of Mangatu were the first to be approached with the idea of blanket planting of severely eroded areas<sup>48</sup>. The other properties which eventually became part of land purchases for the Mangatu State Forest – Tawhiti and Waipaoa stations – were encouraged to

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<sup>42</sup> “Maori in need of help. New methods and new capital.” – New Zealand Herald, 1.7.1959 (PBCB 5/18).

<sup>43</sup> Lands and Survey 1964, p82.

<sup>44</sup> Carson 1960, p3.

<sup>45</sup> Ward 1958, p212.

<sup>46</sup> CCL, Gisborne, to Nolan and Skeet, Barristers and Solicitors, Gisborne, 3.11.1959 (L&S 4/882).

<sup>47</sup> “Monthly report to 10 April 1956.” – Metzgers, Soil Conservator, PBCB, to Chairman, Soil Conservation Committee, PBCB, p158 (PBCB MB).

<sup>48</sup> “Monthly report to 12 June 1956.” – Metzgers, Soil Conservator, PBCB, to Chairman, Soil Conservation Committee, PBCB, p205 (PBCB MB).

experiment with erosion barriers while continuing to manage their properties as pastoral farms. By this stage, similar techniques had been proven ineffective at the Weraroa research unit, but the PBCB allowed these landowners to experiment with them in the hope that erosion could be controlled and afforestation would not be needed. The PBCB trusted pakeha farmers as discerning managers of the agri-environment and these farmers were, therefore, presented with a broader range of opportunities to address soil erosion on their properties.

Because it was located centrally within the zone of crushed argillite, the land belonging to Mangatu Blocks was severely eroded. In total, 9% of the land was eroded to such an extent that the slopes were bare, including 2% which consisted of the Te Weraroa Stream bed and 64ha of aggraded river flats. These rates of extreme erosion were, however, consistent with neighbouring stations, and there were no physical reasons why Mangatu Blocks' farms should have been identified for special attention. Nevertheless, the soil conservator of the PBCB was evidently determined that afforestation was the only option for the Maori-owned land. While the ongoing profitability of Mangatu farms was not questioned, the conservator suggested that daily farming activities were becoming more difficult over time with disruption of fences, waterlogged ground, and loss of access roads<sup>49</sup>. Unlike the case for Waipaoa and Tawhiti stations, the principal concern of the conservator in this instance was not the potential viability of the farm but the "detritus carried down by the rivers [which] is causing concern for the lands further downstream<sup>50</sup>."

The soil conservator recommended a long term erosion control program on all types of land, irrespective of the extent of erosion. He also recommended that "measures to be undertaken to control the same will have to be extensive and far reaching and will involve a change of the present pastoral land use<sup>51</sup>." This is in contrast to reports for neighbouring properties which encouraged the use of erosion barriers and other forms of structural control in order to maintain pastoral agriculture on the properties. While these divergent approaches imply cultural bias, it should be noted that the area of land which was specified in this way was larger than surrounding properties. Consequently, it provided a significant proportion of the sediment which entered the Waipaoa catchment. Nonetheless, there appears to have been disproportionate haste in the process of identifying Maori land for afforestation as compared to that for European properties<sup>52</sup>.

Before hearing submissions on the necessity for erosion control in the upper Waipaoa, Prime Minister Nash visited the area in May 1959. The attitude of the PBCB to Maori land meant that it received considerably more attention in this visit than other types of land. The PBCB had predetermined the focus of the visit

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<sup>49</sup> "Erosion control Te Hua Station." – Metzgers, Soil Conservator, PBCB, to Chairman, Soil Conservation Committee, PBCB, 31.5.1956, p292 (PBCB MB).

<sup>50</sup> *Ibid.*

<sup>51</sup> *Ibid.*

<sup>52</sup> "Catchment board wants action in land purchase." – Gisborne Herald, 13.5.1961 (GisMUS VF-Natural Events).

through carefully-worded submissions to Wellington in the time leading up to Nash's arrival:

The attachment of the Maori owners to their land is sympathetically understood, as is their reluctance to suffer disturbance to farming operations which even a stage-by-stage acquisition will involve, but with our knowledge of the erosion problem and of its impact on farming, the board would be failing in its duty if it did not plainly state its opinion that the owners' interests will be served best by selling the land to the Crown before its value diminishes any further<sup>53</sup>.

In this instance, token recognition of Maori customary values is quickly surpassed by a eurocentric justification based on market value. It was assumed that Maori would want to sell their land if it could be proved that their land values were threatened. Consequently, there was no attempt to understand and incorporate the cultural attachments of tangata whenua to their ancestral lands. The 'owners' interests' were of little importance to the PBCB and in the same letter the chairman of the Board stated clearly that his main interest was "the necessity for afforestation of this area for the purpose of preventing aggradation of the Waipaoa river and so protecting its valley and plain<sup>54</sup>."

PBCB submissions which stated that "Maori owners could be reluctant to part with their land<sup>55</sup>" further restricted the scope of Nash's visit to Maori land issues. In these submissions, it is apparent that the PBCB had pre-judged the Maori owners as an obstacle to the pursuit of the common good which, in the case of the Waipaoa catchment, meant 'good' outcomes for farmers on the Poverty Bay flats. During his visit, Nash viewed the worst areas of erosion and spoke to the owners of Mangatu Blocks 1, 3 & 4 Inc. Reports of the meeting indicate that:

The Prime Minister promised his support to the scheme...and gave the assurance that whatever decision was made it would be fair and equitable to the owners concerned in the land involved in the scheme and it was his responsibility as Minister of Maori Affairs to see that the scheme is equitably carried out<sup>56</sup>.

He gave the Maori people connected with the Mangatu Incorporation an assurance that their interests would receive exactly the same consideration as those of other people concerned<sup>57</sup>.

There is no indication that the Prime Minister met with any of the other owners on his visit. This reveals a significant difference in how stakeholders were approached prior to the approval of afforestation. Other land owners did not face the pressure

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<sup>53</sup> J.B. Hair, Chairman, PBCB, to Prime Minister Nash, 19.5.1959 (PBCB MB).

<sup>54</sup> *Ibid.*

<sup>55</sup> *Ibid.*

<sup>56</sup> "Upper Waipaoa river catchment. Report of visit of Prime Minister Nash to the UWC." – 1.6.1959 (PBCB MB).

<sup>57</sup> "Erosion problem demands urgent action – Mr. Nash." – Gisborne Herald, 21.5.1959 (GisMUS VF-Forestry).

of executive petition. Moreover, it will be shown that the Mangatu landowners did not receive 'exactly the same consideration' as pakeha landowners on similar land.

The proprietors of Mangatu Blocks were not content with the level of Crown consultation before the decision to purchase land in the upper Waipaoa catchment<sup>58</sup>. While in Gisborne, Nash had promised that "round table discussion would be required to decide what is the right thing to do and thereafter Engineers and others would determine how to do it"<sup>59</sup>. However, his conception of a round table did not necessarily include Maori representation. The local agent for the Commissioner of Crown Lands who had been instructed to undertake the negotiations for land acquisition was confronted with this complaint at a hui held by the Proprietors of Mangatu. He suggested that the technical experts who had been consulted at cabinet level were sufficient to meet the requirement for 'round table' discussions<sup>60</sup>. Not only is this indicative of the Crown's attitude to consultation with iwi, it also represents the Crown's paternalistic attitude to Maori and their land. Evidently, tangata whenua were not seen as having important local knowledge or values which should be incorporated into the scheme: experts were to determine the fate of the headwaters with little or no instruction to heed Maori concerns.

Experts from such government agencies as the Ministry of Works and Development, the PBCB, the SCRCC, Lands and Survey and the NZFS inspected the eroded land in the upper catchment in order to decide where planting should begin. The PBCB, NZFS and the Commissioner of Crown Lands (CCL) determined which lands should be purchased for this purpose<sup>61</sup>. Ultimately, a broad approach to land purchase and replanting was taken in preference to the PBCB's earlier belief that afforestation should be restricted to a limited range of sites within the catchment. This decision was supported by Crown agents because the long-term nature of the project could only be assured with long-term control: acquisition, as opposed to land management of private land, was the preferred option<sup>62</sup>. Central government approved funding for an afforestation programme in August 1959<sup>63</sup>, and the first trees were planted soon thereafter<sup>64</sup>.

### **Mangatu and the negotiation process**

Mangatu Blocks 1, 3 & 4 Inc. were called upon to provide just under half of the land required for the afforestation program, approximately 3460ha. This land was to come from Te Hua Station as well as from parts of Dome and Tarndale Stations.

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<sup>58</sup> Pers. comm. Rutene Irwin and John Ruru.

<sup>59</sup> "Upper Waipaoa River catchment. Report of visit of Prime Minister Nash to the UWC." – 1.6.1959, p607 (PBCB MB).

<sup>60</sup> "Mangatu acquisition." – F.W. Brown, CCL, Gisborne to Director General of Crown Lands, Wellington, 1.3.1960 (L&S 4/883).

<sup>61</sup> "Proposed acquisition of land for afforestation purposes. Upper Waipaoa catchment." – F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 14.10.1959 (L&S 4/883).

<sup>62</sup> C.F Skinner, Minister of Lands, to Minister of Works, Wellington, 5.11.1959 (L&S 4/883).

<sup>63</sup> "Some support for East Coast Commission." – New Zealand Herald, 13.8.1959 (PBCB 5/18).

<sup>64</sup> Allsop 1973, p28.

Two farms in pakeha ownership, Tawhiti and Waipaoa Stations, were expected to contribute the balance of land (3590ha)<sup>65</sup>. From the earliest proposals for afforestation, the purchase of Maori owned land was pre-determined in local discourse as a barrier to the success of the program<sup>66</sup>. This was not necessarily the case: although the negotiations with the management committee were prolonged, the time frame was similar in the case of pakeha farmers<sup>67</sup>. Before the onset of negotiations, the Soil Conservation Committee (SCC) of the PBCB believed that it was important to maintain positive relations with all landowners because future support was required for the long-term success of the project. It suggested that "the approach to both Maori and European land owners should be on the same basis<sup>68</sup>." In retrospect, however, the negotiation process diverged fundamentally in approaches to Maori and pakeha land.

The owners of Mangatu Blocks 1, 3 & 4 Inc. were condemned for delaying the acquisition process. The management committee of the incorporation was aware of the need for afforestation as an erosion control measure. It had the legal capacity to alienate the land if needed<sup>69</sup> but, as elected representatives, the management committee was cautious to act in the best interests of their shareholders<sup>70</sup>. The owners of the Mangatu Blocks met to discuss the possibility of selling a portion of their land in February 1960<sup>71</sup>. The result was a unanimous decision against selling: "No owner present at [the] meeting wished to have it charged against them that he had been a party to the sale of ancestral lands<sup>72</sup>". The unanimous refusal to negotiate was not an explicit attempt to reject or disrupt the afforestation proposals. Rather, it was an acceptance that if they refused to sell, the Crown would move to compulsorily acquire the land. This strategy was designed to remove the burden of accountability from the conscience of the management team, reflecting the gravity of the decision to alienate *any* land which remained in Maori ownership. A report in the *Gisborne Herald* of the Maori response to the Prime Minister's visit summarises the views of tangata whenua in this regard:

The land had been leased over a long period of years to Pakehas and only a few years ago it had come back to the owners. 'And now,' the speaker added, 'the Pakehas want it back to plant trees on.' [He also] considered that too much land was being taken to stop erosion. He felt that the land that it was intended to acquire should be taken compulsorily so that the generations to come could not point a finger at their ancestors in the event of the land ultimately going to waste<sup>73</sup>.

<sup>65</sup> *Ibid.*, p95.

<sup>66</sup> J.B. Hair, Chairman, PBCB, to Prime Minister Nash, 19.5.1959 (PBCB MB).

<sup>67</sup> "Acquisition. Part Waipaoa Station." – F.W. Brown, CCL, to Conservator of Forests, NZFS, Rotorua, 26.6.1964 (L&S 4/885D).

<sup>68</sup> "Report of the meeting of the Soil Conservation Committee." – 5.7.1956 (PBCB MB).

<sup>69</sup> "Progress of land acquisition for upper Waipaoa catchment." – Afforestation report for Director General of Lands, 29.1.1960 (L&S 4/883).

<sup>70</sup> "Mangatu views on forestry sale." – Gisborne Herald, 29.8.1961 (GisMUS VF-Forestry).

<sup>71</sup> District Conservator, NZFS, Gisborne, to Director General of Forests, Wellington, 22.2.1960 (NZFS 6/2/108).

<sup>72</sup> Secretary, Mangatu Blocks 1, 3 & 4 Inc., to F.W. Brown, CCL, Gisborne, 25.2.1960 (L&S 4/883).

The trauma of voluntary alienation of ancestral land after 120 years of involuntary land loss induced the politics of withdrawal amongst the management committee<sup>74</sup>.

While public calls for compulsory acquisition of Maori land were common both before and during the negotiation process, government policy was to negotiate for sale where possible<sup>75</sup>. The CCL never publicly threatened the owners with compulsory acquisition. However, he did suggest that this would be the probable outcome if the owners decided against negotiating for sale<sup>76</sup>. Although compulsory acquisition might appear to be an objectionable scenario for the owners, the management committee had carefully explained to the owners the necessity of afforesting this section of their land, both for the benefit of the region and for other land belonging to Mangatu Blocks. The decision to coerce the Crown to take the land through compulsory acquisition was, therefore, an attempt to protect the interests of the owners while at the same time maintaining the mana of the management group. From the few available records of these discussions between owners and managers of Mangatu Blocks, it appears that most owners agreed with the need to afforest at least some land. However, no-one wanted to take responsibility for the decision and there appears to have been debate about how much land should be sold to the Crown for afforestation.

Accompanying the acceptance of compulsory acquisition was a suspicion that there was no choice in the matter. Some, if not most, owners believed that compulsory acquisition was inevitable and that the owners would obtain fairer compensation through the Maori Land Court rather than through negotiation<sup>77</sup>. According to reports of a preliminary meeting between the CCL and the Mangatu management committee in 1960, the opinion was expressed that this process was alienation but under a different name<sup>78</sup>. The spectre of the Crown taking the land stood over the process from the start<sup>79</sup>. This view was confirmed by the stubborn inflexibility of the CCL to consider alternatives to the sale of the land: the CCL ruled out all options which did not include the alienation of the land<sup>80</sup>. In a 1960 meeting, it was suggested by the owners that the land could be leased to the NZFS. However, this suggestion was declared infeasible by the CCL who contended that leasing would not afford the NZFS satisfactory levels of control<sup>81</sup>. Ten years later, under the East Coast Project<sup>82</sup>, leasehold arrangements were promoted in attempts to afforest Maori owned land<sup>83</sup>, suggesting that such arrangements were feasible. The incorpo-

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<sup>73</sup> "Mangatu committee will negotiate with government." – Gisborne Herald, 21.6.1960 (GisMUS VF-Forestry).

<sup>74</sup> "Mangatu views on forestry sale." – Gisborne Herald, 29.8.1961. (GisMUS VF-Forestry).

<sup>75</sup> "Statement by Chairman on Mangatu Lands Issue." – Gisborne Herald, 14.4.1960 (GisMUS VF-Forestry).

<sup>76</sup> "Report of meeting between owners of Mangatu Blocks Inc." – A.R. Gardiner, Secretary, Mangatu Blocks Inc., to E.T. Tirakatene, Minister of Forests and Acting Minister of Maori Affairs, 29.4.1960 (NZFS 6/2/108).

<sup>77</sup> "Statement by Chairman on Mangatu lands issue." – Gisborne Herald, 14.4.1960 (GisMUS VF-Forestry).

<sup>78</sup> "Mangatu acquisition." – F.W. Brown, CCL, Gisborne, to Director General of Crown Lands, 1.3.1960 (L&S 4/883).

<sup>79</sup> Pers. Comm. John Ruru.

<sup>80</sup> "Mangatu acquisition." – F.W. Brown, CCL, Gisborne, to Director General of Crown Lands, 1.3.1960 (L&S 4/883).

<sup>81</sup> F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 1.3.1960 (NZFS 6/2/108).

<sup>82</sup> See Section 5.2.

<sup>83</sup> "East Coast Project." – Reeves, Chairman, PBCB, to K. Holyoake, Prime Minister, 25.6.1971 (PBCB 21/10).

ration also suggested a trade of upper catchment land for Crown land rather than monetary purchase. However, the Minister of Lands dismissed this option on the basis of a lack of suitable Crown land for the purpose<sup>84</sup>. It was also decided that the incorporation would be able to use the money received from a sale to purchase alternative lands if it so desired<sup>85</sup>.

The stress to the owners in the decision to alienate was not sympathetically reported in the *Gisborne Herald*:

The commissioner reports that although the Land Department has been authorised by the government to purchase on behalf of the Forest Service [6400ha] of land, difficulty is being experienced in reaching agreement with some Maori owners who have refused to sell because of the reluctance to part with tribal lands...The latest announcement that some landowners are not prepared to sell, for a reason that is far removed from the true interests of the majority of district residents, is a blow to these hopes and aspirations [to protect the downstream area from flooding]<sup>86</sup>.

To add to their already poor image, Maori land owners were now seen as delaying the start of an important program which would benefit the wider community. In reality, the CCL stated in his reports of the meetings that the owners of Mangatu Blocks had negotiated in good faith:

In my discussion with the committee to date, I have found them fairly realistic as to the necessity for relinquishing an area for afforestation...The owners appreciate that the land has got to go, but it is the method of handing it over that will cause the greatest exercise<sup>87</sup>.

In rebuttal of the newspaper editorials, representatives of the incorporation strongly denied allegations of time wasting and selfish behaviour. They claimed that the decision to forgo negotiations with the Crown was made with full knowledge of the possible outcomes:

[The owners] were told that no doubt the next step would be compulsory acquisition by the government and that we would now just have to await events...In all the newspaper publicity, the fact that the owners declined to sell is stressed, but no reference is made to the fact that they fully understood compulsory acquisition would follow, that they accepted this and that they would expect the Maori Land Court to protect them in the matter of compensation...

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<sup>84</sup> Secretary, Mangatu Blocks Inc., to C.F. Skinner, Minister of Lands, 4.5.1960 (NZFS 6/2/108).

<sup>85</sup> "Upper Waipaoa afforestation." – F.W. Brown, CCL, to Secretary, Mangatu Blocks 1, 3 & 4 Inc. 24.11.1959 (L&S 4/883).

<sup>86</sup> "Afforestation must proceed." – *Gisborne Herald*, 9.4.1960 (GisMUS VF-Forestry).

<sup>87</sup> "Progress of land acquisition for upper Waipaoa catchment." – Afforestation report to Director General of Lands, 29.1.1960 (L&S 4/883).

It would appear that the officials concerned were too hasty in leading the general public to believe that they would be able to commence tree planting this season. They evidently anticipated the land purchase negotiations would be completed in time for this to be done. These calculations went wrong, the tree planting operations cannot be commenced yet, the public is raising an outcry, and the Mangatu people are being made the scapegoats<sup>88</sup>.

Upon stating this resigned acceptance of compulsory acquisition, a letter was received from the Minister of Lands who sought confirmation of the management committee's views. In particular, he recognised that a middle ground between negotiated sale and compulsory acquisition might satisfy the management committee's desire to avoid voluntary alienation. If Maori were amenable to this approach he wanted to "seek cabinet's approval to the acquisition of the Maori owned areas within the scheme on the basis suggested i.e., with compensation fixed by [the] Maori Land Court<sup>89</sup>." Even though all parties considered Maori Land Court valuations to be the next stage in the process, this intervention by the Court never transpired<sup>90</sup>.

A meeting with E.T. Tirakatene, who was at that time the Minister of Forests and Acting Minister of Maori Affairs, was organised after the Secretary of Mangatu Blocks wrote to confirm the owners' opposition to negotiated sale<sup>91</sup>. At the meeting in June 1960, Tirakatene convinced the owners of the need to sell the land for the afforestation scheme. In his account of the valuation process which would be employed he suggested that, "You will not be broken for figures when it comes to the point of negotiating to substantiate your claim<sup>92</sup>." The owners decided to authorise the management committee to begin negotiations with the Crown. This decision was confirmed four months later at an annual general meeting, and negotiations proceeded soon thereafter<sup>93</sup>.

After a number of proposals and counter-proposals, the government approved the price of £9-1-0 per acre in May 1961<sup>94</sup>. In agreeing to this price, the management committee alluded to several matters: residents on the Poverty Bay flats were to receive the benefits of afforestation; the owners could not in any way be called willing sellers; and, while there was a need for some form of erosion control, the urgency of this matter did not justify the alienation of Maori land<sup>95</sup>. The CCL accepted this valuation because he agreed with the justifications of the owners for a

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<sup>88</sup> "Report of meeting between owners of Mangatu Blocks Inc." – A.R. Gardiner, Secretary, Mangatu Blocks Inc., to E.T. Tirakatene, Minister of Forests and Acting Minister of Maori Affairs, 29.4.1960 (NZFS 6/2/108).

<sup>89</sup> C.F. Skinner, Minister of Lands, to M. Dennis, Chairman, Mangatu Blocks 1, 3 & 4 Inc., 28.3.1960 (L&S 4/883).

<sup>90</sup> F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 1.3.1960 (NZFS 1/7/6d).

<sup>91</sup> "Report of Meeting between owners of Mangatu Blocks Inc." – A.R. Gardiner, Secretary, Mangatu Blocks Inc., to E.T. Tirakatene, Minister of Forests and Acting Minister of Maori Affairs, 29.4.1960 (NZFS 1/7/6d).

<sup>92</sup> "Mangatu Committee will negotiate with Government." – Gisborne Herald, 21.6.1960 (GisMUS VF- Natural Events).

<sup>93</sup> "Mangatu Blocks Inc. AGM." – Secretary, Mangatu Blocks 1, 3 & 4 Inc., to F.W. Brown, CCL, Gisborne, 28.10.1960 (L&S 4/883).

<sup>94</sup> Treasury, Wellington, to F.W. Brown, CCL, Gisborne, 29.5.1961 (L&S 4/883).

<sup>95</sup> "Counter offer re. Mangatu lands." – Secretary, Mangatu Blocks 1, 3 & 4 Inc., to F.W. Brown, CCL, Gisborne, 7.11.1960 (L&S 4/883).

high land value<sup>96</sup>. He also believed that the value was comparable to the price of Tawhiti Station land which, by this stage, had also been purchased for the Mangatu State Forest. Notably, the CCL also recognised that the Maori Land Court would have awarded a significantly higher price if the land was obtained through compulsory acquisition<sup>97</sup>. The settlement included a lease-back clause, so that the management committee could use the land until it was required for planting<sup>98</sup>.

In retrospect, it is almost impossible to decide whether the owners received a fair price for their land. There is no doubt that the price per acre was higher than the market value of the land. Yet, a representative of the incorporation at the time of the negotiations made a telling statement. He "made reference to the sentimental value of the land, which could not be reimbursed with cold cash<sup>99</sup>." The cultural and spiritual significance of ancestral lands can never be fully compensated. While this is significant, it is perhaps more important to recognise that the negotiations between the Crown and the Mangatu owners were circumscribed by local ideology. The SCRCC and the NZFS were persuaded to intervene in the region on the basis of the PBCB's account of the seriousness of the erosional problem. The Board, however, was not reacting only to geomorphological changes in the catchment; it did not operate in a socio-political vacuum, but rather it reacted to the predisposed opinions of its constituency. These opinions were based inherently in culturally biased and historically inaccurate understandings of Maori as 'bad farmers.' The failure of Crown agencies to distinguish this bias from fact clearly influenced the decision-making of those agencies. The NZFS, SCRCC and the CCL should have offered the owners a number of options, rather than forcing iwi to decide between voluntary sale or involuntary alienation.

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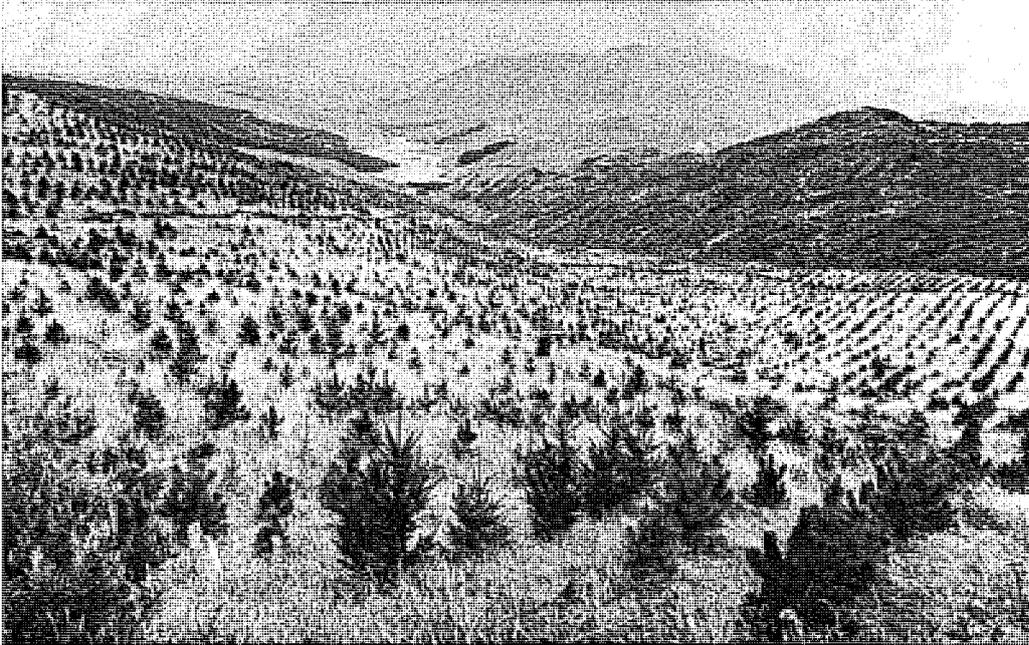
<sup>96</sup> F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 9.3.1961 (L&S 4/883).

<sup>97</sup> F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 19.12.1960 (L&S 4/883).

<sup>98</sup> "Agreement for sale and purchase of Mangatu Blocks land for reafforestation." - no date (L&S 4/883).

<sup>99</sup> "Mangatu committee will negotiate with government." - Gisborne Herald, 21.6.1960 (GisMUS VF-Forestry).

*Figure 5.1 – The development of Mangatu State Forest, 1971 and 2000<sup>100</sup>*



<sup>100</sup> **Source:** Top – Gisborne Museum and Arts Centre; Bottom – Author.

## Waipaoa Station

In the meantime, the owners of Tawhiti Station accepted a proposal to sell their land to the NZFS<sup>101</sup>. This meant that only Waipaoa Station remained of the three sets of farms which had originally been mooted for afforestation. One of the principal owners of the station, P.M. Reynolds, was the Deputy Chair of the PBCB during the time of the negotiations for land acquisition. He was a vociferous campaigner for the need to make haste with the land purchases<sup>102</sup>. However, the owners of Waipaoa Station were the most recalcitrant of all landowners in these negotiations<sup>103</sup>. They were the only party to refuse outright to sell land which had been designated as necessary for erosion control. The NZFS targeted the Bottom Wether and McLeavies runs for afforestation but the owners believed that these areas should be exempted because they were not located on crushed argillite. The owners were successful in their attempts to retain possession of the land, largely through the assistance of the PBCB<sup>104</sup>. Negotiations between the Waipaoa owners and the CCL were stalled while the PBCB produced two reports<sup>105</sup> on the economic benefits and costs of erosion control works and one on the possibilities for maintaining pastoral agriculture on the land<sup>106</sup>. The mere production of these reports is indicative of levels of patronage which were not extended to Mangatu Blocks.

The latter report concluded that severe land instability on the property would preclude levels of profit per acre which were typical for a New Zealand farm<sup>107</sup>. However, the extensive nature of farming on the property would maintain a reasonable net return because the property was relatively large. This description was similar to that for Te Hua Station in the Mangatu Blocks which had earlier been targeted as a crucial component of any afforestation scheme<sup>108</sup>. Given these similarities, it can be hypothesised that a similar outcome should have emerged if the negotiation process was free of prejudice. The owners of Waipaoa Station decided to retain most of their land while divesting a smaller area to the Crown, and they approached the PBCB to prepare an erosion control package for the land which would remain in their ownership<sup>109</sup>. The PBCB agreed to this task but the SCRCC rejected the resulting proposal for an erosion control subsidy because "a more comprehensive

<sup>101</sup> "Proposed acquisition of land for afforestation purposes. Upper Waipaoa catchment." – F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 14.10.1959. (L&S 4/883).

<sup>102</sup> "Catchment Board wants action in land purchases." – Gisborne Herald, 13.5.1961 (GisMUS VF-Natural Events).

<sup>103</sup> "Acquisition part Waipaoa Station." – F.W. Brown, CCL, Gisborne, to Conservator of Forests, NZFS, Rotorua, 26.6.1964 (L&S 4/885i).

<sup>104</sup> "Soil Conservation Committee report." – 4.3.1963 (PBCB MB).

<sup>105</sup> "Agricultural aspects of proposed soil conservation works in Bottom Wether run and McLeavies." – Report 1228, 5.8.1963 (PBCB MB); "Erosion control cost. Bottom Wether run and McLeavies paddocks." – Report 1229, 5.8.1963 (PBCB MB).

<sup>106</sup> "Waipaoa Station. Purchase of land for afforestation." – F.W. Brown, CCL, Gisborne, to Conservator of Forests, Rotorua, 18.6.1963 (L&S 4/885i).

<sup>107</sup> "Agricultural aspects of proposed soil conservation works in Bottom Wether run and McLeavies" – Report 1228, 5.8.1963 (PBCB MB).

<sup>108</sup> "Erosion control Te Hua Station." – Metzgers, Soil Conservator, PBCB, to Chairman, Soil Conservation Committee, PBCB, 31.5.1956, p292 (PBCB MB).

<sup>109</sup> "Waipaoa Station. Purchase of land for addition to Mangatu S.F. 108." – F.W. Brown, CCL, Gisborne, to Conservator of Forests, NZFS, Rotorua, 4.9.1963 (L&S 4/885i).

scheme based on a conservation farm plan is necessary in all interests to ensure soundness of conservation work<sup>110</sup>.” The PBCB requested a reconsideration of the decision<sup>111</sup>, but it was again declined<sup>112</sup>. The erosion control work was eventually carried out at a cost to the station’s owners.

Despite continued calls for the land to be sold to the NZFS<sup>113</sup>, compulsory acquisition was never contemplated in official correspondence. In contradiction to the possible outcomes of negotiations for Maori land, therefore, the owners of Waipaoa Station were permitted to choose their own destiny. Although erosion was extensive on the property, erosion control in the absence of wide-scale afforestation was considered an acceptable alternative on portions of the land in question. In the case of Mangatu Blocks, however, only weak justifications were provided for the stated need to assume total control and ownership over the land:

A good part of the area comprises very unstable country, but some of the better land has had to be included in the scheme for the purpose of getting decent fence lines and so forth<sup>114</sup>.

The owners of Mangatu Blocks had earlier asked the CCL whether there were alternatives to the sale of land. He replied that it was in the best interests of the owners to sell as soon as possible at the extant government valuation because of the loss of value associated with the ongoing erosion problems<sup>115</sup>. For Mangatu lands, agencies of land administration and environmental regulation would only accept the option of ownership transfer while, for Waipaoa Station, a mix of supervised land management with some land transfer was considered to be appropriate.

The manner in which Waipaoa Station was permitted to maintain its farming operation through land and erosion management without ceding to the NZFS afforestation project suggests preferential treatment for a Board member’s land interests. It also reflects public opinion about Maori owned land in the district: the PBCB evidently absorbed the views of the community at large. The public media campaign against Maori influenced the advice of the PBCB to the SCRCC, the NZFS and the CCL. This advice was not always accepted by representatives of the Crown but it, nevertheless, resulted in Crown agencies adopting an inflexible and uncompromising attitude in negotiations.

The settlement of the Mangatu Blocks purchase was fortunate for the Waipaoa owners in that the Crown had enough land to start planting. In order to reduce

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<sup>110</sup> “Soil Conservation Committee meeting report” – 5.4.1965 (PBCB MB).

<sup>111</sup> “Soil Conservation Committee meeting report” – 15.6.1965 (PBCB MB).

<sup>112</sup> “Extension of erosion control scheme no. 26. Waipaoa Station.” – Director, Water & Soil Conservation Organisation, NWASCO, to Secretary, PBCB, 3.2.1971 (PBCB U1/45).

<sup>113</sup> “Proposed extension of erosion control scheme no. 26. Waipaoa Station – McLeavies and Bottom Wether run.” – E.K. Wilson, Secretary, PBCB, to MOWD, Gisborne, 8.10.1971 (PBCB U1/45).

<sup>114</sup> “Information document to Minister of Maori Affairs.” – no date, p5 (MA Mangatu 1955-59).

<sup>115</sup> “Mangatu acquisition.” – F.W. Brown, CCL, Gisborne, to Director General of Lands, Wellington, 1.3.1960 (L&S 4/883).

expenditure, the CCL decided to defer further purchases until required in 1967<sup>116</sup>. The NZFS did not support this move and wanted to proceed with the purchases as the land was deteriorating further through grazing<sup>117</sup>. A 1960 inspection of the property by representatives of the NZFS, PBCB and the owners concluded that a much larger area should be afforested to control aggradation of the eastern tributaries of the Waipaoa. This never eventuated because it was not part of the NZFS's mandate to purchase the extra 4800ha required<sup>118</sup>. Extra land was later purchased from Waipaoa Station as part of the East Coast Project but the Bottom Wether and McLeavies blocks were not part of these purchases.

### The effectiveness of afforestation at Mangatu

Afforestation in the Mangatu-Tarndale area reduced the proportion of very severely eroded land from 10% of the upper catchment in 1960 to 3.5% in 1988<sup>119</sup>. Likewise

Sediment production from 11 gullies in a four km<sup>2</sup> area in the headwaters of the Waipaoa catchment reduced from 2480 t ha<sup>-1</sup> a<sup>-1</sup> during the period 1939 to 1958 when the area was in pasture, to 1550 t ha<sup>-1</sup> during the period 1958 to 1992 when the area was in forest. This reduction of 38% was achieved through the stabilisation of many smaller gullies. Reforestation also prevented many new gullies from forming<sup>120</sup>.

If judged on these figures alone then the afforestation scheme appears to have been a success. Several studies have concluded that afforestation has successfully limited erosion on the areas where trees were planted<sup>121</sup>. However, the question remains as to whether it has produced the benefits for which it was originally implemented – the substantial reduction of sediment supply to rivers and a reversal of aggradation trends on the Poverty Bay flats. There has been a reduction in mass movement in afforested areas, with the stabilising of shallow flows which were already in place at the time of planting. Afforestation has had little impact on the larger sites of mass movement such as the Tarndale and Mangatu slips which continue to supply sediment to the channel<sup>122</sup>. Yet, in replacing the vegetative cover on potentially unstable land, the likelihood of new areas of mass wastage in the manner of Tarndale has been greatly reduced<sup>123</sup>.

There has been a noticeable reduction in rates of aggradation within water channels close to the afforested areas<sup>124</sup>. Further downstream, however, the change is indis-

<sup>116</sup> "Waipaoa Station." – F.W. Brown, CCL, Gisborne, 1961 (L&S 4/885i); Allsop 1973, p28.

<sup>117</sup> "Upper Waipaoa afforestation." – D. Kennedy, Assistant Conservator, Rotorua, to F.W. Brown, CCL, Gisborne, 27.4.1962 (L&S 4/885i).

<sup>118</sup> "Waipaoa Catchment boundary adjustment." – J. Ure, Forester, NZFS, Gisborne, to Conservator of Forests, Rotorua, 2.3.1960 (L&S 4/885i).

<sup>119</sup> "Waipaoa erosion study looking for the full picture." – Gisborne Herald, 28.5.98 (GisMUS VF-Forestry).

<sup>120</sup> Page *et al.* 2000, p17.

<sup>121</sup> "Mangatu's afforestation an example to world." – Gisborne Herald, 18.2.1998 (GisMUS VF-Forestry).

<sup>122</sup> O'Loughlin 1984, p279.

<sup>123</sup> MOWD 1987, p35.

<sup>124</sup> Gomez *et al.* 1998.

cernible. Based on this fact alone, it can be said that the afforestation scheme has failed to satisfy expectations. In the long term, it may be that the stabilisation of this area will result in a decrease in aggradation but with only 6% of the Waipaoa catchment afforested to date this is not likely<sup>125</sup>. Rowe *et al.* argue that sediment supply to the Waipaoa river is unlikely to have been substantially reduced because this would have required at least 30% of the upper catchment in forest<sup>126</sup>.

The primary intention of the afforestation project which became known as the Mangatu State Forest was a reduction in downstream aggradation and flooding in Poverty Bay. However, only the control of on-site erosion in the plantation areas has been accomplished. Even this level of achievement is not guaranteed in the long-term because, as will be shown later, the change in focus from protection to production forestry threatens existing benefits of the scheme. In the late 1950s and early 1960s, Mangatu Blocks and other local Maori were publicly condemned as 'bad managers' of the agri-environment who would not acquiesce to the call for conservation forestry in the name of the public good. After the planting of the Mangatu State Forest, this condemnation became absurdly ironic: Maori had given up valuable land assets for a conservation forestry project, while the objectives of that project were threatened because non-Maori landowners would not accept afforestation of their properties.

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<sup>125</sup> *Ibid.*, p36.

<sup>126</sup> Rowe *et al.* 1997.

## 5.2 The East Coast Project

In short, the Mangatu State Forest represented too small an area for successful erosion control through afforestation on a catchment scale. Following repeated claims that the Mangatu afforestation was insufficient to reverse erosional problems on that scale, the SCRCC commissioned a comprehensive assessment of erosion in Tairāwhiti. A technical committee appointed by the SCRCC and headed by Dr. N.H. Taylor – director of the Soil Bureau of the DSIR – initiated a study of land use in 1963. The *Taylor Report* was completed in 1967<sup>127</sup> and the government endorsed the project's findings in 1968. Funds were voted to the NZFS to implement the afforestation recommendations of the project, while the PBCB was mandated and funded to continue its subsidisation of non-forest applications of erosion control. The report was written with a view to combat erosion but this was in some ways an explicitly stated means to an implicit end: the real focus of the report was to safeguard a future for pastoral agriculture in order to stimulate regional development<sup>128</sup>. The conclusions of the report included retirement from pastoral use and afforestation of 'at risk' land, with erosion management on the more productive areas. Along with other forms of erosion control, protection/production forests to be planted on the retired areas would provide revenue and employment for rural areas in an attempt to boost a declining economy and stem rural out-migration<sup>129</sup>.

According to the *Taylor Report*, there were six reasons why the East Coast region had suffered a decrease in production which was more significant than in other rural areas in New Zealand:

- (1) depletion of initial fertility and soil cover;
- (2) general problems of soil stability;
- (3) land tenure and size of holdings;
- (4) isolation and a conservative outlook on new ideas;
- (5) lack of continuous investment in farming;
- (6) farm labour difficulties<sup>130</sup>.

Iwi were particularly affected by the rural recession and many young Maori left the area to find work in other centres. The *Taylor Report* argued that a resolution of the erosion and productivity problems would cure social problems in the district<sup>131</sup>. The report used Whatatutu and Te Karaka as examples of rural communities which had benefited from the presence of an afforestation scheme in their area<sup>132</sup>. Both the move towards forestry for regional development, and towards a mix of protection and production forestry, transformed the public understanding of the purpose of afforestation in the Waipaoa catchment.

<sup>127</sup> Trotter 1988, p13.

<sup>128</sup> MOWD 1987, p1.

<sup>129</sup> Rasch 1989, p7.

<sup>130</sup> MOWD 1987, p8.

<sup>131</sup> Taylor *et al* 1970, p17.

<sup>132</sup> *Ibid.*, p23.

The report produced five options which ranged from no intervention to afforestation of all the land behind an arbitrary line – the blue line – in an area known as the critical headwaters – the CHA. The CHA was comprised of 140,000ha – including 94,000ha in pasture – and covered slip prone hills from Mangatu to Hicks Bay<sup>133</sup>. Surprisingly, the government identified option E as its preferred scheme: a plan to afforest the entire region behind the blue line, an area of approximately 100,000ha. This was purported to be “the most revolutionary decision ever made on soil conservation in New Zealand<sup>134</sup>.” The report also recognised the agricultural importance of the 490,000ha of land seaward of the blue line, known as the pastoral foreland. It was argued that 291,000ha of the pastoral foreland required management of erosion<sup>135</sup>, which could be administered through the PBCB’s farm plans for erosion control<sup>136</sup>.

The *Taylor Report* received a hostile reaction on its release. Local residents were upset by what they believed to be a lack of consultation on the report’s recommendations. As had happened with the Mangatu State Forest project, the residents of downstream areas were supportive of the recommendations because they would benefit the most from upstream erosion control. A point of concern for many landowners in the affected areas was the arbitrary nature of the distinction between the CHA and the pastoral foreland. Landowners concluded that significant areas of stable and productive land, especially at the interface between the two areas, would be lost to production as a result of this boundary<sup>137</sup>. Maori landowners throughout Tairāwhiti were particularly aggrieved, believing that the recommendations amounted to a new land grab because a considerable portion of Maori land was behind the blue line. The ruling that no subsidised control works to manage erosion would be carried out on land in the CHA further compounded landowner and, especially, Maori fears. In those areas, official strategy documents concluded that the only appropriate form of erosion control was afforestation<sup>138</sup>.

The ECP represented a significant departure from the inflexibility of the Mangatu State Forest project. Potential contributors to the scheme were encouraged to maintain ownership of their properties, transforming those properties into ‘forest farms’ or creating mixed-use forestry and agricultural farms. Even with this increased flexibility, however, it was difficult to convince farmers to adopt afforestation. The Crown’s inability to purchase or lease a sufficient quantity of land was the major impediment to the establishment of protection and production forest on the East Coast<sup>139</sup>. While a majority of landowners supported afforestation for erosion con-

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<sup>133</sup> *Ibid.*, p15.

<sup>134</sup> “Much pioneering work in Board’s 41 year history.” – Gisborne Herald, 11.4.1986 (GisMUS VF-Natural Events).

<sup>135</sup> Taylor *et al.* 1970, p15.

<sup>136</sup> Taylor *et al.*, p29.

<sup>137</sup> Trotter 1988, p13.

<sup>138</sup> “Erosion control forestry.” – National Water and Soil Conservation Organisation, Wellington, to Secretary, PBCB, 30.8.1974 (PBCB 21/10).

<sup>139</sup> “Annual report year ending 31.12.1977.” – East Coast District Planning Council (PBCB M/3); “Annual Report year ending 31.12.1978.” – East Coast District Planning Council (PBCB M/3)

trol, they did not want to lose the benefits of their own land. Where the long-term level of profit from afforestation was likely to be less than that for farming, land-owners avoided the appeal of the PBCB and NZFS to afforest. The ECP offered more flexibility to Maori as well as pakeha. Lease options were developed specifically to facilitate the planting of Maori land in multiple ownership<sup>140</sup>. Nonetheless, although local Maori were aware of the erosion problem<sup>141</sup>, transferring control of what little land they had left to the Crown was not seen as viable nor fair<sup>142</sup>.

The PBCB continued to evaluate ways of successfully implementing the *Taylor report*. In 1977, the *East Coast land use planning and development study* was established to investigate the ECP and its effectiveness. The outcome of this study was the *Red report* which recommended the implementation of land use classifications to determine the best possible use of land within the region. This approach was more sensitive to ecological and agricultural conditions than the arbitrariness of the blue line but, while such mechanisms were both politically and ecologically sound, there were a number of problems with the study. Maori were excluded as participants in the research, even after many calls for inclusion from the Tairāwhiti District Maori Council<sup>143</sup>, and advice from the Minister of Agriculture and the M.P. for East Cape<sup>144</sup>. While members of such Crown agencies as MAF, NZFS, Lands and Survey and MOWD along with the PBCB were represented, it was decided that the Tairāwhiti District Maori Council was an 'interest group' whose representation would not improve the efficiency of the study group<sup>145</sup>. In correspondence between the PBCB and the local branch of the Council it was noted that:

You will see that no special interest groups were represented and the Board considers this policy must be adhered to. In the Mangatu catchment it is regretted that your request [for representation on the study group] must therefore be declined. The special regard Maori have for their land is, however, understood and acknowledged by the Board. Your desire to comment on the next stages to be done is noted. Your Council's comments will be very welcome<sup>146</sup>.

Under Treaty jurisprudence, of course, Maori are not an interested party but a management partner. While the special relationship of tangata whenua to their land is acknowledged in this letter, there were no opportunities beyond 'comments' for Maori to express their kaitiakitanga relationship. The lack of a directive in the Soil Conservation and Rivers Control Act 1944 to compel catchment boards to uphold

<sup>140</sup> "East Coast Planning Council Minutes." – 19.7.1974 (PBCB 19/7/1a).

<sup>141</sup> Taylor *et al* 1970, p10.

<sup>142</sup> "East Coast Planning Council Minutes." – 8.8.1977 (PBCB 19/7/1a).

<sup>143</sup> Secretary, Tairāwhiti District Maori Council, to Secretary, PBCB, 14.12.1978 (PBCB M/4b).

<sup>144</sup> "Report of a meeting with Hon. D. McIntyre, Minister of Agriculture and Forestry and M.P. for East Cape." – PBCB, 2.3.1979 (PBCB M/4a).

<sup>145</sup> "Personnel required for land use study." – R.T. Paulin, PBCB, to Soil Conservation Committee, PBCB, 25.8.1980 (PBCB M/4b).

<sup>146</sup> "Re. Land use study. Maori representative." – N.B. Roe, Secretary, PBCB, to M. Searancke, Secretary, Tairāwhiti District Maori Council, Gisborne, 23.2.1979 (PBCB M/4).

rangatiratanga in land use decision-making represents a fundamental omission by the Crown.

Rather than involve Maori as stakeholders in the process, it was decided instead to consult Maori and other "interest groups"<sup>147</sup>. Farmers were allowed to influence the *Red report* through attendance at roadside and woolshed meetings. These meetings were extensive, allowing all affected property owners to contribute if they wanted and, as a result, their views were incorporated into the recommendations of the report. Apart from those Maori who farmed the land, consultation was restricted to the Tairāwhiti District Maori Council and there was no specific attempt to liaise with iwi or other Maori groups which held mana whenua. The *Red report* re-emphasised the need for afforestation and not erosion management in the CHA and suggested that subsidised erosion control should be limited to relatively productive land in the lower catchment. Maori owners believed that this was unfair because it would lead to favouritism for pakeha land in the subsidisation of farm development<sup>148</sup>.

While the report contended that "a firm contract was established with Maori groups and the Maori people generally"<sup>149</sup>, this was not the case. Consequently, there was little in the way of Maori buy-in to the recommendations of the *Red Report*. In the context of the importance placed on the development of Maori land at this time<sup>150</sup>, it was regrettable that Maori were not active participants in the research and consultative processes. Some years later the East Coast Planning Council remarked that:

The district has a large Maori community, and their active participation is vital in any attempts to solve the district's problems. This has not always happened in the past<sup>151</sup>.

It was not surprising that Maori could not be readily persuaded to participate in afforestation and soil conservation programmes – they were given almost no ability to influence the design of those programmes. The PBCB and the Crown not only disregarded Treaty principles in their failure to consult with Maori, they also followed a short-sighted agenda: the ECP would only have been successful with Maori support. Because of this narrow agenda, Maori remained as passive interests in the process of afforestation. Later, it was suggested that this problem needed to be addressed for the ECP to fulfil its aims:

The fear of the Maori people of the region being left as just a labour force is increasing. Their admiration and pride in the administration of the Mangatu

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<sup>147</sup> *Ibid*

<sup>148</sup> "Land use planning and development. East Coast region." – B.S. Robinson, Deputy Secretary, Department of Maori Affairs, to Director, Water and Soil Conservation, MOWD, Wellington, 2.10.1978 (PBCB M/4).

<sup>149</sup> Red Report 1978, p19.

<sup>150</sup> See "Maori as agri-environmental managers: the public perception" from page 109.

<sup>151</sup> "Development of pastoral Farming in Poverty Bay/East Coast." – no date (PBCB M/3).

Blocks has to be seen to be appreciated. The shareholders in this co-operative are the rank and file of the Maori people of the region, and the incorporation is extensively interested in growing trees. A distinct boost to Maori morale would be provided, and would also enhance the good race relationship this region enjoys, if their people had representation in the top administration of [the forestry] industry, as well as supplying the major part of the labour force<sup>152</sup>.

The need to involve Maori in both conservation and production forestry was not adequately heeded by government departments. The fears cited in the above quotation appear to have become reality, not only to the detriment of Maori land management but also to the ECP itself<sup>153</sup>.

A review of the East Coast Project in 1987 noted that 31,000ha of unstable on the East Coast had been afforested<sup>154</sup>. A total of 75,000ha of unstable land remained in pasture. The adoption of protection/production forestry under the ECP fell well short of objectives. Of the less-eroded land which had been specified for non-forest approaches to soil conservation, 28,000ha had been addressed and remained in pastoral production while 110,000ha had yet to be addressed<sup>155</sup>. These figures are not expected to have changed markedly since that time. For a variety of reasons, therefore, the ECP has failed to markedly extend conservation forestry as it was intended. The tangible benefits of afforestation remain restricted to on-site stabilisation and the wider objectives of catchment management and reduced aggradation are by no means assured.

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<sup>152</sup> "Utilisation of State resources at Patunamu, Wharerata And Mangatu." – C. Rau, Chairman, East Cape United Council, to B. Couch, Minister of Maori Affairs, and Duncan McIntyre, Minister of Forestry, 15.1.1981 (MA 58/1).

<sup>153</sup> Wall and Cocklin 1994; 1996.

<sup>154</sup> MOWD 1987, p19.

<sup>155</sup> *Ibid*, p73.

### 5.3 Protection/production

Initially, the primary objective of afforestation in the upper catchment was “to combat very serious accelerated soil erosion, with production of timber a secondary aim<sup>156</sup>.” The extensive briefing of Prime Minister Nash prior to his arrival in the district in 1959 to negotiate with Maori owners included an explicit statement of intent that afforestation would be implemented on a 1:1 ratio of production to protection forestry:

The general idea is that the area shall be planted in trees, half of which will be productive forest, and the other half purely protection forest in which cutting would not be permitted save on the most stringent conditions, if at all<sup>157</sup>.

The Maori owners of Mangatu Blocks were in part swayed by the conservation argument in their decision to sell land to the NZFS. That the cutting rights to this land were later sold by the Crown to private companies for non-conservation purposes suggests that the Crown has, in retrospect, been dishonourable in its transactions with Maori. Soil conservation was completed in the name of the national and public good; production forestry is a private good. While production featured as a component of the afforestation program from the beginning<sup>158</sup>, a changing political culture in New Zealand has transformed the protection/production continuum to the point where the conservation benefits are threatened.

The Mangatu State Forest was planned as a forest with conservation objectives. It was thought that some of the timber may be utilised, but this was to be dependent on the geological stability at the time of harvest. The protection of the Gisborne floodplains, through the reduction of sediment discharge to rivers, was the most important objective in the scheme<sup>159</sup>. At the time of planting the least expensive and most readily available tree species were those used in the production forests which were contemporaneously planted in the central North Island<sup>160</sup>. Because of the pressing need for effective protection against erosion, the selection of these species for the Mangatu forest did not pass without comment. Initial investigations at the Te Weraroa research site had prompted questions about the suitability of conifers and pines and the wisdom of allowing production forestry on such unstable land:

The question was raised, should conifers be planted at all on very badly eroded areas. Also, if they have any physical advantage at all over broad-leaved trees, whether they should not be managed on such areas, entirely as protection plantings. It seems obvious that under your proposal timber production would be an important thinning criterion, and it was commented at

<sup>156</sup> Allsop 1973, p11.

<sup>157</sup> “Information document to Minister of Maori Affairs.” – no date (MA Mangatu 1955-59).

<sup>158</sup> “Comments regarding draft for WRFCS review.” – T. Freeman, Senior Soil Conservator, GDC, 17.6.1993 (Cons M/5).

<sup>159</sup> Lands and Survey 1964, p43.

<sup>160</sup> “Afforestation as a subsidised soil conservation measure. Report 244.” – A.D. Todd, Engineer, PBCB, 5.8.1958 (PBCB MB).

the Council meeting that timber production, to be economic, should be confined to stable or near-stable areas and the two issues not confused<sup>161</sup>.

Broadleaf species were generally more suitable for erosion control because they intercept and transpire more water than such production species as pine. In New Zealand conditions, pine does not self seed, so it needs to be replanted at considerable cost. Moreover, trees in pine plantations typically reach maturity and die at the same time, meaning that after about 50 years erosion control benefits are lost *en masse*.

Yet, following the introduction of the ECP, *Pinus radiata* was promoted as the ideal species for all types of afforestation use. Its purported benefits were:

- (1) Having a shorter growing period to maturity and hence quicker return on outlay;
- (2) Having an already established market outlet for either logs or sawn timber;
- (3) Being thrifty in a wide range of conditions – especially many hard eroding sites<sup>162</sup>.

In these justifications for *radiata* it is obvious that the commercial aspects of afforestation had become the undeclared intention, even if publicly the NZFS and the PBCB continued to advocate for afforestation on the basis of soil conservation. Three years later, some staff of the NZFS questioned the suitability of the species because “if erosion control was the sole end use, then *Pinus radiata* may not be the most desirable species<sup>163</sup>.”

The use of pine has also been questioned in a recent review<sup>164</sup>. Even without a harvest, pine species have a limited life span and are susceptible to wind-throw after 50 years<sup>165</sup>. Therefore, such species are not suitable for conservation forestry. A drainage engineer for the Gisborne District Council argued recently that:

Long-term retirement is best from a river management perspective, the relatively short-term cycles of a production pine forest with the erosion between harvest and next planting canopy cover will continue to add sediment to a river system that will not be able to transport the supply it has for at least 100 years<sup>166</sup>.

At first, a number of different types of tree were trialed at Mangatu. The fact that pine became the predominant species for planting indicates that the objectives of afforestation rapidly moved towards production.

<sup>161</sup> “Te Weraroa: thinning and pruning.” – SCRCC, to PBCB, 1.5.1957 (PBCB 21/16).

<sup>162</sup> “Erosion control survey. Poverty Bay/East Coast, 1973.” – no date (PBCB 4/65/1).

<sup>163</sup> “East Coast/Poverty Bay erosion control afforestation policy.” – D. Conway, Director General of Forests, to Chairman, PBCB, 25.5.1976 (PBCB M4a).

<sup>164</sup> Royds-Garden and Williams 1993, pE3.

<sup>165</sup> “Draft report for WRFCs review.” – D. Peacock, no date, p7 (Cons M/5).

<sup>166</sup> *Ibid.*

The protection/production ratio was contentious for the NZFS from the very start. Advisors in Wellington had initially suggested that as much as 89% of the afforested area could be harvested. This was soon decreased to 80%, but even this was considered unsatisfactory by NZFS staff who knew the area from immediate experience. One of these staff members suggested that "all planting in the East Coast area should be considered protective until such time as it is apparent that an area will produce a utilisation yield<sup>167</sup>." On this basis, a 1:1 ratio for production and protection forestry was established in 1960<sup>168</sup>. By as early as 1973, however, this ratio was entirely removed from correspondence. The intended use of the afforested blocks was no longer a matter for debate: "Since the forests are clearly for production we can hardly shelter behind the protection aspect any longer<sup>169</sup>." This quotation suggests that at least some NZFS *policy* advisors had always considered Mangatu a production forest and that they used the 'protection aspect' merely to gain the support of the SCRCC.

Despite the earlier misgivings of *field* staff, the NZFS unofficially adopted Mangatu as a production forest around 1971<sup>170</sup>. Working plans were formulated which aimed "to produce a reasonable proportion of high quality logs. A secondary role is the stabilisation of the erosion susceptible country on which the forest is situated<sup>171</sup>". It was about this time that a regular pruning schedule was established for all areas of the forest. Previously, only some areas were pruned, suggesting that these areas were reserved for protection<sup>172</sup>. However, the public record of NZFS opinion at this time subtly misrepresented the real intentions of the service:

The primary objective of forestry management is soil and water conservation and this is the fundamental reason for the presence of the NZFS on the East Coast. The fact that we are also concerned with production aspects should be welcomed by all East Coast residents<sup>173</sup>.

The NZFS maintained that the forests planted at Mangatu were always intended to have a production component. In harvesting the mature areas of forest, the service was, supposedly, pursuing only the goals of good forest management practice<sup>174</sup>. Yet, even with these admissions, the NZFS retained the public contention that large areas of the Mangatu State Forest would never be harvested.

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<sup>167</sup> "Protection/production forestry." – District Forest Conservator, Gisborne, to Head Office, NZFS, 15.12.1970 (NZFS 1/7/6b).

<sup>168</sup> "Information document to Minister of Maori Affairs." – no date (MA Mangatu 1955-59).

<sup>169</sup> J. Ure, District Conservator, NZFS, to Regional Conservator, Rotorua, 9.3.1973 (NZFS 1/7/6c).

<sup>170</sup> "Survey Waipaoa acquisition." – J. Ure, Conservator of Forests, Rotorua, to Chief Surveyor, Department of Lands and Survey, Gisborne, 25.11.1971 (L&S 4/885ii); Robinson 1993, p101.

<sup>171</sup> "Foresters report. Period ended 30.6.1968." – District Conservator, Gisborne, to Conservator of Forests, Rotorua (NZFS 33/1).

<sup>172</sup> Early and regular pruning increases the commercial value of mature logs, producing straighter trunks and timber with fewer knots. Much of the timber which is presently extracted from the upper Waipaoa catchment is of poor quality and, as a result, it is typically chipped. The low quality of the timber is related to poor soil fertility, movement of planted slopes and the lack of pruning in the early stages of the trees' growth.

<sup>173</sup> "Afforestation. PBCB." – E.R. Kearns, NZFS, to Chairman, PBCB, 3.3.1978 (PBCB 4/45).

<sup>174</sup> *Ibid.*

At times, the potential for profitable harvesting of headwater forests has been touted in the Gisborne area<sup>175</sup>. Because the NZFS and the PBCB experienced difficulties in accelerating farmer adoption of afforestation, both agencies attempted to encourage adoption through publicizing the profitability of forest farms. In this way, the PBCB succeeded in obtaining governmental subsidies for afforestation through the SCRCC as well as landowner support. It was also argued that "not only is afforestation of this area a necessity for the district it is also likely to be a profitable enterprise for the government<sup>176</sup>." Following the release of the *Taylor Report*, Dr. N.H. Taylor addressed the Soil Conservation Committee of the PBCB about the possible outcomes of his recommendations. Taylor believed that his plan provided a means to make erosion control both profitable for participants and, therefore, politically feasible. He predicted a possible 15% return on forestry in the CHA. Likewise, the NZFS appeared confident of the potential production value of the forest. It suggested that "a large proportion of the forest could be utilised when mature without danger of a renewal of gully erosion<sup>177</sup>. It is evident from this commentary that the objectives of the NZFS were inconsistently held across its staff.

Earlier, the owners of Mangatu Blocks had questioned the CCL about the possibility of entering into a joint venture with the NZFS. He replied that the idea was not rational because:

...any profit would be very small and a long time in coming. He emphasised the fact that the intention was to establish a protection forest not a productive one, and milling if any would be on a small scale with little profit.

Land was to be purchased to provide it with a cover of vegetation and having established this to control it. Trees will die out, some thinned by milling but all will be replaced. It was a pity the forest cover was ever removed and having learnt the lesson, any new forest established would be taken careful care of and not removed again. A protection forest was to be established and the land was not being purchased for the sake of buying land. There was a grave and firm purpose behind it all<sup>178</sup>.

This advice contributed to the decision of the owners of Mangatu Blocks to sell their land: they understood that the scheme was intended for soil conservation and, therefore, it was not likely to generate revenue. They also sold the land on the understanding that the project was in the interests of the public good. If the owners had known of the potential profit which would eventually be taken from these forests, they may have argued more strongly for a joint-venture agreement. Likewise, if the owners had known that the public good components of the scheme were to be

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<sup>175</sup> Harris (1988, p6) notes that these economic returns have seldom been realisable. Distance from processing facilities and inadequate transportation routes along with the predominant use of poorer classes of land for planting seriously affected the financial viability of protection/production afforestation in the hill country of the East Coast

<sup>176</sup> "Submission to Ministers of Lands and Works." - J.B. Hair, Chairman, PBCB, 30.3.59, p574 (PBCB MB).

<sup>177</sup> *Ibid*

<sup>178</sup> "Report on Mangatu Blocks 1, 3 & 4 Inc. annual meeting." - 21.10.1960 (L&S 4/883).

surpassed by private gain, they may have fought more strongly to retain the land in their ownership.

### **A return to conservation forestry?**

The devastation of Cyclone Bola in 1988 convinced many that the goals of protection forestry must be re-invigorated<sup>179</sup>. As a result, an extension to the ECP was announced – the *East Coast Conservation Forestry Project*. Under this scheme, landowners were subsidised for 95% of the costs of establishing protection/production forest on unstable land. However, subsidies were only available for the planting of *Pinus radiata* – other species were planted at the landowner's expense. This further elevated the status of *production* forestry and the species most likely to yield timber<sup>180</sup>. This scheme departed from previous afforestation attempts in its reliance on the private sector to provide land and labour, while central and local government would subsidise the costs. Monies were distributed through the local authority, with localised assessment of the need for erosion protection. The system should have been more sensitive to the needs of each property but, unfortunately, the Gisborne District Council displayed variable financial commitment to the scheme over time<sup>181</sup>. The scheme never reached its target of planting 3000ha *per annum*. Moreover, after 1990 the areas planted under this scheme were reclassified from protection forestry to a protection/production mix<sup>182</sup>.

The *East Coast Conservation Forestry Project* was a short-term scheme designed to address reversals in erosion control brought about by Cyclone Bola. The difficulties in implementing this emergency project convinced the Crown of the need for a more permanent and coordinated approach to soil and water conservation on the East Coast. As part of this decision, the *East Coast Forestry Project* (ECFP) was created. Under the ECFP a tendered grant system was established wherein landowners were subsidised for afforestation work on their land. Outwardly, the scheme represented a retreat towards the goals of conservation forestry. The principal goals of the project were:

To promote large-scale commercial forestry as a means of controlling soil erosion, providing employment and regional development and to recognize environmental needs on individual properties<sup>183</sup>.

While the scheme targeted land with moderate to severe erosion, the conservation objectives in this quotation conflict with the other objectives. The legitimisation of commercial forestry and the emphasis on regional development suggest that this was not a simple return to protection forestry *per se*<sup>184</sup>.

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<sup>179</sup> Blaschke and Peterson 1994, p1.

<sup>180</sup> Royds-Garden and Williams 1993, pE3.

<sup>181</sup> Robinson 1993, p65.

<sup>182</sup> *Ibid.*, p103.

<sup>183</sup> *Ibid.*, p11.

<sup>184</sup> "Forestry experts spell out scheme details." – Gisborne Herald, 2.10.1992 (GisMUS VF-Forestry).

Figure 5.2 – History repeats? Logging at Mangatu, 2000



A contentious outcome of the scheme was the clearance of regenerating native bush, so that it could be replaced by pine plantations. While policy advisors for the ECFP recommended that older stands of such bush should be preserved rather than cleared and replaced by *Pinus radiata*<sup>185</sup>, many farmers adopted the scheme because it offered a way to bring regenerating land into commercial use. Changes to the project regulations in 1993 gave protection to emerging indigenous forest and closed canopy scrub<sup>186</sup>. However, afforestation was occurring in all the wrong places – little in the way of highly unstable land in the headwaters was afforested.

Even with the subsidies, the costs of involvement in the scheme were initially high for landowners<sup>187</sup>, encouraging many of them to become involved in joint-ventures with off-farm financiers rather than the ECFP. Under these arrangements, farmers supplied the land, with the juvenile trees and management provided by a commercial forestry company. Such outcomes as these are problematic for two reasons. First, the pressure to make a profit under these arrangements led to the disregard of the ECFP and its objectives because it was more profitable for farmers to target the less-eroded land on their properties which would yield timber more quickly. Up until 1998, only 16,000ha had been afforested under the ECFP – only half of the area which was initially targeted under the scheme<sup>188</sup>. Second, the increasing influ-

<sup>185</sup> Bergin *et al* 1993, p40.

<sup>186</sup> Blaschke and Peterson 1994, p23.

<sup>187</sup> "Forestry experts spell out scheme details." – Gisborne Herald, 2.10.1992 (GisMUS VF-Forestry).

<sup>188</sup> "State confirms its East Coast forest funding." – Gisborne Herald, 21.6.1999 (GisMUS VF-Forestry).

ence of commercial backers in local afforestation has shifted again the balance between production and protection forestry.

### **Outcomes of a production emphasis and implications for Treaty settlement**

In the early 1980s, the NZFS trialed harvest methods to ascertain the most effective and safe procedure for extracting the timber which would be sufficiently mature to harvest in the 1990s<sup>189</sup>. A significant amount of research was carried out on the likely effects of harvesting the timber from the erosion prone areas<sup>190</sup>. Findings indicated that the strength following harvest of roots left *in situ* was non-existent after 40 months. This was relatively unimportant because the root structure of pine was less important than the forests' ability to intercept rainfall<sup>191</sup>. In the case of *Pinus radiata*, a canopy sufficient to stabilise slopes forms 6-8 years after planting. It is in this window of time when the potential for severe erosion is greatest<sup>192</sup>. A research program developed by Landcare Research, the NZFS and Timberlands determined that:

The short-term on-site environmental impacts of harvesting had been reduced to an acceptable level. The real measure of success, however, will not become apparent until the second rotation becomes established and [the] rate of mass movement, soil erosion and sediment transport are determined<sup>193</sup>.

ITT Rayonier discontinued this program after purchasing the cutting rights to the Mangatu Forest. It preferred instead to rely on its own research and a best practices policy<sup>194</sup>. Of itself, this abandonment indicates some of the potential negative outcomes of the shift to private rather than state control of forests in the area.

From the late 1960s, State and private forests on the East Coast were expected to increase significantly in their spatial extent in accordance with the objectives of the Taylor report. Because the increase in forest planting was more modest than these projections, there are significant limitations to the amount of extant forest which can be legitimately harvested without impact on soil conservation objectives. Yet, the cutting rights for five East Coast forests, including Mangatu, were tendered for sale as part of the corporate strategy of the New Zealand Forest Corporation (NZFC) – the State Owned Enterprise which inherited the assets of the NZFS in 1987 – and, later, Timberlands East Coast. The original objectives of the afforestation schemes, especially erosion control, have been irrevocably altered by the intrusion of commercial enterprise. The expansion of protection forestry is not an

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<sup>189</sup> "Planning requirement. East Coast Forests." – NZFS, 21.9.1983 (PBCB G/2).

<sup>190</sup> Blaschke and Peterson 1994, p70.

<sup>191</sup> Peacock 1986, p15.

<sup>192</sup> FRI 1990, p4.

<sup>193</sup> Blaschke and Peterson, p70.

<sup>194</sup> *Ibid.*, p70.

obvious objective for SOEs which must conform to the goals of profit rather than to those of the public good. Consequently, state-assisted plantings in the Waipaoa catchment have declined markedly since that time<sup>195</sup>, while remaining forest areas have been increasingly targeted for their commercial rather than conservation values. Put simply, production and profit objectives conflict with the goals of erosion control<sup>196</sup>.

Plans announced from Wellington to corporatise the NZFS were met with concern by the local catchment board. It believed that the protection/production mix which had evolved up until corporatisation was balanced, but that this balance would disappear under the new regime wherein profit was to be the measure of success<sup>197</sup>. The government directed Treasury to differentiate between areas of production and protection, but Treasury possessed neither the correct motivation nor skills for this task<sup>198</sup>. Not only has the profit motivation of corporatisation curtailed afforestation on the less fertile and inaccessible areas of the East Coast, it has also rendered the retention of forest assets untenable. The increased cost of harvesting erosion-prone slopes meant that the cutting rights to Mangatu forests were rapidly targeted for sale<sup>199</sup>. The cutting rights to the Mangatu forests were first transferred to the company London Pacific, but this company became financially insolvent after only a short period in operation<sup>200</sup>. ITT Rayonier purchased the rights in 1992, with special soil conservation covenants attached to their Crown Forest Licenses<sup>201</sup>.

These covenants represent some protection against over-vigorous commercial exploitation, but the level of protection offered by covenants and the requirements for replanting after harvest are ambiguous. The covenants typically include such statements as "the Occupier shall replant any stand of trees which it fells in whole or in part in the Covenant Area<sup>202</sup>." It is unclear from the covenants exactly when the 'in part' clause can be invoked. The cutting rights for Mangatu have been sold to commercial forestry companies and as part of the agreement must be replanted almost immediately upon harvest. What happens after the first cycle of harvesting and replanting remains uncertain, however, so the long-term future for soil protection is not guaranteed. Moreover, the ecological effects of harvesting will not be fully known until a decade into the second cycle of tree planting. GDC conditions on forestry resource consents potentially offer a higher level of protection against soil erosion than the covenants themselves. Marden, however, has questioned the

<sup>195</sup> Robinson 1993, p92.

<sup>196</sup> Royds-Garden and Williams 1993, pE2.

<sup>197</sup> "Forest development. East Coast." – R.C. Miller, Chairman, ECCB-RWB, to D. Lange, Prime Minister, 2.7.1985 (NZFS M/4).

<sup>198</sup> "Forest development. East Coast." – D. Lange, Prime Minister, to R.C. Miller, Chairman, ECCB-RWB, no date (NZFS M/4).

<sup>199</sup> Robinson 1993, p90.

<sup>200</sup> "Losses set back area's forestry." – Gisborne Herald, 21.3.1991 (GisMUS VF-Forestry).

<sup>201</sup> "Crown forests." – R.C. Miller, Regional Conservator, GDC, to Chief Executive, Environment and Planning, GDC, 3.8.1990 (Cons G/1).

<sup>202</sup> "Mangatu forest. Protective covenant No. 2." – no date (Cons G/1); Refer, also, to "Crown forests." – R.C. Miller, Regional Conservator, GDC, to Manager, Environment and Planning, GDC, 3.8.1990 (Cons G/1).

extent of, and methods for, harvesting of these forests, which have thus far been permitted by the GDC<sup>203</sup>. The areas where harvesting has taken place to date reflect the pattern of *accessibility* more than they do the extent of erosion. The old rhetoric of a 1:1 ratio of protection to production has almost entirely disappeared in local correspondence about forestry. Increasingly, a precautionary approach to the protection-production continuum has been abandoned in local discourse and in local expressions of environmental management.

Figure 5.3 – The effects of radiata harvests



A log puller in action (Left). Even the act of harvesting leads to erosion. However, it is the loss of the forest canopy through logging which can lead to more significant impacts. At right, forest has been removed on an inherently unstable site. Although, seedlings have been replanted, it is speculative to suggest that erosion will not become unmanageable before those seedlings mature.

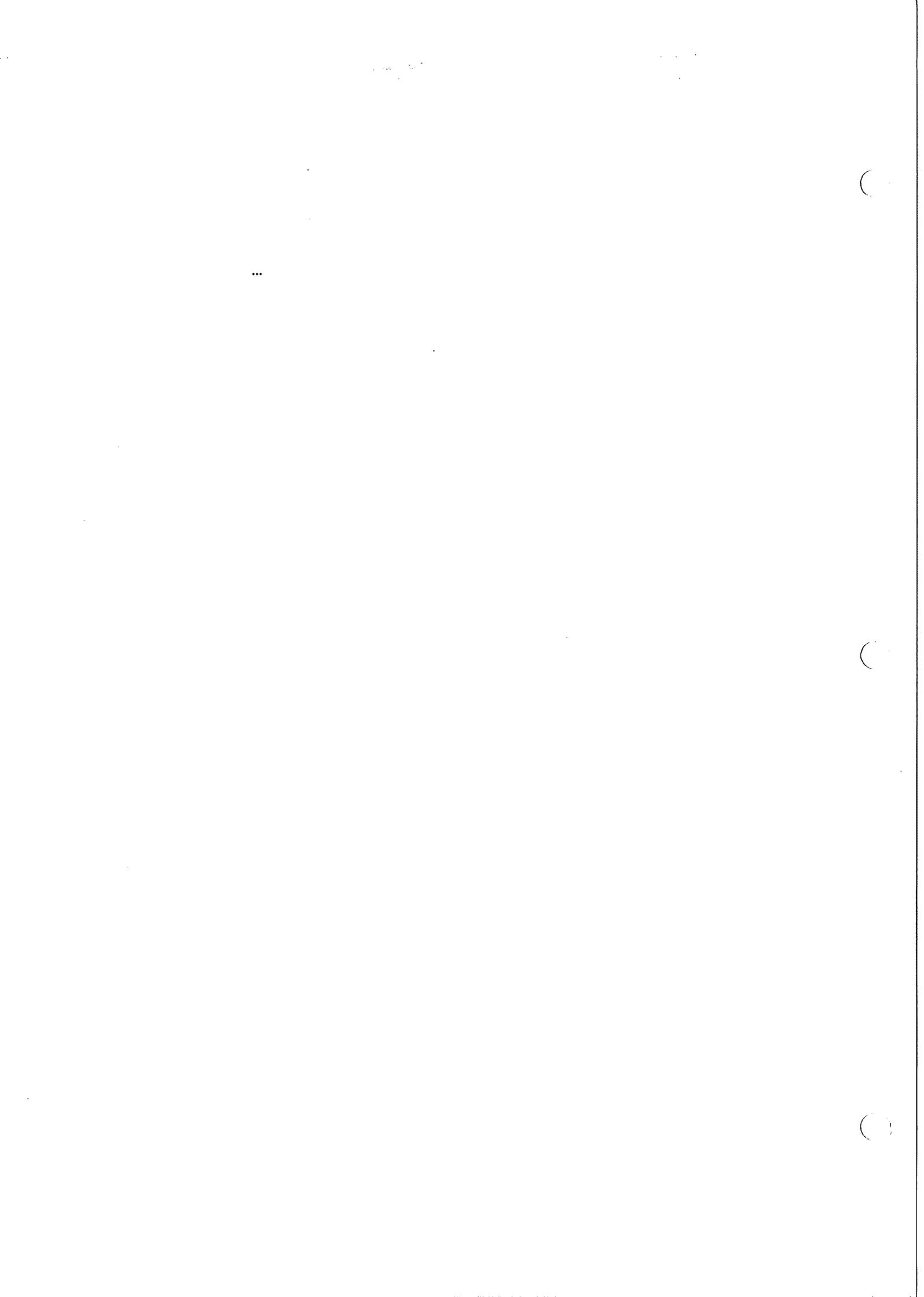
This leaves open the possibility of a repetition of history. Indiscriminate logging of indigenous forests in the headwaters of the Waipaoa at the turn of the 20<sup>th</sup> Century led to an acceleration of erosion and downstream flooding. Protection and protection/production forests were planted from 1960 to arrest these trends, but poorly managed harvesting of these forests at the turn of the 21<sup>st</sup> Century may well lead to renewed problems downstream. The troubled history of protection/production has important implications for Treaty settlement processes in the area. The Crown has previously shown a preference for the use of assets rather than money in reparative settlements. In Gisborne, land under former Crown forests provides a significant proportion of local Crown assets. If Mangatu and ECP land is handed back to iwi with, perhaps, a first claim to future cutting rights, the long-term value of these assets may be difficult to establish and may well represent a liability rather than a resource. In future, environmentalists and downstream property owners may place political pressure on future owners and on resource managers to limit harvesting on the basis of renewed evidence of soil erosion and downstream problems<sup>204</sup>. It may,

<sup>203</sup> Marden and Rowan 1997; Marden and Saunders 1992.

therefore, be unwise for tangata whenua to accept this land as reparation in kind for regional injustices. In any case, the improper nature of the acquisition of the Mangatu lands perhaps suggests that the land should be returned as of right rather than as compensation for confiscation of land on the Poverty Bay flats.

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<sup>204</sup> A comparable lesson from history: In 1906, the South Island Landless Natives Act (SILNA) was enacted as one of the first attempts at reparative justice in New Zealand. 18 reserves were given to South Island Maori as reparation for the failure of the Crown to include reserves in land purchases and for the generally inequitable nature of these purchases. The reserves themselves, however, were not necessarily fair reparation. At the time, many of the areas were considered to be inaccessible wastelands which would never be amenable to farming. Values change over time: today, many of the reserves remain clothed in native bush and the rimu forest on the Waitutu and Tautuku reserves is considered to be of rare ecological value. Because of this significant ecological value, environmentalists have effectively prevented the reserves' owners from using the land. Reparation assets can, therefore, become a liability and it would be unfortunate if the history of SILNA lands was repeated in the case of Mangatu.



## The making of Port Gisborne

**T**he Turanganui River and the coastline from which it emerges is important for both Maori and pakeha. According to one historical narrative, the first Maori waka to the area landed on the rocks in the river, including the sacred rock Te Toka-a-Taiau. The crew of the Endeavour also used this area as a staging point for their first investigations of the land. Later, the river was used as a base for early European trade, with prominent settlers establishing jetties to match their commercial operations – for example, Harris in 1831 and Read in 1852<sup>1</sup>. Gradually, the mouth of the Turanganui was developed from these initial jetties into a port<sup>2</sup>. The rock platforms in the river also served as a departure point for Maori fishing expeditions to reefs in the bay. The river itself was a bountiful source of kai, with plentiful shellfish to be gathered from its mudflats, rock platforms and tributaries and there was regular har-

<sup>1</sup> Whyte 1984, p4.

<sup>2</sup> "Berthing at Port Gisborne." – Promotional booklet, Gisborne: Port Gisborne Ltd.

vesting of mullet and other fish in the tidal reaches. Eventually, the transportation and food gathering uses would come into conflict, with the increasing sophistication and infrastructural requirements of the former impacting severely on the latter.

The Treaty of Waitangi conferred to the British the right to settle New Zealand. The establishment of settlements necessitated infrastructure, including ports, so the creation of a port can be viewed as a *kawanatanga* right of the Crown. European settlers regarded the development of a port at Gisborne as a necessity, and local and national authorities contended that such a development was of colonial importance. During the course of the development, however, the river and its environs have been dramatically and irreversibly transformed. Rocks of historical and cultural significance have been blasted from the river, the channel was deepened, the river banks were both excavated and reclaimed, and the river was diverted from its course to create a full harbour. In particular, these transformations have had a detrimental impact on the fishing resources of the river, resulting in a loss of a resource base for local Maori. Throughout the construction of the harbour and its associated infrastructural projects, there was little evidence of the Crown or its appointees offering partnership rights to the iwi of Turanganui-a-Kiwa. Likewise, there was a demonstrable lack of consultation in key decisions, with no Maori representation on the Gisborne Harbour Board, its associated committees and regional conferences.

## 6.1 Initial development of a river port

This Section details the initial development of the port from its informal beginnings as a series of unrelated jetties to the more formalised modification of the river mouth area. While some comments are made about the legality of this transformation and about the taking of land for harbour activities, such a commentary has been restricted. It is understood that specific research has been commissioned for the port area which will evaluate the legitimacy of Crown authorisations and title vestings in the area. Consequently, this Section focuses on environmental issues – principally the loss of customary fisheries in the area. Even this objective, however, is hampered by the lack of suitable archives relating to the period 1870 to 1910. At that time, environmental impacts were not well-recorded and the loss of important Marine Department files in a parliamentary fire removed many of the authorisations for the initial port development.

### The transformational pressures of settlement

The town of Gisborne was formally designed in 1868-70. As the sea was the primary method of transportation to and from the area, and because the township of Gisborne was growing rapidly, there was a demand from the settlers for the development of a port with safe berthing facilities. In 1872, Gisborne was gazetted as a port and it commissioned its first pilot in 1874<sup>3</sup>. During this time, the government adopted a non-committal and detached approach to the development of the port. Constrained by finance, it granted permission to a trader to construct a public wharf. It was not until 1877 that the port came under the control of the Gisborne Borough Council, after its creation through the Municipal Corporations Act of 1876. Local settlers continued to pressurise the Crown for a better harbour and the issue was debated in the House of Representatives in 1875. The outcome of this debate was inconclusive, however, with the government of the day suggesting that it was a matter for provincial government<sup>4</sup>. In this context, the Borough permitted private individuals to occupy river space with jetties while it awaited Crown intervention. By the time the Gisborne Harbour Board Empowering Act 1884 was passed, works on a harbour were already well under way. The Gisborne Borough Council had initiated developments, as had businessmen with a vested interest. Wharves and jetties had been constructed, and rocks blasted from the channel of the Turanganui River. The Crown had allowed for the river to be gazetted as part of a port, but it then divested of itself the responsibility of governance. This abandonment of duty established the preconditions for later breaches of the Treaty.

Berthing in the Turanganui River was not always practicable and natural conditions often made visits to the port dangerous. Rough seas, a bar at the mouth of the river, and siltation of the river channel from flooding all culminated in a momentum for a

<sup>3</sup> Whyte 1984, p.14.

<sup>4</sup> *Ibid.*, p.15.

safer harbour. During the late 1870s, a number of proposals for formal harbour were discussed. An outer harbour and a breakwater were mooted but, without an endowment or other source of finance, the Borough Council could not raise the funds required for this work even with local approval. The settlers maintained their pressure on parliament, eventually leading to the enactment of the Gisborne Harbour Board Act 1882 – an act to create the Gisborne Harbour Board (GHB)<sup>5</sup>. Under this Act, significant tracts of the foreshore – including the tidal portions of the rivers – were to be vested in the GHB. However, the Crown grant for the foreshore was not finalised until 1884 and, without this grant, the GHB could not exercise its powers<sup>6</sup>. Once the grant of the foreshore was finalised through the Gisborne Harbour Board Empowering Act 1884, the GHB set about rapidly developing and modifying the Turanganui River<sup>7</sup>. It allocated coastal space and permitted the erection of jetties and wharfs to assist this development. The extension of these powers to the GHB without reference to the potential impacts on Maori fisheries represents insufficient regard to the Treaty rights of tangata whenua. According to Crengle, the Treaty principle of active protection is not limited when the Crown devolves responsibility to subsidiaries and “the Crown cannot evade its Treaty obligations by conferring its authority on other bodies<sup>8</sup>.”

The decades either side of the turn of the 20<sup>th</sup> Century were a time of expansion in the Gisborne region. As has been shown in Chapter 2, pasture was extended to the hill country and there was also a considerable number of purchases of Maori land for the purposes of farming. The increase in pastoral agriculture induced increased use of the port and heightened the need for improved facilities<sup>9</sup>. These improvements were carried out by the GHB which raised money through government sanctioned loans. Development of the port progressed with a cumulative momentum and with little regard to ecological impacts because the port was “admitted [to be] one of colonial importance<sup>10</sup>.” The provision of safe moorage was of blinding importance to the settlers because Gisborne was particularly isolated in terms of land-based travel.

These transformations at the Port were based on the assumption that the vesting of the foreshore conveyed universal and unencumbered authority to the GHB. The foreshore grant included the land between high and low water mark in a wide range of environments: beaches from Lytton Road to the mouth of the Waikanae Stream; the tidal reaches of the Waimata, Taruheru and Turanganui rivers; and Kaiti Beach and Tuamotu Island<sup>11</sup>. The Crown vested the foreshore in the Gisborne Harbour

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<sup>5</sup> “Appointing Port of Poverty Bay under ‘the Marine Act 1867.’” – J. Ferguson, Governor, Wellington, 4.6.1874 (GDC 362-04).

<sup>6</sup> “Early authorisations at Port Gisborne.” – C. Lowry, 17.6.1953 (GDC 362-04).

<sup>7</sup> 6.2.1883 (GHB MB).

<sup>8</sup> Crengle 1993, p15.

<sup>9</sup> Poverty Bay Herald, 25.7.1901 (GHB CB).

<sup>10</sup> “Crown and Native Land Policy Act.” – 15.10.1887, p.149 (GHB MB).

Board on the assumption that the foreshore was Crown property. This Chapter does not provide a full critique of the Crown's supposed right to grant the Gisborne foreshore – this will be taken up in another report which has been specifically commissioned for port issues. However, it is necessary to introduce this topic here, if only because the ecological and eco-cultural impacts of the making of Port Gisborne cannot be understood without comprehension of mana moana and authority to transform the environment.

Until the 1870s, Government departments acted in the knowledge that Maori title to the foreshore had to be extinguished. Although the Public Reserves Act 1854 was based on the assumption of Crown ownership of the foreshore, it was commonly interpreted as if it applied only to foreshores where Maori title had already been extinguished. In 1869, a Select Committee on the Thames Sea Beach Bill was told that Maori foreshore rights ceased only when the Maori title over the adjacent land was extinguished<sup>12</sup>. By the mid-1880s, however, the presumption of Crown ownership of the foreshore and sea-bed was entrenched. The prevailing interpretation was that the Crown had sufficient authority over the foreshore to grant portions of it to harbour boards and other agencies<sup>13</sup>. This new interpretation of the Crown's eminent domain was illustrated through such legislative changes as the Harbours Act 1878 and the Crown Grants Act 1886, 1908. It was also manifest in empowering legislation introduced under the Harbours Act, including the Gisborne Harbour Board Empowering Act 1884.

Retrospectively, the Crown's assumption of ownership has been challenged in a number of legal transactions. The precedent-setting case was *Ninety-Mile Beach* in 1957 in which the Crown's simplistic view of its eminent domain was disputed<sup>14</sup>. The Crown's interpretation of the Treaty maintained that the foreshore was to be held by the Crown for the benefit of both Maori and pakeha because of the importation of common law from Britain in 1840<sup>15</sup>. In *Ninety-Mile Beach* it was noted that the adoption of British common law does not necessarily extinguish customary title. Extinguishment, therefore, required a legal transaction of specific and clear intent to clarify the title to foreshore areas<sup>16</sup>. Typically, this would have entailed the passing of adjoining land through the Native Land Court, whereupon customary title was relinquished to that land.

However, even this did not necessarily legitimise the Crown's presumption to title to the foreshore: the Waitangi Tribunal has been asked on several occasions to rule on this matter where tangata whenua did not *knowingly* relinquish their rights to the

<sup>11</sup> "Works committee report." – 20.6.1960 (GHB MB).

<sup>12</sup> James Mackay to a Select Committee on the Thames Sea Beach Bill 1869 –AJHR F-7, p6, cited in Boast 1996, p31.

<sup>13</sup> Boast 1996, p38.

<sup>14</sup> Boast 1993.

<sup>15</sup> Boast 1996, p.27.

<sup>16</sup> Bennion 1997; Lanning 1998; MacLeod 1998.

foreshore and associated fisheries. In the Te Whanganui-a-Orotu claim to the Waitangi Tribunal, the claimants contended that they never knowingly or willingly relinquished their tino rangatiratanga over their taonga – an estuary which was subsequently transformed into a harbour. Additionally, they contended that the Crown was in breach of Treaty principles by asserting ownership over Te Whanganui-a-Orotu when it vested it in the Napier Harbour Board<sup>17</sup>.

There are a number of similarities in this claim to potential claims in Gisborne. The Gisborne Harbour Board Act 1882 and the Gisborne Harbour Board Empowering Act 1884 were passed without reference to, nor consultation with, tangata whenua. Consequently, it could also be argued that iwi did not consciously relinquish their rangatiratanga over the foreshore area which became the port. Adjoining land passed through the Native Land Court<sup>18</sup> only shortly before the passage of the 1882 and 1884 acts of parliament and *after* the gazetting of the area as a port in 1872. While the question of whether this represents an act or omission by the Crown will be taken up in another report, this potential ambiguity of title is important for the present report. Regardless of whether or not the extinguishment of title was legally tolerable, the legitimacy of agents to transform this foreshore is understandably contested in the Gisborne case. The degree to which the Harbour Board empathetically managed this contestation and, especially, the associated cultural attachments to this landscape, then become important matters for study.

## Planning for a harbour

The GHB acted quickly to capitalise on its vesting, as if there was no ambiguity in its mandate and as if there were no cultural values which required careful consideration. It regarded the foreshore endowment as an asset, believing that it was “the duty of the Board to derive as much benefit from their property as possible<sup>19</sup>.” Even before the grant was finalised, the GHB allocated portions of the foreshore, only recognising belatedly that it could not formalise these allocations until the foreshore grant was confirmed<sup>20</sup>. Thereafter, large portions of the foreshore were allocated to developers within weeks. This included the erection of jetties and wharfs and the leasing of portions of the foreshore<sup>21</sup>. The means of allocation was leasing through public auction with the leases subject to conditions and negotiations where necessary<sup>22</sup>. Essentially, the highest bidder received considerable powers of occupation and transformation and there were few opportunities for public objection in the auction process. Even a modest reading of the Treaty would suggest that the Crown should ensure through legislation that local authorities seek to involve iwi in coastal decision-making. Compromise is necessary to accommodate

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<sup>17</sup> Te Whanganui-o-Orotu report. Waitangi Tribunal 1995, pp98-99.

<sup>18</sup> Kaiti passed through the court in 1873 and the Waikanae blocks between 1873 and 1877.

<sup>19</sup> 22.12.1896, p257 (GHB MB).

<sup>20</sup> 1.4.1884, p152 (GHB MB).

<sup>21</sup> 29.4.1884, p164 (GHB MB).

<sup>22</sup> “Letting of foreshore.” – 10.6.1884, p172 (GHB MB).

divergent cultural attitudes to resources, but compromise requires, at the very least, consultation. The minute books<sup>23</sup> of the GHB suggest that decisions were made with almost no reference to Maori and their affinity to this important coastal marine area.

With a lack of government involvement, the foreshore and tidal reaches of the rivers were subdivided and partitioned. The foreshore from the existing wharfs on either side of the Turanganui and Taruheru Rivers up to Peel Street was surveyed into lots of suitable size for leasing<sup>24</sup>. The GHB generated significant income from rentals of leased land which was then used to construct port facilities. Leasing land was also seen to “further the prosperity of the district<sup>25</sup>,” especially in the regard of the lease of the Kaiti blockyards for the region’s main freezing works. The Board’s foreshore grant was subject to the Public Bodies Powers Act 1887. Under this act, the Board was mandated to lease portions of the foreshore for considerable periods of time. The blockyard premises were leased under this Act for 21 years to the Gisborne Refrigerating Co., with a right to renew the lease at the end of the 21 years<sup>26</sup>. This reduced public access to the river with leased sections regarded as private property by the lessees. As will be shown in Chapter 10, the use of this area by the freezing works also led to the mass pollution of the river mouth area. Such statements as “the committee regarded the interests of the whole district, and of the Harbour Board first and foremost<sup>27</sup>” are not supported by analysis of the GHB minute books, wherein it is clear that only an elite of business and landowning interests were considered in strategic decisions.

Several plans were developed to transform the Turanganui River into a harbour. The proposal of an outer harbour along Kaiti Beach had gained ratepayer approval in 1877, with a local businessman promising to acquire a £50,000 loan for the purpose. A related proposal mooted the construction of a 250m breakwater from Kaiti Beach. Without a foreshore endowment, however, this type of development could not be undertaken<sup>28</sup>. A further proposal for an outer harbour was put forward in the *Coode report*. This report was tabled in both houses of parliament, and was part of a colony-wide survey of ports. The report advocated an island harbour off Kaiti Beach: ongoing development of the Turanganui River was discounted because the likely necessity of expensive maintenance dredging of sediment at the river mouth. The Empowering Act of 1884 sanctioned the raising of a £200,000 loan for building Coode’s outer harbour. However, the GHB used the money to improve the river port through the construction of a breakwater, the purpose of which was to prevent the drift of marine sediment into the river mouth and to provide a calm

<sup>23</sup> File: GHB MB

<sup>24</sup> 29.3.87, p91 (GHB MB).

<sup>25</sup> *Ibid.*

<sup>26</sup> 2.12.1897, p338 (GHB MB).

<sup>27</sup> 7.11.1895, p212 (GHB MB).

<sup>28</sup> Whyte 1984, p23.

water exit to the river. This necessitated seven amendment acts to allow the GHB to spend the money in ways which departed from original intentions<sup>29</sup>. Parliament passed these amendments, authorising a significant modification of the Turanganui River. The Crown could, therefore, be held responsible for the consequent alterations to the river and the loss of customary fisheries.

An alternative river scheme was developed in 1885 and included a breakwater, groyne and a swinging basin. The Marine Department adopted this scheme against vocal ratepayer opposition<sup>30</sup>. It was argued that the river scheme could still be used during its construction, whereas the Coode plan would not be operational until it was finished. An immediately available port was considered paramount because this would "benefit the whole colony<sup>31</sup>." However, the decision to continue development of a river port was expensive. The predictions the Coode report that a river harbour would incur substantial maintenance costs proved correct. As early as 1888, the GHB petitioned parliament for financial aid as its ratepayers had already borne taxes "past endurance<sup>32</sup>." The government was responsible for authorising several additional loans up until 1916. In 1907, £400,000 were authorised through an enabling act for construction of an outer harbour. Once again the plan for an outer harbour never eventuated and, consequently, the money was never used for that purpose. In 1913, another enabling act was passed to borrow £200,000 for new works to extend the breakwater, and to pay off old loans<sup>33</sup>. These policy reversals of the GHB indicate very poor standards of management, research and planning.

Although local ratepayers were aggrieved at the escalating costs, the real costs of attempts to maintain a river port were borne substantially by the environment. The port development in this period was characterised by a lack of integrated planning. Lack of consensus over which plan to adopt hindered the development, and the debate about the merits of outer and inner harbours would continue into the 1920s. Development would commence only to be halted because of such unforeseen problems as sand drift over the harbour entrance<sup>34</sup>. The outcome of this haphazard evolution was the significant modification of the Turanganui River, its banks, and the surrounding coastal marine area. These works were sanctioned by the government in the form of loan authorisation and Marine Department approval of harbour designs. The government did not hinder the Port development, for the creation of a port was of 'colonial importance' and was to proceed at all costs. As will be shown, Treaty guarantees were overlooked in the disorganised approach to port development and because of the insistence of local and national agents that Gisborne required a port of significant proportions.

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<sup>29</sup> Mackay 1927, p140.

<sup>30</sup> "Solving the harbour problem." – Gisborne Times, 4.2.1919 (GHB CB).

<sup>31</sup> Whyte 1984, p34.

<sup>32</sup> 22.5.1888, p209 (GHB MB).

<sup>33</sup> "Solving the harbour problem." – Gisborne Times, 4.2.1919 (GHB CB).

<sup>34</sup> February 1893, p60 (GHB MB).

## Alteration of the environment

The Turanganui River began to be altered by European settlers as early as 1831 when Captain J.W. Harris set up his trading post on the western bank of the river. Subsequent jetties and wharves were built before the GHB came into being. Once works were authorised through the 1884 Act, construction advanced rapidly. The abandonment of the outer harbour plan led to renewed development alongside the river. The river scheme comprised of a breakwater extending seaward from the eastern bank of the Turanganui River, a groyne on the western side of the river, and a swinging basin. In 1887, the Marine Department approved plans for the 250m breakwater and construction began soon thereafter<sup>35</sup>. Material for the breakwater included the papa rock in the Turanganui channel and rock from Kaiti Hill and Tuamotu Island, the implications of which are discussed in the next Chapter.

It was soon recognised that the breakwater alone was not sufficient to create a safe port. Bars formed at the mouth and this was thought to be caused by the longshore drift of sand along Waikanae Beach. In response to this, the groyne was extended parallel to the breakwater. It was not until 1914 that the breakwater was finally completed and before completion both it and the groyne were extended 90m beyond their design with Marine Department approval. Wharfs were constructed along the banks of the Turanganui River on both the town and Kaiti sides. Reads wharf, at the confluence of the Turanganui and Taruheru Rivers, was built in the early 1870s and extended a few years later<sup>36</sup>. By the late 1890s construction of the Town Wharf and a wharf on the Kaiti side were well under way. The Kaiti wharf required substantial reclamation using gravel from Kaiti beach and rock to macadamise the reclamation<sup>37</sup>. Once finished, the wharf was 3m deep at low water and 75m long<sup>38</sup>. In 1912, the Minister of Marine approved a scheme to dredge the Waikanae Creek and to construct wharves on both sides.

Breastwork along the rivers was associated with the development of wharfs, altering the banks of the river and constraining them behind wooden structures. This encroached upon the customary gathering of fish and shellfish from along the banks. While access remained, the habitat of the kaimoana was altered through the construction of such structures. Dredging and reclamation also led to the destruction of fisheries. During this initial period, such projects required approval from the Marine Department, but it was rare for permission to be withheld for such activities. In authorising plans, the Department focused on the design and feasibility of works, while ignoring the effects of development on the environment and on the people who relied on its resources. The attitude expressed by the GHB in its Minute Books was of confident expectation of Marine Department approval, rather than apprehension about whether a scheme would be accepted. In this respect, it

<sup>35</sup> 5.7.1887, p114 (GHB MB).

<sup>36</sup> Whyte 1984, p28.

<sup>37</sup> "Harbour Board." – Poverty Bay Herald, November 1901 (GBH CB).

<sup>38</sup> "Harbour Board." – 1.4.1898 (GHB MB).

was the Harbour Board which exercised effective control, with Marine Department approval a mere formality.

*Figure 6.1 – Rock platforms near the mouth of the Turanganui River<sup>39</sup>*



**Removal of rocks:**

Before modification of the Turanganui, the river near its mouth was a narrow channel which was difficult for settler ships and boats to navigate because of the large number of rocks therein. Figure 6.1 highlights the extent of rock platforms to the side of the river mouth, but the channel itself was characterised by similar formations. With a steady increase in river traffic, there was a demand to make the channel more navigable. As early as 1854, a Government land agent had advocated for the blasting of rocks in the river<sup>40</sup>. The rocks remained until 1875 when the Poverty Bay Highways Board requested the Marine Department to intervene. In response to this request, the Marine Department blasted some of the rocks but it exhausted its supplies of explosives, highlighting the magnitude of the transformation. There followed more pressure in 1876 to remedy the “impracticable condition of the river<sup>41</sup>,” because several boats were holed on the rocks in that time. Settler opinion in local newspapers was entirely unsympathetic towards the cultural importance of these components of the river environment:

Screw as much as possible out of the Government, (was the Herald’s advice on the subject), and lose no time in letting a contract to some capable person to annihilate every rock in the channel. To allow the river to remain in its present state inflicts a most serious injury on the commerce and shipping of the district<sup>42</sup>.

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<sup>39</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>40</sup> Whyte 1984, p17.

<sup>41</sup> “Port of Poverty Bay.” – 1874-77 (GisMUS GHB 3/2).

The Marine Department reacted only to audible public opinion and provided no opportunities for public objection in its decision to eliminate the rocks. Consequently, the remaining rocks were removed in 1877 with the Marine Department's blessing<sup>43</sup>.

While the removal of the rocks remedied the navigational problems in the river, it also destroyed a culturally significant site which was sacred to a number of iwi. Toka-a-Taiau, a rock in the middle of the river opposite the mouth of the Waikanae Creek, served as an important, if contested, boundary marker between Ngati Porou and Ngati Kahungunu<sup>44</sup>, with other iwi also claiming the rock as a boundary marker. Other narratives point to rock as the personification of ancestors<sup>45</sup>. Additionally, Toka-a-Taiau was significant as the place of the first formal meeting between Maori and English-speaking visitors<sup>46</sup>. Maori elders warned the Marine Department against the blasting of Toka-a-Taiau<sup>47</sup>. Whyte summarised how the authorities "were warned of the significance of that particular rock. They were warned also that the consequence of interfering with such a shrine would be a disaster for the harbour plans<sup>48</sup>." Such appeals were not heeded.

Removal of rocks was ongoing throughout the development of the port. The rocks continued to be viewed as an obstacle to transport, with the authorities purging them from the river to enhance navigation. An Empowering Act passed in 1896 authorised the blasting of the papa floor of the harbour<sup>49</sup>. The aim was to remove nearly 1700m<sup>3</sup> of rock through dredging and blasting to create a navigable channel which was both straighter and deeper<sup>50</sup>. Rocks outside of the river – some of which are marked on Figure 6.2 – were also blasted in order to safeguard the approach to the harbour. A number of pinnacle rocks in the inner reaches of Poverty Bay were blasted and there followed a request in 1899 to remove Waihora rocks with torpedoes. In a rare instance of judgement, however, the Marine Department declined to remove the Waihora rocks. Pinnacle rocks were considered to be such a nuisance that, in 1903, eight companies joined together to present a deputation to the GHB. This request urged the GHB and the Marine Department to remove the Tokomaru and remaining pinnacle rocks<sup>51</sup>. The agencies responded in a piecemeal but cumulative fashion, removing rocks around some of the marker buoys in the Bay as well as several others.

<sup>42</sup> *Ibid.*

<sup>43</sup> Whyte 1984, p18.

<sup>44</sup> Salmond 1991, p122.

<sup>45</sup> Whyte 1984, p18.

<sup>46</sup> Salmond 1991, p127.

<sup>47</sup> *Ibid.*, p441.

<sup>48</sup> *Ibid.*

<sup>49</sup> "Harbour Board." – Poverty Bay Herald, 27.5.1898 (GHB CB).

<sup>50</sup> "Mr Napier Bell's report." – Poverty Bay Herald, 5.9.1899 (GHB CB).

<sup>51</sup> "Deputation re rocks in Bay." – 30.7.1903 (GHB MB).

Figure 6.2 – Hydrographic chart 1897<sup>52</sup>



There were two important outcomes of these actions. First, removal of some of the rocks resulted in a loss of fisheries. As many of the pinnacle rocks were partially submerged they served as important habitats for fish. Many local Maori would canoe out to these submerged rocks to fish, and the rocks provided a reef-like environment for a wide variety of kaimoana. Extensive amounts of papa rock were removed from the river to make way for, and to be used in, the construction of the breakwater. This papa rock had formed an important reef which, at low tide, had yielded a vast supply of kina, paua and koura. Second, many of the submerged rocks in the Bay were spiritually important because they were associated with anchors from the migration canoes. Several of these rocks/anchors were also blasted in order to chain navigation buoys to them. Indeed, most of the buoys include anchorings which have despoiled the historical and spiritual significance of these important taonga.

Removal of rocks was renewed in 1914, with a substantial alteration to the river mouth. Blasting operations were carried out for nine months, in which time thousands of holes were blasted into rocks<sup>53</sup>. The mouth of the river was widened, with

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<sup>52</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>53</sup> "Engineer-Secretary's annual report." – Gisborne Times, 18.4.1916 (GHB CB).

several negative outcomes. In 1911, the Executive Officer of the GHB commented that “the absence of complaints from the public is some criterion of the efficiency of the staff<sup>54</sup>.” It is more likely that the lack of complaint reflected lack of opportunity to object – the GHB offered no mechanisms for public participation and, other than direct public representation on its Board, it was not required to offer such opportunities under its enabling legislation. With the membership of the GHB limited to such land-owning elites as the Lysnar family, local Maori were unable to stop the blasting of rocks and other forms of environmental transformation.

### **Reclamations:**

The Turanganui River has been substantially altered through the act of reclaiming land. Official reclamation work began soon after the formation of the GHB and it continues today. The purpose of reclamations in this initial period was to provide flat land for infrastructure associated with port construction, and to provide an asset base through leasing and land sale. Reclamations also appeared to be vehicle through which the Harbour Board asserted its ‘ownership’ of the foreshore. Only a matter of months after the GHB received the foreshore grant in 1884, its policy of reclamation was established. In 1886, all rock uncovered at low tide was surveyed to ascertain the approximate value in one generation’s time of this area if reclaimed<sup>55</sup>. The Board regarded reclamations to be its “right from time to time [as] the foreshore of the river is one of the Board’s most valuable assets<sup>56</sup>.” Materials for the reclamations were provided through the blasting of the rocks from the channel of the Turanganui River, the spoil from dredging associated with Harbour works, and gravel extracted from Kaiti Beach<sup>57</sup>. The environmental impact of these extractive activities is discussed in depth in Chapter 7. The process of reclamation illustrates the extent of environmental modification during the initial construction of the harbour: Rocks were blasted, rivers dredged, beaches striped of material, and artificial land was created. The range and extent of these activities impacted upon the functioning of both the river and the coastal environment as a resource base.

Reclamations created additional land for harbour development. The Town Wharf and the Board’s blockyards – later the site for the local freezing works – were constructed on reclaimed land<sup>58</sup>. Other reclamations were also carried out along both sides of the Turanganui and along the Taruheru<sup>59</sup>. Between 1882 and 1900, approximately 3.6 hectares of land adjacent to the Waiohiharore block was reclaimed through harbour works. This block was ultimately taken by the Rail Department under the Public Works Act and, when it became surplus to requirements, local authorities acquired title to the land<sup>60</sup>. The foreshore in this area was significant to

<sup>54</sup> Whyte 1984, p63.

<sup>55</sup> 14.9.1886, p19 (GHB MB).

<sup>56</sup> “Harbour Board.” – 28.6.1900 (GHB MB).

<sup>57</sup> 28.3.1901, (GHB MB).

<sup>58</sup> “Harbour Board.” – November 1901 (GHB MB).

<sup>59</sup> 24.11.1904 (GHB MB).

tangata whenua, but to the Board it was merely a strip of potential land which could be reclaimed for such purposes as increasing the Board's asset-base. Reclaimed land was leased to provide the GHB with income for other projects. The GHB was enthusiastic to maximise its potential revenue through reclamation work and set about to have the high-tide mark defined and marked on the foreshore of beaches and rivers in order to prevent reclamation by private owners<sup>61</sup>. By 1910, the plan of the GHB's Crown grant to the foreshore included a large amount of reclaimed land on the Kaiti side of the river<sup>62</sup>. Once reclamations had been carried out, the Harbour Board would seek title of the reclaimed land through the Crown.

The GHB sought to have areas on the river banks which had not already been vested in private individuals allocated to it through another Crown grant. Areas from high water mark on both sides of the Turanganui, Taruheru and Waimata adjoining the foreshores to the statutory street lines (20m) were to be vested in the Board so that it could carry out harbour works<sup>63</sup>. The Board then proceeded to charge occupants for the erection of private jetties. It also subdivided, partitioned and leased the foreshore and this – in combination with the rigorous surveying of boundaries and the continued acquisition of land adjacent to the foreshore – illustrates just how important the foreshore was to the Board. Indeed, the GHB appeared to be fiercely protective of all foreshore areas around the Gisborne Borough, irrespective of whether or not it had been given a grant to these areas. This exclusive use can be contrasted to the previous sharing of the foreshore, river, sea and all the resources associated with these environments for the mutual benefit of the people who occupied the area. In response to a request for part of the foreshore, a GHB committee recommended in 1891 that the whole foreshore be mapped into lots for reserves and fishing rents<sup>64</sup>. Dividing the foreshore through boundaries was a foreign concept to Maori, who shared their resources with neighbouring hapu. Evidence in Land Court minute books for Kaiti and Waikanae blocks recount many examples of the shared use of this area, but development of the port after 1882 was based on colonial norms of singular tenure.

One of the most readily apparent effects on the environment was the loss of mudflats along the tidal portions of rivers. The mudflats served as important habitat for pipi and other kaimoana, which local Maori used extensively as a food source. However, the mudflats were regarded as 'unsightly' and 'evil smelling' by pakeha<sup>65</sup>. This perception of the mudflats is discussed further in Chapter 8. The GHB viewed the reclamation of land from mudflats as a civic 'improvement' for the Borough and a commodity for the Board. Reclamations "would cover and make useful if not

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<sup>60</sup> 26.7.1900 (GHB MB).

<sup>61</sup> 28.6.1900 (GHB MB).

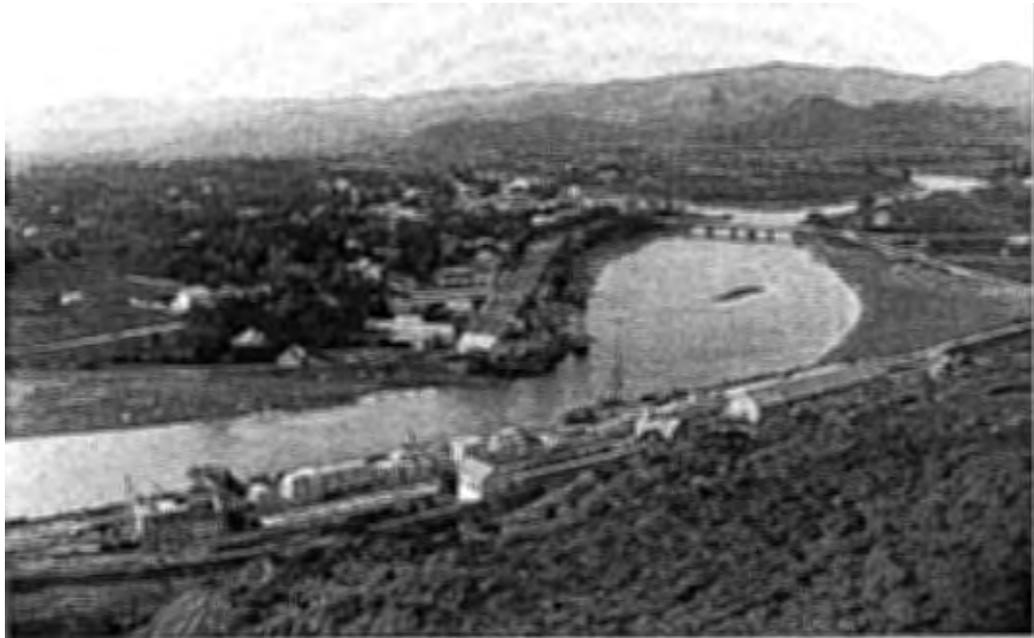
<sup>62</sup> "Plan of Board's foreshore." – 19.12.1910 (GHB MB).

<sup>63</sup> 28.02.1902 (GHB MB).

<sup>64</sup> 1.4.1891 (GHB MB).

<sup>65</sup> See, for example, "Removing mudflats." – 26.9.1932 (GHB MB).

Figure 6.3 – Reclamation of mudflats: 1891 vs 1909<sup>a</sup>



The mudflats depicted in the 1891 photograph – both at the bottom left and mid-right – were used extensively by local iwi for the purposes of gathering white pipi. In the 1891 photograph, a retaining wall has been constructed and the mudflats are being drained prior to their reclamation.

a. **Source:** Gisborne Museum and Arts Centre.

valuable in the future what now is an objectionable and useless mud bank<sup>66</sup>.” These depictions of mudflats as wasted spaces illustrates the lack of attention to Maori cultural values in the planning decisions for the construction of the harbour, and a failure to implement Article II of the Treaty. Through the legislative and authorising functions of the Marine Department, therefore, a number of acts and omissions by the Crown can be identified at the river mouth.

The port transformations represent Crown breaches of the Treaty brought about by inadequate representation of Maori issues in planning legislation of the time. Through the signing of the Treaty of Waitangi, English common law was applied to New Zealand. It is a rule of common law that any portions of tidal areas that become dry land by natural and imperceptible accretion, become the property of the adjoining land owners. Any accretion or reclamation that is perceptible and sudden by natural or artificial means, becomes the property of the Crown<sup>67</sup>. Common law ‘rights’ to accretion land were extended by statute law, with section 147 of the Harbours Act 1878 providing authority to reclaim parts of the foreshore by an Order in Council<sup>68</sup>. The Crown’s desire to protect its ownership of the foreshore was translated into section 12 of Crown Grants Act 1866 (and later section 35 of Crown Grants Act 1908), where the seaward boundary of a property was defined as the line of high water mark. The seaward boundary of a property could easily have been defined as the low water mark, but this did not secure sufficient space on the foreshore to satisfy the Crown’s appetite for the coastal marine area<sup>69</sup>. With the foreshore grant in 1884, ownership was transferred to the GHB, which would then gain title to any reclamations it carried out through the issuing of Certificates of Title. The act of reclamation served to reinforce the assumption of Crown ownership, thus extending the breach of the Treaty.

## Fisheries

Before the development of the harbour the river and near shore environment of Poverty Bay supported an abundance of fish. Mullet, snapper, eels and whitebait could be found in the tidal reaches of the rivers, and the reefs and tidal flats harboured an abundance of shellfish including mussels, paua, crayfish and white pipi. A letter to the *Gisborne Herald* recalled a surprising variety of species which were readily found around the shores of Tuamotu Island and Kaiti Beach. Apparently, “the sea...teemed with crayfish and paua<sup>70</sup>.” The growth and development of the port seriously affected the habitat of these species.

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<sup>66</sup> L. Reynolds, Engineer, to GHB, 14.1.1904 (GisMUS GHB 1/2).

<sup>67</sup> Draft clause. Reserves and Other Lands Disposal Bill, 1953. Explanatory Note (M 4/1877).

<sup>68</sup> “Awapuni Lagoon.” – Marine Department, to Director-General, Department of Lands and Survey, 31.3.1951 (M 4/1877).

<sup>69</sup> *Ibid*.

<sup>70</sup> “Oldtimer.” – *Gisborne Herald* (GisMUS VF-Natural History: Zoology).

Water quality declined through the detritus of blasting operations and from the sediment which was brought about by excavation. Works around the mouth of the river encroached upon Waiohiharore Block No. 1, which had been established by the Maori Land Court in 1875 as an inalienable fishing reserve for Te Aitanga-a-Mahaki<sup>71</sup>. Because of ongoing transformations at the river mouth, this Block was to become worthless as a fishing reserve. Yet, Te Aitanga-a-Mahaki and other iwi were given no opportunity to object to transformations in the area. This area was so important to the owners that they refused to sell it on the basis that it provided access to the fishing resource. The GHB had unsuccessfully attempted to purchase the Waiohiharore block, but it was told that it had no power to take the land<sup>72</sup>. The land was eventually taken in 1900 by the Rail Department under the Public Works Act. Government authorisation of the taking of this land was clearly not in the spirit of the Treaty. Harbour works in 1912 further altered this area when the Marine Department authorised a scheme to extend the wharfs on the western side of the Turanganui River, and to dredge the Waikanae Creek mouth, pursuant to section 150 of the Harbours Act 1908<sup>73</sup>.

There are many historical accounts of the abundance of pipi in the Taruheru River:

Maoris often came across the river from Waituhi, and got in the coach at the Waerenga-a-hika corner. When they reached town they changed into old clothes under the Peel Street bridge, and fossicked in the river mud for pipis<sup>74</sup>.

In those days the Taruheru was a wide deep river, with a shingly beach on each side. These beaches were a favourite place with the Maoris, for the layer of sand hid literally millions of large and luscious pipis<sup>75</sup>.

The establishment of the Nelson Brothers' freezing works along the Taruheru River in 1899 impacted significantly on this food source. The pollution outcomes of this freezing works and the GRC works at Kaiti are evaluated in Chapter 10. However, the environmental impacts of the Nelson Brothers' works were not restricted to pollution. The company used the river as a transportation link to the port and often requested the GHB to enhance its navigability: the "deepening of Taruheru River [was] an urgent necessity<sup>76</sup>." Because of the forest clearance in the upper catchment, the rivers had shoaled considerably after 1900 through sedimentation. In 1915, the management of the works requested the GHB to deepen the Taruheru River through dredging to improve access for their boats which carried

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<sup>71</sup> 2 Gisborne MB 229, 3.7.1875.

<sup>72</sup> 2.8.1894 (GHB MB).

<sup>73</sup> "Harbour extension." – 30.10.1912 (GHB MB).

<sup>74</sup> Hatten 1969, p26.

<sup>75</sup> Mackay 1927, p87.

<sup>76</sup> "The Taruheru River. Silting up of the channel. Harbourmaster to report on the matter" – Gisborne Times, 1.6.1915 (GHB CB).

cargoes of frozen meat down river<sup>77</sup>. In response, the Chairman of the GHB considered that:

The present trouble was undoubtedly caused by the growth of pipi beds near the brewery. In the past Maori have come and used the pipi beds gathering ample supplies at this locality. The Maori had apparently something else to live on now, and the pipi beds were accumulating<sup>78</sup>.

This quotation illustrates the lack of environmental understanding which existed at this time. The works' pollution of the beds prevented Maori from using the mud-flats, rather than the discovery of an alternative source of sustenance. The beds were dredged to comply with the needs of the freezing works because the company was a principal force in the economic development of the region, and it was then unthinkable for pipi to hamper the progress of the region's economy<sup>79</sup>. The ability to navigate the river up to the freezing works was considered to be of such importance that an agreement was made between the Harbour Board and Nelson Brothers: the company would dredge the channel from their works to Lytton Road, with the Harbour Board responsible for dredging from Lytton Road to the sea<sup>80</sup>. In this way, fisheries for 5km up the Turanganui and Taruheru rivers were negatively affected by dredging activities.

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<sup>77</sup> "The Taruheru River. Silting up of the channel. Harbourmaster to report on the matter." – Gisborne Times, 1.6.1915 (GHB CB).

<sup>78</sup> Whyte 1984.

<sup>79</sup> No title, 7.11.1901, p60 (GHB MB).

<sup>80</sup> *Ibid.*

## 6.2 The diversion cut: a new course for the Turanganui

With the construction of the breakwater and parallel groyne completed in 1914, the GHB continued with its maintenance programme of dredging the harbour basin to keep it clear of obstructions. Over time, however, this became increasingly expensive. Chapter 2 evaluated the downstream impacts of forestry clearance on the Waipaoa River. These impacts – in particular, siltation – also affected the Waimata, Taruheru and Turanganui rivers. In turn, the GHB was forced to expend considerable amounts of money to dredge the channels of the rivers for navigational purposes. The flood of 1916 deposited such a significant quantity of silt that it forced the GHB to reassess the port because its functioning could not be guaranteed at all times. The construction of the diversion cut, which partitioned the Turanganui River from the port, provided a partial engineering resolution to the problem. However, it also imposed additional forms of environmental change on the river and its environs.

The problem of siltation induced redevelopment of the port. Successive floods in 1916 obstructed the river to such an extent that channel depth was reduced from 4.9m to 1.2m<sup>81</sup>. As a result the port was closed for long periods during 1916 and a substantial programme of maintenance dredging was required. Generally, flood events would reverse months of work achieved through dredging. Reynolds, an influential engineer who would eventually re-design the harbour, condemned the dependence on dredging and suggested that the harbour be redesigned to avoid siltation<sup>82</sup>. City officials declared that “the business of the town cannot come to a standstill because the river is silted up<sup>83</sup>.” Public opinion contended that the district could not be adequately served and developed through maintenance of the existing facilities<sup>84</sup>. Expenditure on the harbour until 1916 had been significant with over £1,000,000 spent on capital developments without substantial improvements in the port’s reliability<sup>85</sup>. There was considerable public pressure for the GHB to provide worthwhile returns on the money invested in the harbour. As a result, the Board resolved in August 1916 that no further developments of a permanent nature would be undertaken until additional engineering studies had been commissioned<sup>86</sup>.

At the central government level, the overall development of the region played an important role in decision-making. In a report by the Minister of Marine, the potential development of the whole region was related to infrastructural deficiencies:

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<sup>81</sup> Whyte 1984, p69.

<sup>82</sup> “Harbour problem. Mr Reynolds submits his report.” – Gisborne Times, 14.8.1917 (GHB CB).

<sup>83</sup> “Passengers and mails.” – Poverty Bay Herald, 17.12.1917 (GHB CB).

<sup>84</sup> “The Harbour conference.” – Gisborne Times, 10.6.1919 (GHB CB).

<sup>85</sup> “Our readers’ opinions.” – Gisborne Times, 21.10.1919 (GHB CB).

<sup>86</sup> “Permanent works stopped.” – Gisborne Times, 4.5.1917 (GHB CB).

[T]he government is not ignorant to the immense development which is possible in the East Coast and which only awaits the construction of permanent inland roads, and railways together with a safe outlet by sea at this port... The development of this district by land and sea is so vast that it should be treated very largely as a public work in aid of which the friendly overture from the Minister should be fully utilised... The Crown, the future settlement of the interior, and the whole coastal trade of New Zealand are vitally concerned in the construction of an efficient and safe outer harbour in Poverty Bay<sup>87</sup>.

Once again, the necessity of the development of the port was related to the notion of 'colonial importance.' The statement also suggests that the Marine Department would have approved any plan brought before it, providing the GHB with complete discretion to transform the foreshore within its grant area.

### **Planning for redevelopment of the Port**

The main aim of the redevelopment was to remove silt from the harbour by expediting its course to the sea<sup>88</sup>. In the search for a solution to the siltation problem it was noted that the following principles should be observed:

All schemes should be designed in accordance with the laws of nature; the river and the estuary should be considered in their entirety, [and one] should consider other parts of the system; training and regulating bends in river should be undertaken when bends and constrictions in the width of the river inhibit navigation<sup>89</sup>.

The directive to consider the river in its entirety did not extend to the cultural use of the river as a resource space, nor to its spiritual value as a site of significance to *tan-gata whenua*. Indeed, the objectives of the engineers who were charged with the redevelopment were particularly narrow. The GHB had called both lay people and professionals to design schemes to remedy the "silt problem"<sup>90</sup>. The Board received 42 designs for the new harbour including schemes for a harbour in the mouth of the Waikanae Creek, outer harbours of varied configurations and ports based on diversion of the river<sup>91</sup>.

The Board held a conference in 1919 with other local bodies in the Gisborne rating district to discuss the harbour problem, and to ascertain the requirements of other stakeholders<sup>92</sup>. Representatives of the County Council, Gisborne Borough, past and present Harbour Board members, such stakeholders in the commercial develop-

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<sup>87</sup> "Harbour conference. Meeting of "A" Committee: recommendation of a scheme." – Poverty Bay Herald, 10.3.1919 (GHB CB).

<sup>88</sup> "Laymen's schemes. Engineers report: various schemes criticised." – Gisborne Times, 16.8.1917 (GHB CB).

<sup>89</sup> "The silt problem. 400,000 tons brought down by the May flood." – Gisborne Times, 18.7.1916 (GHB CB).

<sup>90</sup> "Harbour matters." – Gisborne Times, 16.1.1917 (GHB CB).

<sup>91</sup> "Search for better harbour. Board inspects laymen's schemes." – Gisborne Times, 12.6.1917 (GHB CB).

<sup>92</sup> "Harbour matters. Conference to be called: suggested diversion of the river." – Gisborne Times, 17.12.1918 (GHB CB).

ment of the district as the management of the freezing works, as well as other prominent local people, attended the conference<sup>93</sup>. Tangata whenua were not represented at this conference, providing them with no ability to directly affect its result. Commercial interests were seen, therefore, to take precedence over the cultural rights of Maori in this new phase of development. The Board received a strong mandate to redevelop significantly the area from the conference<sup>94</sup>. It was recommended that the GHB concentrate on an outer harbour, with no further work undertaken on the river as this could impede the future construction of the outer harbour<sup>95</sup>. The conference also stipulated that a Board of Commissioners comprised of government representatives be appointed to advise these redevelopments<sup>96</sup>.

The Commissioners report was presented in April 1920 and detailed an outer harbour plan which would cost nearly £1,600,000. Strong public opposition to the expense of this scheme was voiced at a second conference held in July 1920. Again, Maori were not represented directly at this conference. Subsequently, Reynolds – an engineer who had advised the GHB in the past – was asked to design an alternative scheme<sup>97</sup>. The Board adopted Reynold's plan to divert the river thereby creating space for an outer harbour to accommodate overseas ships. The Gisborne Harbour Enabling Act 1919 had authorised a loan of £1,000,000 to construct an outer harbour. After the 1920 conference, it was amended for the new design. The amendment also transferred rights of ownership to the GHB for an area of about 440 hectares below high water mark, between Awapuni and Kaiti Hill, ostensibly for the purpose of harbour construction. In retrospect, there appears to have been no justification for the extension of the Board's mandate so far south of the Turanganui River. Because there was no suggestion that port activities would ever move south/west, it can only be assumed that this foreshore had been set aside to provide revenue for the GHB. Any accretions and reclamations in this area would become the property of the GHB<sup>98</sup>, and the Board used its new mandate on Midway and Waikanāe beaches to extract royalties for sand extraction<sup>99</sup>.

The Marine Department sanctioned Reynold's scheme in 1922<sup>100</sup>, with this approval leading to substantial modification of the Turanganui River. Reynolds' plan was to divert the river from the Kaiti Bridge down to the mouth of the river, where it would sweep westward towards Waikanāe Beach. This was to be achieved by constructing a training all down the middle of the river, which would gradually arc

<sup>93</sup> "Solving the harbour problem." – Gisborne Times, 4.2.1919 (GHB CB); Whyte 1984, p73.

<sup>94</sup> "A rift in the lute: the harbour conference." – Gisborne Times, 4.2.1919 (GHB CB).

<sup>95</sup> "Harbour conference. Meeting of "A" Committee: recommendation of a scheme." – Poverty Bay Herald, 10.3.1919 (GHB CB).

<sup>96</sup> "Harbour problem, final meeting of conference." – Gisborne Times, 10.6.1919 (GHB CB).

<sup>97</sup> "The Harbour Board. Chairman's annual review" - Gisborne Times, 4.5.1920 (GHB CB).

<sup>98</sup> *Ibid*.

<sup>99</sup> J. Todd to J.L Mawson, Department of Internal Affairs, 25.12.1943 (IA 103/100).

<sup>100</sup> Whyte 1984, p73.

towards the true right of the river and would then cut through to Waikanāe Beach. The diversion would cut through 550 metres of low-lying sand accretion and beach to the low water mark on the Waikanāe Beach, 425 metres from the existing break-water<sup>101</sup>. In the initial design, the diversion wall was to swing around to the north/east after exiting to the sea – it would run parallel with the coast, thereby forming an outer harbour between it and Kaiti Beach<sup>102</sup>. Work began on the diversion in 1923, but by 1927 a radical design alteration made. The construction of an outer harbour was to be abandoned, with a new plan to create an inner harbour in the former bed of the river. This once again required Marine Department approval, which was duly granted<sup>103</sup>.

Figure 6.4 – Schematic of proposed diversion cut, 1923<sup>a</sup>



The hashed white lines represent the new course for the Turanganui River. As shown, the diversion was put through the mouth of the Waikanāe Creek, alongside an area which had been set aside as a fishing reserve for Te Aitanga-a-Mahaki. The cut eradicated substantial areas of mudflat (pipi habitat).

a. **Source:** Gisborne Museum and Arts Centre.

The decision to concentrate on the inner harbour culminated in what Whyte describes as “years of ill-informed changes of policy<sup>104</sup>.” The lack of planning represented a lack of prior research, including a lack of research into the potential environmental impacts of alternative schemes. It also meant that the extent of modifications to the river mouth area were greater than they should have been: Maori resource spaces were unnecessarily disturbed. The change in plans in 1927 recreated unrest amongst the membership of the GHB, with several resignations amongst its ranks. In his resignation address, Member Campbell argued that:

I consider there is something wrong with the law that permits a number of gentlemen...who are quite incapable of understanding harbour matters and the work of harbour development such as that at Gisborne, who, nevertheless, have the power to veto expert engineering advice, as in this instance, and so nullify the work of three years, as the Gisborne Harbour Board has just done<sup>105</sup>.

<sup>101</sup> Reynolds report to Gisborne Harbour Board, 30.5.1921 (GisMUS GHB 1/2).

<sup>102</sup> Whyte 1984, p75.

<sup>103</sup> “New harbour. Past year’s work.” – Gisborne Times, 18.12.1928 (GHB CB).

<sup>104</sup> Whyte 1984, p87.

<sup>105</sup> Poverty Bay Herald, 26.3.1928.

This indeed highlights deficiencies in the legislative mandate of the board, but it also foreshadows wider problems with its administrative structure. While it was unfortunate that the political expediency of lay-members could be seen to over-ride expert advice, it was particularly disdainful that those same members could make decisions without reference to tangata whenua. The actions of the GHB in this time period brought into question its representativeness as a public body. The Board was predominantly European and was comprised of prominent men from the district, especially wealthy landowners; there was no representation from the Maori community or those with a lower income base. Both the GHB and the Marine Department made decisions which affected the Turanganui River, yet the composition of these agencies was not representative of the wider community. Government departments of the time were comprised of a predominantly European staff, who often made decisions from a monocultural and detached viewpoint.

### Modifications to the environment

The diversion of the river necessitated extensive drilling and blasting of its bed and banks, not only to reshape the river, but also to prepare the way for a new breakwater and the new river channel. Retaining walls were constructed on the banks of the river, and concrete wharfs were built<sup>106</sup>. Extensive dredging was also carried out during this period and Kaiti Esplanade was re-aligned<sup>107</sup>. The most substantial of the modifications related to the removal of the mouth of the Waikanae Creek and the mudflats at the confluence of the Waikanae and the Turanganui. The significance of the diversion cut for the landscape immediately west of the river mouth can be seen in Figures 6.4 and 6.5. The diversion was driven through this area with no compassion to the historical importance of these mudflats as a source of pipi. Waikanae Beach was also excavated by drilling, blasting and dredging to create a new channel for the river, with the removal of over 550 metres of low-lying land<sup>108</sup>. Training walls were constructed around the mouth of the Waikanae Creek and, on the completion of the diversion cut, this area was gradually reclaimed. A sea wall which enclosed the entrance to the harbour was completed in 1931<sup>109</sup>, yielding Waikanae Island – a triangular remnant of land left stranded between the original river mouth and the new channel. This remained until 1964 when it was removed to create a wider harbour entrance<sup>110</sup>.

Later, this area would be subject to reclamations associated with the construction of the processing plant belonging to J.Watties Cannery Ltd.<sup>111</sup>. The changes in the early 1920s, however, were equally transformational. Any remaining swamp and accreted

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<sup>106</sup> "Progress of Harbour. The month's work." – Poverty Bay Herald, 25.10.1926 (GHB CB).

<sup>107</sup> Gisborne Harbour Board (GisMUS GHB 3/2).

<sup>108</sup> Report of P. Reynolds to GHB, 30.5.1921 (GisMUS GHB 1/2).

<sup>109</sup> Whyte 1984, p89.

<sup>110</sup> *Ibid*, p105.

<sup>111</sup> Refer to Section 8.2.

land around the mouth of the Waikanae was reclaimed, both for port and industrial purposes. The creek itself was trained along a new course so that it became straighter, narrower and led more directly to the sea<sup>112</sup>. This destroyed or damaged several pa tuna (eel weirs) located along the Creek which had been used extensively by local Maori in traditional times. Up until the 1920s, these eel weirs were famous for their reliability, but thereafter only a few remained.

Figure 6.5 – Dredging of the cut, 1926<sup>113</sup>



Once the diversion of the river was completed, work concentrated on the Kaiti basin, where extensive dredging prepared the river for the construction of wharfs<sup>114</sup>. The new course of the river created space on the Kaiti side for several reclamations, leading to the establish-

ment of a construction yard for the harbour<sup>115</sup>. Many locals objected to these reclamations<sup>116</sup>, but they proceeded irrespective of public comment. Indeed, many inhabitants of the Gisborne Borough were surprised at the extent of the modifications as they were completed<sup>117</sup>, suggesting that the public was not sufficiently involved in decision-making before the diversion scheme was accepted. During the construction of the diversion cut, several areas were reclaimed to provide additional land for the building of the port. An extensive reclamation on the town bank of the Turanganui River – Reads Quay reclamation – extended from the railway bridge to Waikanae Creek, along the rivers edge where the railway and road were located<sup>118</sup>.

In the decades after the completion of the diversion cut, only minor changes were made to the structure of the river mouth environment. These small alterations, however, had a cumulative impact which threatened any remaining Maori fisheries in the area. In 1949, local Maori petitioned the GHB about the extent of the harbour works and the effect that this was having on fisheries in the Turanganui River:

A petition signed by a number of Maoris regarding rocks and harbour works was read. The petitioners requested the Board not to build a harbour in the Waikanae Basin and to consult with the Marine Department in regard to protecting the rivers and rocks for shell fish. The names of the rocks and rivers were given and proverbs were quoted<sup>119</sup>.

<sup>112</sup> Whyte 1984, p77.

<sup>113</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>114</sup> "New harbour. Past years' work." – Gisborne Times, 18.12.1928 (GHB CB).

<sup>115</sup> "Construction yard." – Advisory Committee, 11.7.1924 (GHB MB).

<sup>116</sup> "Our readers' opinions." – Gisborne Times, 21.10.1919 (GHB CB).

<sup>117</sup> *Ibid.*

<sup>118</sup> Maps, charts and plans of harbour (GisMUS GHB 3/2).

<sup>119</sup> "Harbour development petition." – 28.11.1949 (GHB MB).

In referring this petition to the Marine Department, the Board outlined local Maori concerns as they had been stated, but it did not necessarily sympathise with the views of tangata whenua:

It is doubtful if any harbour works undertaken by the Board will interfere with the rocks named and my Board directed me to forward the petition to you as coming within the scope of fishing controlled by your Department<sup>120</sup>.

The alterations to the basin did affect these rocks and fisheries and there were no attempts to accommodate Maori interests.

Local iwi were prepared to compromise and accommodate the inevitable development to some extent. In 1939, the Waikanae Park development was proposed for an area of foreshore in the Board's control along Midway beach. Plans included the 'improvement' of the foreshore but a Maori reservation property of 40 hectares inland from the foreshore impeded these plans. The Maori who owned this property gifted these 40 hectares to the people of Gisborne for all time, with the stipulation that their fishing and pipi rights were not disturbed<sup>121</sup>. While this shows how important the fisheries were to local Maori, Section 10.1 will show that these fisheries have since been abandoned by local iwi because of pollution by sewage discharges.

## Access and ownership

The re-development of the harbour restricted access to the Turanganui River. Increasingly, the GHB came to own most of the land alongside the river's foreshore. Along the Kaiti side of the river, several wharves and construction yards provided physical barriers to public access. The town side of the river was modified through reclamations, training walls, breastwork and excavations. All these structures affected both physical and legal access to the river, with private property serving as a barrier between public roads and the foreshore. The time of the diversion cut was characterised by major development and modification of the foreshore of the river. Access to traditional resources was almost completely taken away by the time the diversion cut and associated works were completed. After the construction of the cut, it became difficult to launch a boat or canoe from the banks of the Turanganui, as had been done in the past<sup>122</sup>.

Access was most significantly altered around the mouth of the Waikanae Creek where a large amount of land was removed to create the new channel for the river. In conjunction with the land taken from Waiohiorore Block No. 1 by the Rail Department, access to the lower reaches of the Waikanae was effectively

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<sup>120</sup> GHB, to Secretary, Marine Department, 21.12.1949 (GHB LB).

<sup>121</sup> "Waikanae park development, Gisborne." – Waikanae Park Development Committee, Local Centennial Committee, and the Gisborne 30,000 Club, to Minister of Internal Affairs, 21.6.1939 (IA 62/10/64).

<sup>122</sup> "Complaint. Fishing and launching tenders." – 13.9.1939 (GHB LB).

removed<sup>123</sup>. *Legal* access along the low-tide mudflat of the Creek was retained, but *practical* access to the mudflat itself was prevented by high fences. Even today, it is difficult to even view the lower portions of the Waikanae.

The culverting of the Kopuawahakapata Creek provides a well-documented example of how the port developments have impacted upon public access. In 1926, the GHB proposed to divert the Kopuawahakapata Creek under Kaiti Esplanade by means of a concrete culvert. A landowner who had a frontage to the tidal creek complained vigorously about this change because the creek provided access to the sea via the Turanganui River<sup>124</sup>. The Board scarcely regarded the complaint, and the construction continued. In its view, the culvert was a cheap and satisfactory solution to its needs – to build a bridge across the creek would have cost nearly twice as much<sup>125</sup>. The landowner pursued a legal case against the GHB on the basis of loss of access to water<sup>126</sup>, but this was unsuccessful – the Board had a legal mandate to reconstruct the foreshore within its grant area.

Only pakeha objections to the loss of access were recorded in official correspondence, but the Board evidently feared Maori objection to such losses. When the GHB drafted its plans to culvert Kopuawahakapata Creek, a letter was sent to the Marine Department stating that:

The Board is prepared to accept full responsibility for any difficulties that may arise with the Maoris or the Borough Council regarding the construction of the culvert<sup>127</sup>.

In traditional times, the upper reaches of the Kopuawahakapata provided fresh water for tangata whenua, while the lower reaches were banked by relatively wide mudflats (see Figure 6.6) with freely available pipi. The loss of access to such spaces was concomitant with their destruction – A few years later members of the public complained that the culvert had affected the quality of the water which was “unsightly and unhealthy owing to the stagnant water lying between the culvert and the Esplanade Rd<sup>128</sup>.” Eventually, the highly polluted environment was reclaimed by the GHB in association with neighbouring industries<sup>129</sup>. Whenever land around the foreshore was acquired and whenever mudflats and swampy areas were reclaimed, rights of public access were further diminished, preventing Maori from accessing traditional fisheries.

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<sup>123</sup> “Railway land.” – 19.12.1921 (GHB MB).

<sup>124</sup> “Kaiti Creek culverting scheme.” – Poverty Bay Herald, 31.1.1927 (GHB CB).

<sup>125</sup> “Kopuawahakapata Creek culvert.” – 30.5.1927 (GHB MB).

<sup>126</sup> “Kaiti waterway.” – Poverty Bay Herald, 30.5.1927 (GHB CB).

<sup>127</sup> “Kopuawahakapata Creek culvert.” – 29.11.1926 (GHB MB).

<sup>128</sup> “Harbour Board monthly meeting.” – Gisborne Times, 28.3.1933 (GHB CB).

<sup>129</sup> “Cement plant will extend over creek.” – Gisborne Herald, 24.10.1969 (GHB CB).

Figure 6.6 – Kopuawhakatapa Creek 1905, before the culvert and reclamation<sup>130</sup>



The acquisition of the land around the Kaiti Esplanade via the Public Works Act in 1928 was a particularly significant loss for Maori<sup>131</sup>. Over 2ha of land near Hirini Street and Wainui Road were taken, with the intention of setting the esplanade further inland. The area included five sections of Maori land, on which the Poho-o-Rawiri marae was initially sited<sup>132</sup>. Tangata whenua opposed the acquisition in the Native Land Court, but the Court allowed the acquisition under the Native Land Claims Adjustment Act 1927 and compensated the owners with £10,000<sup>133</sup>. A new marae was consequently built on the corner of Ranfurly Street and Queens Drive. The GHB then transferred part of the land acquired from the marae site to J.J. Niven and Co. Ltd. as compensation for that company's reduction in business, itself brought about by the Board's acquisition of land<sup>134</sup>. The use and transfer of land acquired under the Public Works Act in this manner runs counter to the logic of even that Act and conflicts with Treaty principles.

Several items of legislation were passed to expand the Board's jurisdiction, enabling the harbour works to proceed and this legislation also affected public access. The earlier Loan Amendment Act 1920 allowed the Harbour Board to obtain ownership rights over the area below high water mark between Awapuni and Kaiti Hill. The Public Bodies Empowering Act 1922 gave the GHB the power to make by-laws as it saw necessary for the preservation and control of the foreshore vested in it<sup>135</sup>. Nevertheless, the Board's title to the tidal reaches of rivers was questioned in 1925. The District Land Registrar found that the Board did not have legal title to the riverbeds of the Turanganui and Taruheru rivers<sup>136</sup>. The GHB assumed it had received

<sup>130</sup> Source: Gisborne Museum and Arts Centre.

<sup>131</sup> It is assumed that the acquisition of land under the Public Works Act in this area will receive substantial attention elsewhere. For this reason, it is mentioned only in passing in this Section.

<sup>132</sup> "Kaiti land acquisition." – 27.7.1925 (GHB MB).

<sup>133</sup> 56 Gisborne MB 54; Whyte 1984, p86.

<sup>134</sup> "Native land." – Advisory Committee, 12.10.1927 (GHB MB).

<sup>135</sup> "Waikanae Beach. Question of control." – Gisborne Times, 17.1.1922 (GHB CB).

title to these areas under the Gisborne Harbour Board Acts 1882 and 1905 (a consolidating act). However, the Crown Grant of 1884 included only the areas between high and low water mark on each side of the rivers. The beds between low water and low water – bank to bank – were, therefore, excluded<sup>137</sup>.

The GHB immediately called upon the government to amend the 1905 Act. A bills committee opposed the first draft of the amendment, and would only agree to the Board obtaining title to the riverbed within the area of the existing harbour. Under this arrangement, the GHB received riverbed title up to Peel Street, but not as far as Lytton Road which marked the extent of the Board's control of the river bank from high to low water<sup>138</sup>. The GHB agreed to this condition as it no longer had to service the navigational requirements of the Nelson Brothers freezing works, which had by this point become insolvent. The lack of riverbed title from 1884 to 1929 brings into question the validity of port construction activities prior to this time. With no title to the riverbed, the GHB did not have sufficient legal authority to carry out such works as the dredging of the channel, drilling and blasting of rocks, the erection of groynes and the breakwater and, even, the construction of the diversion cut. Ultimate accountability for these activities must lie with the Crown, because it sanctioned all the works for the port through the Marine Department, giving the GHB permission to carry out the modifications in the absence of title.

<sup>136</sup> GHB, to A.G. Barnett, Harbours Association of NZ, 18.9.1939 (GHB LB).

<sup>137</sup> *Ibid*

<sup>138</sup> "Re. River foreshore." – GHB, to A.G. Barnett, Harbours Association of NZ, 18.7.1929 (GHB LB).

### 6.3 Reclamations for storage and infrastructure

From 1935 to the present, there have been few significant alterations to the configuration of the port itself. Nevertheless, the area around the harbour has been substantially modified to site infrastructural developments related to port activities. In the 1960s, following years of stagnation, there was a renewed interest in exporting raw material from the port. In an attempt to expand such trade, an overseas wharf was constructed. Empowering acts in 1961 and 1964 authorised the raising of loans to the total of £870,000<sup>139</sup> but, once again, there were almost no conditions attached to ensure that the Board minimised environmental impacts. The construction of this wharf required the harbour to be substantially deepened. The resulting dredge spoil was deposited in the Bay with such works continuing to the present day<sup>140</sup>. The purpose of the overseas wharf was to enable the development of export industries, notably forestry. As is shown in this section, the move towards the facilitation of forestry exports led to substantial modification of Kaiti Beach through reclamation.

In the 1960s, the Gisborne City Council established a committee to investigate redevelopment of the foreshore area<sup>141</sup>. At the same time, the GHB was pressured by the community to expand facilities at the port in the name of regional growth<sup>142</sup>. Newspaper editorials stated that the authorities should “not [be] caught napping” and “not a moment should be lost<sup>143</sup>.” The growing trade in export logs was regarded as vital to the region, but there were few places in Gisborne where logs could be stored prior to export. In 1967, a Ministry of Works report identified three potential sites for handling wood products prior to shipment: Tuamotu Island, Muriwai Beach and the Kaiti Beach foreshore, concluding that the latter was the most appropriate for this activity<sup>144</sup>. All three of these sites would have caused offence to tangata whenua through the despoilment of traditional fisheries. Forestry exports became the significant component of Port Gisborne’s revenue, accounting for 84% of the total trade in 1996<sup>145</sup>. While the public voiced concern about the increase in traffic caused by logging trucks and the visual impact of the stacks of logs at the port<sup>146</sup>, passionate Maori objections to the possible transformation of Kaiti Beach were not well-publicised. Continued growth of this trade led to the identification of further storage areas, more wharfs and a deepening of the harbour as priorities to be achieved by 2000<sup>147</sup>.

<sup>139</sup> Whyte 1984, p106.

<sup>140</sup> Refer to Section 7.2.

<sup>141</sup> “Waikanae Beach improvements.” – 17.6.1963 (GHB MB).

<sup>142</sup> “Extension of Port the best move.” – Gisborne Herald, 11.12.1979 (GHB CB).

<sup>143</sup> Gisborne Herald, 19.10.1964 (GHB CB).

<sup>144</sup> MOWD 1967.

<sup>145</sup> “Port considering selling assets to minimise risks.” – Gisborne Herald, 7.4.1997 (GisMUS VF-Forestry).

<sup>146</sup> “Harbour development.” – Gisborne Herald, 29.12.1979 (GHB CB).

<sup>147</sup> *Ibid*.

## Incremental reclamation of Kaiti Beach

Having investigated its needs throughout the 1960s, the GHB adopted a 50 year plan for the port in 1967, which included provision for substantial reclamations along Kaiti Beach<sup>148</sup>. Although that plan was devoid of specific details about the extent of possible reclamations, later plans revealed that the Board envisaged up to 40ha of log storage on land reclaimed from the wave platforms at Kaiti<sup>149</sup>. The Board's plans faced two significant obstacles:

- Kaiti Beach was a well-recognised fishery for local tangata whenua. Extensive wave cut platforms which were comprised of papa rock extended up to 300m out to sea. At low tide these platforms provided a reliable source of kina and paua, while at other times they in effect formed a reef which provided many niches for koura. There is no doubt that the fishery had suffered through pollution from the Kaiti freezing works<sup>150</sup>, but this did not limit its historical and potential future significance for local iwi. The GHB viewed the platforms as half-complete reclamations because only small amounts of fill and construction work were needed to convert them into log storage areas. These views irreconcilably conflicted with the Treaty rights of tangata whenua.
- The Harbours Act 1950 – which was administered by the Department of Marine until 1968 and by the Marine Division of the Ministry of Transport thereafter – prevented the reclamation of such a significant area in the absence of extensive public scrutiny and debate. Up to that time, the GHB had successfully used s 175 of the Act to obtain small reclamations (under 4ha) by Order in Council. This route required only the recommendation of the Marine Department/Division, which was based on simple navigational rather than environmental criteria. For reclamations larger than 4ha, the GHB required a special act of parliament with broader public consultation and a more detailed analysis of environmental impacts. It is significant that Board members had discussed the reclamation provisions of the Harbours Act extensively in 1965 – The GHB knew that a Special Act was required for its plans for Kaiti Beach<sup>151</sup>.

GHB minutes highlight that it was the Board's intention in 1964 to reclaim 9.3ha on Kaiti Beach, to be available for lease as industrial sites<sup>152</sup>. By the early 1970s, the long-term plan of the GHB was to reclaim a further 36.4 hectares on the Beach, which was intended for industrial premises and, mainly, for log marshalling<sup>153</sup>. Even the 9.3ha of encroachment – a figure which is close to the 8.5ha which was eventually reclaimed – far exceeded the 4ha limit on reclamations by Order in Council. The GHB should have, therefore, applied for a special act, submitting its intentions to wider public scrutiny. Had this been the case, tangata whenua would have had a

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<sup>148</sup> "Environmental assessment of 3,192 hectares of reclamation of Kaiti Beach." – Gisborne Harbour Board, November 1974 (MoT 43/2/6/2); Port Gisborne Ltd. 1988.

<sup>149</sup> J. Millar, 29.5.1979, marginalized reply on "Kaiti Hill: Gisborne reclamation." – J. Robertson, Harbours and Fore-shore, MoT, 28.5.1979 (MoT 43/2/6/2).

<sup>150</sup> Refer to Section 10.3.

<sup>151</sup> "Kaiti Beach reclamation." – 24.5.1965, p586 (GHB MB).

<sup>152</sup> "Reclamation policy." – 17.8.1964 (GHB MB).

<sup>153</sup> "Board seek approval on reclamation." – Gisborne Herald, 4.12.1973 (GHB CB).

clear opportunity to voice their concerns about the loss of the platforms. As will be shown, however, the GHB pursued the devious and illegal route of a series of three incremental reclamations – all of which were less than 4ha – in order to effect its long-term plan. The Ministry of Transport's authorisation of these three encroachments represents a particularly serious omission by a Crown agent.

In May of 1969, the GHB applied under s 175 of the Harbours Act to the Secretary for Marine to reclaim 1.62ha of wave platform adjacent to the breakwater<sup>154</sup>. The purpose of this small reclamation was to provide space for storage of oil products on the western end of Kaiti Beach. The GHB also advertised its intent in the local newspaper (s 175a and 178b of the Harbours Act), but it received no objections to its plans. The lack of a formal objection does not necessarily represent public acceptance of the GHB's plans for reclamation. The participatory processes under the Harbours Act were not proactive, relying on public objection to plans rather than proactive involvement of the public in the decision-making process. Under the Act, there were almost no directives for public participation and it was entirely silent about Treaty or Maori rights to the environment. On advertisement, the Marine Division of the Ministry of Transport held the applications for public perusal<sup>155</sup>, requiring a deliberative attempt by potential objector view the material and have their rights heard. In this context, public objection was a time-consuming and frustrating exercise which was, in any case, dependent on the chance viewing of an advertisement in the newspaper. Moreover, it was not incumbent on consent authorities to consider the potential impact of reclamations on public values nor, specifically, on iwi values. The response of the Secretary for Marine to the 1969 application indicated that he considered only technical matters – the nature and materials of construction – in his decision to allow the reclamation<sup>156</sup>. The reclamation was authorised by Order in Council in September of 1969<sup>157</sup>.

Immediately adjacent to the 1969 site, the GHB applied for a 3.5ha reclamation in early 1973. The stated purpose of this reclamation was to locate a bulk oil installation<sup>158</sup>, but this application included the first indication that the reclamations would also be used for log storage. There was only one objection – the Gisborne City Council – which was concerned only with the potential damage to sewerage pipes in the area. Again, the basis of approval for this reclamation was particularly narrow, "The Marine Works Engineer has certified that the reclamation will not tend to the injury of navigation and the Nautical Adviser has no navigational requirements<sup>159</sup>."

<sup>154</sup> "In the matter of Section 175 of the Harbours Act 1950." – Chairman, GHB, 19.5.1969 (MoT 43/2/6/2).

<sup>155</sup> "Proposed reclamation. Kaiti Beach." – P.H. Fisher, Resident Engineer, to District Commissioner of Works, MoW, Napier, 10.4.1973 (MoT 43/2/6/2).

<sup>156</sup> "Gisborne Harbour Board: Reclamation for industrial purposes, Kaiti Beach." – R.N. Kerr, Secretary for Marine, to Minister of Marine, 28.8.1969 (MoT 43/2/6/2).

<sup>157</sup> Extract from NZ Gazette No. 57, 18.9.1969, p1787 – Order in Council (MoT 54/16/75).

<sup>158</sup> "Installation: white products." – A.G. Berry, Operations Manager, BP New Zealand Ltd., Wellington, to Secretary, GHB, 4.6.1974 (MoT 43/2/6/2).

Likewise, the pro forma decision sheet which Marine staff employed to approve reclamations left space for reports from a limited range of experts:

- Marine engineer (suitability of construction).
- The transport division of the Secretary for Marine (legal matters).
- A nautical advisor (impact on navigation).
- Local Harbour Board (impact on navigation)<sup>160</sup>.

As can be seen in this list, the range of factors which were to be accounted for under the Harbours Act was not extensive: there were no stipulations relating to environmental nor cultural effects, and the prosaic issue of impacts on navigation dominated the decision making. Section 175(3)(b) of the Harbours Act 1950 stated that reclamations must not “unduly interfere with or adversely affect the interest of the public.” However, in authorisations of reclamations on the Kaiti foreshore, there is no evidence of an evaluation of public interest. In reclaiming land on Kaiti Beach, the rock platforms were regarded as ideal sites for reclamations, not as important habitats for marine life nor as sites of historical and cultural significance. The Order in Council for the 3.5ha reclamation was gazetted in July of 1973<sup>161</sup>.

*Figure 6.7 – Kaiti Beach in 1974, before work on the second reclamation<sup>162</sup>*



### **Elimination of a traditional fishery by stealth**

It was Marine Division policy that s 175(3) of the Harbours Act 1950 was not to be “used for small adjacent areas [of] reclamations which are part of an overall scheme that would exceed [4ha]<sup>163</sup>.” In 1974, only one year after the 3.5ha reclamation had brought the total encroachment along Kaiti Beach to 5.3ha, the GHB applied to the Marine Division for a third reclamation – 3.19ha and immediately east of the sec-

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<sup>159</sup> “Gisborne Harbour Board reclamation: Kaiti Beach, Gisborne Harbour.” – A.J. Edwards, Secretary for Transport, 17.5.1973 (MoT 43/2/6/2).

<sup>160</sup> “Decision sheet: Harbours Act 1950.” – as completed for Application MD14986, 15.8.1973 (MoT 43/2/6/2).

<sup>161</sup> Extract from NZ Gazette No. 36, p1112, 14.6.1973 (MoT 54/16/75).

<sup>162</sup> **Source:** MoT 43/2/6/2.

<sup>163</sup> “Gisborne Harbour Board. Reclamation: Kaiti Beach.” – B.A. Ranger, Section Clerk, Harbours and Foreshores, Ministry of Transport, 31.10.1973 (MoT 43/2/6/2).

ond reclamation. In its application, the GHB did not even state the purpose of the encroachment<sup>164</sup>, probably in the hope that the Division would not recognise that this reclamation was, like that of 1973, for the purposes of log storage. If the Marine officials had viewed the purpose of the reclamation as forestry, it might have discovered the intent of the Board. Ultimately, the duplicitous labelling of the new reclamation failed to delude the Marine Division which commented upon the deceitful approach of the GHB in an internal report on the matter:

The Board by piecemeal development of the area has obtained authority to reclaim approximately [5.3ha as gazetted in 1969 and 1973 reclamations] by Order in Council, and not a Special Act which would have been required if the total area had been sought initially. The latest application [eventually gazetted in 1975] will bring the total area to be reclaimed to approximately [8.5ha]<sup>165</sup>.

A senior official of the Division who evaluated this report concluded that:

I propose to recommend that this application should be refused, and a Special Act sought. It is contrary to our policy to allow a succession of reclamations by Order in Council, and contrary to the intentions of the Harbours Act. The Board should draw up its long term plans for the whole area, and submit them to public scrutiny<sup>166</sup>.

This provides a clear indication that the Marine Division knew of its duty and, at least in mid-1974, intended to reject the proposal on the grounds that it was illegal under the logic of the Harbours Act. It wrote to the Board to indicate its intention, but the only justification that the Board could muster was that "it would be a waste of resources to dump concrete and masonry blocks in the city tip when there is an immediate and practical use for it elsewhere<sup>167</sup>."

A change in environmental legislation further complicated the Board's desire to reclaim land for a log storage area. In 1973, the government had established the Environmental Protection and Enhancement Procedures (EP&EP) – New Zealand's first legislative attempt at imposing compulsory forms of environmental impact assessment on the activities of local and national government and Crown licensees. In early 1974, a cabinet directive extended the EP&EP to authorisation for reclamations, so the Marine Division requested the GHB to perform an impact assessment on its plan<sup>168</sup>, sending it EP&EP guidelines in October of 1974<sup>169</sup>. The EP&EP have been criticised for their relatively narrow emphasis on biophysical cri-

<sup>164</sup> "Gisborne Harbour Board. Reclamation: Kaiti Beach." – B.A. Ranger, Section Clerk, Harbours and Foreshores, Ministry of Transport, to P.E. Muers, Marine Division, 9.8.1974 (MoT 43/2/6/2).

<sup>165</sup> *Ibid.*

<sup>166</sup> P.E. Muers, 13.8.1974 – Marginalized reply to "Gisborne Harbour Board. Reclamation: Kaiti Beach." – B.A. Ranger, Section Clerk, Harbours and Foreshores, Ministry of Transport, to P.E. Muers, Marine Division, 9.8.1974 (MoT 43/2/6/2).

<sup>167</sup> "Reclamation. Kaiti Beach." – T.N. Gedy, Secretary, GHB, to Director, Marine Division, MoT, Wellington, 17.9.1974 (MoT 43/2/6/2).

teria and impacts on the neighbours of potential developments, rather than bio-physical and cultural dimensions of the environment and all affected parties regardless of whether they neighbour a development site<sup>170</sup>. Specifically, the procedures did not include a requirement to assess impacts on Maori cultural values – an omission of Treaty principles. However, beyond the clauses relating to physical transformation, there were two clauses which should have been invoked in the Kaiti case:

- (b) Does the proposal affect existing communities...?
- (h) Does the proposal affect any areas or structures of historical or archaeological importance?

Despite the overall deficiencies of the EP&EP, these clauses should have been invoked to protect tangata whenua interests in the area.

The Board dutifully completed an impact assessment – only two and a half pages long, with the first two pages comprised of propaganda relating to the necessity of the works rather than an assessment of environmental effects. The final half page – the assessment of effects proper – is quoted in full:

**Impact on Environment:**

The proposed 3.192 hectares of reclamation will extend the two previously gazetted areas further to the southeast along Kaiti Beach. This Beach has for many years been a prohibited area for shell fish collection because of the discharge in this locality of the freezing works effluent. The Board's plan for the overall development of the Kaiti Beach area will change the characteristics of the environment but the Board considers that the overall change will be to the benefit of the public. The activities associated with an operating port are not only the economic good of the community as a whole (129 men are directly employed on the waterfront) but also are a source of great interest and enjoyment to young and old<sup>171</sup>.

Other than an admission that the encroachment would 'change the characteristics of the environment' there was no account of environmental impacts nor of affected communities of interest. This assessment of effects was particularly sub-standard, highlighting the fact that either the GHB had never considered the impacts of its activities or that it was deliberately attempting to mislead the relevant authorities. Moreover, the Board's disregard of the area as a shell fishery of importance to local Maori is particularly disdainful. Its logic appeared to be that because an existing

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<sup>168</sup> "Reclamation. Kaiti Beach." – P.E. Muers, for Director, Marine Division, to Secretary, GHB, 27.9.1974 (MoT 43/2/6/2).

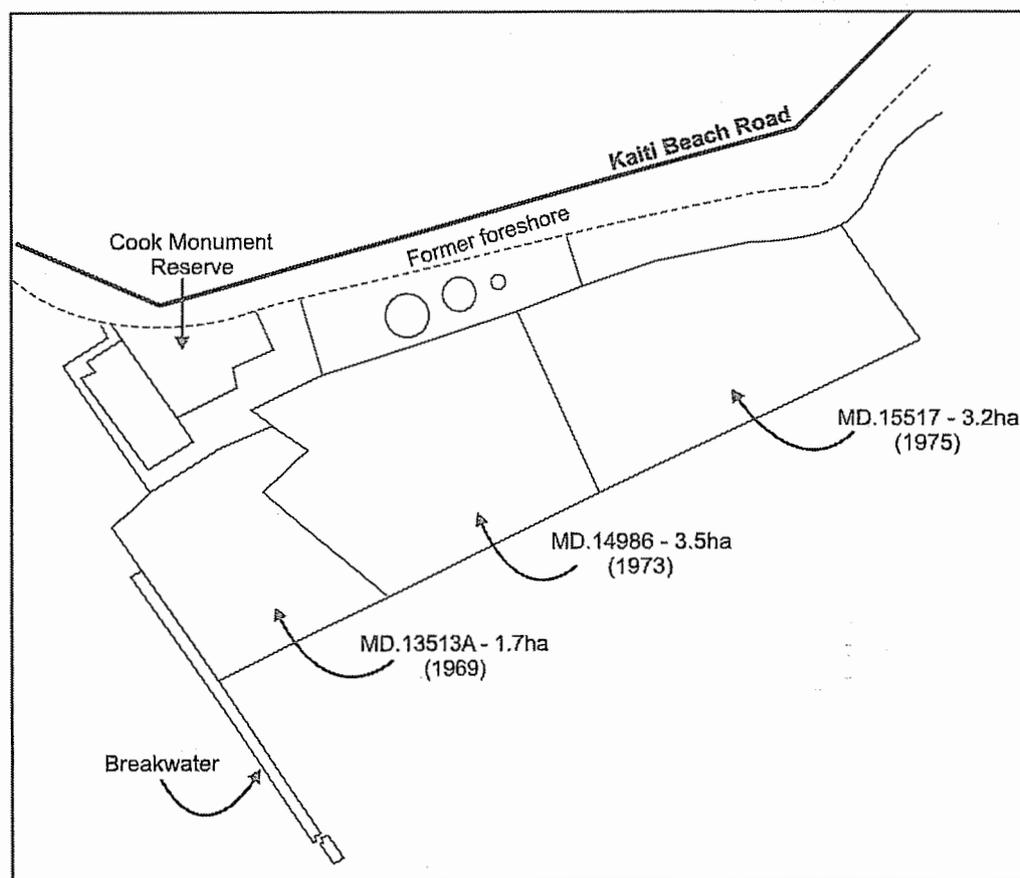
<sup>169</sup> "Reclamation. Kaiti Beach." – P.E. Muers, for Director, Marine Division, to Secretary, GHB, 8.10.1974 (MoT 43/2/6/2).

<sup>170</sup> Morgan 1988.

<sup>171</sup> "Environmental assessment of 3.192 hectares of reclamation of Kaiti Beach." – Gisborne Harbour Board, November 1974 (MoT 43/2/6/2).

source of environmental degradation affected the use value of the wave platforms, then it was acceptable to allow another form of degradation. Rather, it was the Treaty obligation of Crown agencies to ensure that the first form of degradation was mitigated while prohibiting the establishment of a second. Despite the obvious inadequacies in the impact assessment, the Commission for the Environment – the government agency responsible for administering the EP&EP – concluded that, “From the environmental impact assessment provided by the Harbour Board and our visit to the site we believe that the environmental effects of the development are acceptable<sup>172</sup>.” The Commission’s failure to fully implement its own procedures for environmental protection represents a further omission of a Crown agency.

Figure 6.8 – Kaiti beach reclamations and their authorisations<sup>173</sup>



<sup>172</sup> “Gisborne Port Development: Kaiti Beach reclamations.” – P.J.A. McCombs, for Commissioner for the Environment, to Secretary for Transport, MoT, 11.3.1975 (MoT 43/2/6/2).

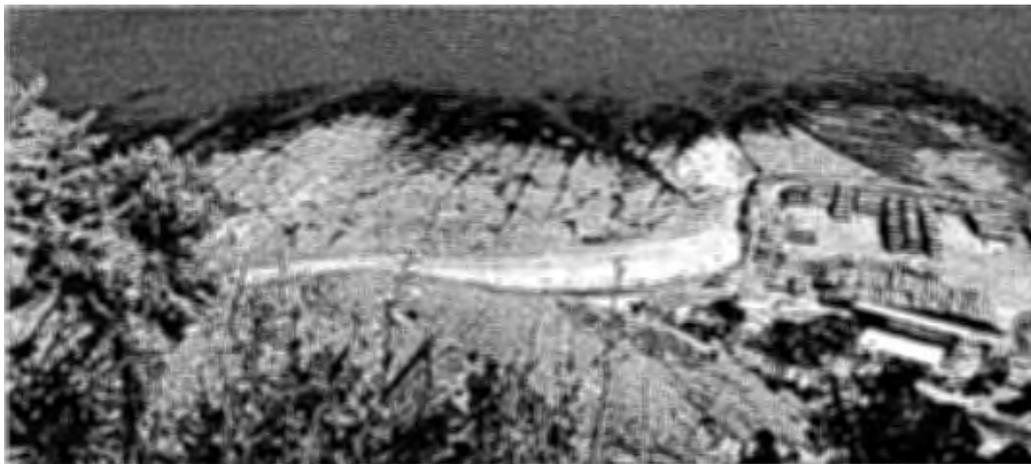
<sup>173</sup> **Source** “Reclamation authorities.” – I.D. Britton, for Director, Marine Division, MoT, to Secretary, GHB, 30.10.1975 (MoT 43/2/6/2).

At the same time that it completed its environmental impact assessment, the GHB lobbied the local member of parliament who, in turn, pressurised the Minister of Transport to permit the reclamation and reign in his staff:

Unless one is familiar with the Board's intentions, it is perhaps too easy to criticise what they are doing, but I can assure you that their plans are very much in the interest of the community and, indeed, that the Board is to be congratulated for their initiative in undertaking these works. It would be disastrous if the reclamation work should be impeded for any reason and these prospects for the port thereby put in jeopardy. I wonder, therefore, if you would be so kind as to investigate the situation with the Department [Marine Division] and urge them to cooperate with the Board<sup>174</sup>.

This request – grounded in the ideology of progress which had so transformed the port site to that date – evidently affected the reasoning of Marine Division staff.

*Figure 6.9 – Encroachment of reclamations onto wave platforms*



In addition to this political influence, the Ministry of Transport's management of this issue was evidently haphazard. In October of 1975, well after the authorisation of the reclamation, the local Officer of Marine wrote to his Ministry that he had been advised that "approvals for both these works have been given and gazetted. I presume that this is the case, although I can find no record of such approval in my records<sup>175</sup>." Earlier, in 1973, the resident engineer of the Ministry of Works confessed that "There appears to be little information on file regarding [the second] application<sup>176</sup>." The confusion continued for quite some time thereafter, with Min-

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<sup>174</sup> T. Davey, MP for Gisborne, to B. Arthur, Minister of Transport, 9.10.1974 (MoT 43/2/6/2).

<sup>175</sup> "Reclamation of foreshore and extension of wharf: Kaiti, Gisborne." – R.D. Campbell, for Regional Marine Officer, Marine Division, Ministry of Transport, to Ministry of Transport, Marine Division, 22.10.1975 (MoT 54/16/75).

<sup>176</sup> "Proposed reclamation – Kaiti Beach." – P.H. Fisher, Resident Engineer, to District Commissioner of Works, MoW, Napier, 10.4.1973 (MoT 43/2/6/2).

istry of Transport staff revealing in 1979 their patent lack of knowledge about the site which they had approved four years earlier:

Could some kind soul please let me know if and when the large reclamation at the bottom of the Kaiti Bluff was/is authorised? In particular, I am interested in who is responsible for the work? Is part of a development project? How big is it going to be<sup>177</sup>?

These statements suggest that the Marine Division had given the issue so little attention that it was, in effect, neglectful in its duties to the environment and to local Maori.

Whatever the case, the Division recapitulated on its initial intention to refuse the reclamation. It had become convinced that, with the nearby discharge of blood from the freezing works, the area was "not used to any extent by the public<sup>178</sup>." In turn, it decided that if the impact assessment was accepted by the Commission for the Environment, then it would recommend an Order in Council for the reclamation. After the Commission's decision, as explained above, the Marine Division recommended an authorisation in March of 1975 with the pollution justification employed once more:

The affected foreshore and sea bed is close to the discharge point of effluent from the local freezing works. It is therefore an area which is little used by the public for recreational purposes<sup>179</sup>.

This widespread acceptance of government agencies that, somehow, 'two wrongs' – pollution followed by reclamation of the traditional fishery – were in the public good represents a significant breach of the Treaty of Waitangi.

The Marine Division was also swayed by the GHB's promise that it would, eventually, apply for a special act. The Division should have forced the Board to apply for such an act for the third reclamation, but instead it decided to allow that reclamation with a stipulation that it would permit no further encroachments until a special act had been passed. In December 1974, the GHB indicated its intention to apply for an act of parliament relating to the "whole of the Board's future planning in the Kaiti Beach area<sup>180</sup>." In other words, the Board succeeded in averting the controversy by promising to seek a special act to cover its wider and much more significant development plan for Kaiti. At this time, its "long term plan [was] to reclaim approximately 90 to 100 acres<sup>181</sup>." This strategy served to divert attention away

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<sup>177</sup> "Kaiti Hill: Gisborne reclamation." – J. Robertson, Harbours and Foreshore, Marine Division, MoT, 28.5.1979 (MoT 43/2/6/2).

<sup>178</sup> "Gisborne Harbour Board. Reclamation: Kaiti Beach." – B.A. Ranger, Section Clerk, Harbours and Foreshores, Ministry of Transport, 31.10.1973 (MoT 43/2/6/2).

<sup>179</sup> Secretary for Transport, to Minister of Transport, 26.3.1975 (MoT 43/2/6/2).

<sup>180</sup> "Reclamation. Kaiti Beach." – T.N. Gedye, Secretary, GHB, to Director, Marine Division, MoT, 3.12.1974 (MoT 43/2/6/2) "Reclamation." – 21.7.1975 (GHB MB).

from the potential illegality of the third reclamation. The minutes of the Board suggest that there was never any genuine intention to pursue a special act and, not surprisingly, no such bill was ever formulated. Indeed, when the Board revisited its long term plans in the late 1980s, it admitted to the Secretary for Transport that it had not developed a concept plan as of 1988<sup>182</sup> – it had at no time even prepared the way for the development of a bill. After an Order in Council, the reclamation of 3.19ha was gazetted in April 1975<sup>183</sup>. This third reclamation should never have been permitted.

*Figure 6.10 – The western end of Kaiti Beach and part of the log marshalling area*



### **Long term outcomes and development**

The existing reclamations have significantly impacted upon this once substantial fishery. Larger areas of the wave platforms have been covered over, and those which remain suffer from ongoing pollution problems. While there are many sources of this pollution, the log storage itself contributes to the problem. This has a detrimental effect on organisms in the harbour, rendering this area unsafe as a fishery. The Kaiti reclamation has been used extensively for timber storage prior to export. With this, there is the potential for run-off to pollute adjacent water. Bark wastes from the timber storage area is a significant source of pollution, with the hydro-carbon storage facility also a possible source of contaminants<sup>184</sup>. Visible discharges from the timber storage area were observed in 1999 – a red-brown stain was apparent, the result of seepage through the sea-wall<sup>185</sup>. While this pollution is

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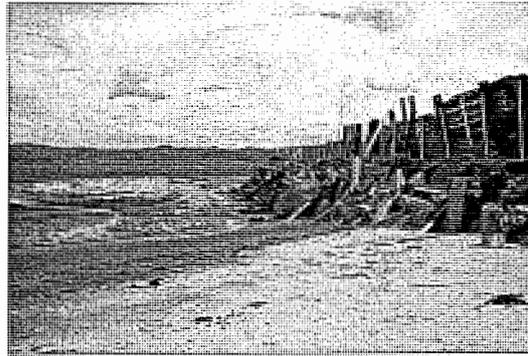
<sup>181</sup> J. Millar, 29.5.1979, marginalized reply on “Kaiti Hill: Gisborne reclamation.” – J. Robertson, Harbours and Foreshore, MoT, 28.5.1979 (MoT 43/2/6/2).

<sup>182</sup> “For the attention: Harbours and Foreshores section.” – B.M. Tahata, Secretary-Treasurer, GHB, to Secretary for Transport, Ministry of Transport, 18.2.1988 (MoT 43/2/6/2).

<sup>183</sup> Extract from NZ Gazette No. 34, p863, 17.4.1975 (MoT 54/16/75).

<sup>184</sup> “Objection to preliminary classification of Poverty Bay and coastal waters.” – T.D. Caley, Chrisp and Caley Ltd., per GHB, 31.8.1989 (GCC 01-233-07).

visible, and probably correctable, there remains the continued threat of pollution which is not visible to the human eye. A continued discharge of even small amounts of log waste and especially gypsum affects the remaining areas which can be successfully fished. Additionally, activities at the Port further pollute this coastline. In tests for metal concentrations, it was found there were heavy concentrations of contaminants found in sediments taken from the Port<sup>186</sup>. The cumulative and long-term effect of these pollutants requires additional monitoring.



The Port has recently reached its capacity for log storage and is investigating the possibility of expansion and re-development based on projected forestry exports. With a lack of flat land available in close proximity to the Port, a 40ha reclamation has been proposed for the remainder of the Kaiti wave platforms<sup>187</sup>. From 1991, the Resource Management Act 1991 became the principal leg-

islation for reclamation and it requires resource consents to be obtained for such activities. Section 245 of the Act requires the approval of a consent authority to carry out reclamations. This essentially devolved responsibility from the Ministry of Transport to the Gisborne District Council. In its *Proposed Regional Coastal Environment Plan*, the Council recognises that reclamations are necessary for the operational needs of the Port. As a result, it has classified reclamations as discretionary activities, provided that the area reclaimed is less than 2ha, and does not extend up to 300m in any direction. The proposed plan also recognises that reclamations can have adverse effects on the environment, and it requires an assessment of effects to be carried out prior to the granting of the consent<sup>188</sup>. Within the Resource Management Act there are provisions for iwi to have a greater say in the management of the environment. Yet, it remains to be seen whether this will allow for partnership in the decision-making for future developments.

In an assessment of impacts for the proposed expansion, Cole discussed the environmental impacts of reclamations on Kaiti beach. It was implied that, as the area is highly accessible, it is subject to significant human disturbance and did not, therefore, harbour large numbers of edible shellfish. It was even stated that "the economic effects of the proposed development may decrease the dependency of local gleaners on the reefs<sup>189</sup>." This fails to account for the cultural value of the reefs: tan-

<sup>185</sup> "Timber run-off stains harbour." – Gisborne Herald, 20.3.1999 (GCC 01-233-07).

<sup>186</sup> Beamsley *et al.* 1997, p33.

<sup>187</sup> Swainson 1997.

<sup>188</sup> GDC 1997, p248.

gata whenua do not necessarily use the reefs as a fishery because of economic necessity, but because it is an expression of their culture, mana and historical rights. In its plans for further development, it appears that the present Port company maintains the historical disdain for the area's importance as a fishery. Although areas may have been compromised by years of pollution and neglect, this is not to say that they are beyond restoration. The regeneration of fisheries at Kaiti Beach will not go ahead if the planned large scale reclamations are permitted in the area in the future. Given the history of neglect in and around Port Gisborne, it may be incumbent on the Waitangi Tribunal to attempt some form of pre-emptive protection for this once exalted fishery.

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<sup>189</sup> Cole 1997, p17.

## **Extractive activities**

**T**he Waipaoa River flood control scheme (Chapter 4) and the development of Port Gisborne (Chapter 6) required significant quantities of stone for their construction. The lower banks of the Waipaoa were lined with boulders to protect them from erosion, while the diversion cut, breakwaters, wharfs and groynes of the port used a significant proportion of the minable rock in the region. This Chapter highlights the outcomes of rock and gravel extraction, with particular emphasis on the disruption to Tuamotu Island, the Whareongaonga quarry and the use of Kaiti Beach. The analysis then turns to the issue of water abstraction, with water quality outcomes of irrigation takings from Te Arai River as a case study. Extractive activities have been carried out in the Gisborne region since the beginning of European settlement. In some instances permission was gained from local iwi to take rock, gravel and water. More often, however, extractive activities materialized without the permission of, nor reference to, tangata whenua. The basis

for extraction was, therefore, the assumption of Crown ownership of the foreshore, sea-bed and rivers.

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## 7.1 Rock extraction

The environmental impacts of the growth of Port Gisborne from 1884 to the present were not restricted to on-site effects. Indeed, some of the more offensive environmental transformations undertaken in the name of the port were off-site, particularly the extraction of rock for harbour construction. Rock has been extracted from numerous sites throughout the Gisborne region, including rivers and islands, and the history of rock extraction has been particularly offensive to local iwi. The mining of rock for construction work and its removal to aid navigation has led to the destruction of sacred rocks and the lowering to the water line of an entire island. Rock has been used for development of infrastructure including roads, rail, and structures associated with the port. Tangata whenua have in the past supported rock extraction with accounts of Maori selling rock for roading purposes in the 1890s<sup>1</sup>. Likewise, Ngai Tamanuhiri sold portions of Whareongaonga to the Gisborne Harbour Board (GHB) so that the Board could mine stone for the construction of the port. However, rock extraction became a grievance when material was extracted from such sacred or historically important sites as Toka-a-Taiau, Tuamotu Island, and the Maraetaha River.

### Extraction of rock from the foreshore

A considerable amount of shingle was removed from the foreshore of the tidal reaches of rivers, and from the few rock beaches around Poverty Bay. Shingle and gravel was extracted from Kaiti Beach for a prolonged period of time, especially during the early years of Port developments. In 1875, the Crown had conveyed to local authorities in the area “forever the right to all metal stone on land specified in the lease [for the Kaiti Beach area]”<sup>2</sup>. Large amounts of gravel were often washed up on Kaiti Beach, and the GHB used this gravel for concrete in the construction of the port’s breakwater and wharfs<sup>3</sup>. Kaiti Beach gravels were also used for railway and road construction<sup>4</sup>, and for fill in reclamations. At times when the Board did not require the gravel for port construction, residents were authorised to obtain gravel from the beaches, with the GHB taking a royalty of 2 shillings per load<sup>5</sup>.

Extraction of Kaiti Beach gravel was common in the early 1900s<sup>6</sup>, and continued as late as the 1980s. At first, however, it was unclear as to whether this practice was part of the Board’s mandate under its 1884 Crown grant to the foreshore. The GHB assumed that it did not have to consult with potentially affected parties because of what it believed to be its rights under the grant. In this way, Maori were

<sup>1</sup> “Te Arai Board. Cheap stone.” – 21.7.1892, p116 (GisMUS 72-122).

<sup>2</sup> “Kaiti metal.” – 11.12.1883, p124 (GHB MB).

<sup>3</sup> “The harbour problem. Board’s policy distinctly laid down.” – Gisborne Times, 28.8.1917 (GHB CB).

<sup>4</sup> “Stone and clay for railway embankment.” – Works Committee, 20.6.1940 (GHB MB); “Shingle.” – 31.7.1888, p225 (GHB MB).

<sup>5</sup> “Harbour Board monthly meeting.” – Gisborne Times, 25.9.1917 (GHB CB).

<sup>6</sup> “Kaiti gravel.” – 26.2.1907, p425 (GHB MB).

never involved in the decision making to take rock and shingle from this area. Subsequently, in 1925, the Marine Department granted the GHB both the right to remove and to authorise the removal of rock and gravel from Kaiti Beach. Henceforth, the GHB was entitled to remove stone and boulders between high and low water mark from Kaiti Hill to Tuahine Point if it accepted liability for any damage to land adjoining the foreshore<sup>7</sup>. Marine Department approval was based on the assumption that resources within the foreshore zone were the Crown's as of right. It is debatable whether such contemporary legislation as the Coal Mines Amendment Act 1903 extended to marine foreshores, even though it secure for the Crown a right to authorise extraction of rocks and minerals to the centre line of rivers<sup>8</sup>.

Despite the fact that the Marine Department gave only permission to take rock material from the high to low tide marks, boulders were removed from Kaiti Beach both above and below high water mark, removing the protection which the boulders provided for the shoreline<sup>9</sup>. The removal of rock material from the Kaiti beach altered its equilibrium. Wave energy had previously been expended on gravel deposits but, with the gradual removal of these deposits, it was expended on parts of the beach which had previously been protected. This change in equilibrium resulted in increased rates of erosion from the cliffs alongside the beach and a number of complaints were received in relation to this. A resident took action against the GHB in 1927 for the removal of gravel and boulders from her property. Erosion continued to result from the removal of rocks from the beach, and removal of the material had to be curtailed at times<sup>10</sup>. Sponge Bay was similarly employed as a source of rock material and with a similar erosional result. In 1928, shingle had accumulated to such an extent that the Cook County Council applied to the GHB for the right to remove 1500m<sup>3</sup> of gravel<sup>11</sup>. After removal of rock, the GHB was once again held responsible for erosion on private property<sup>12</sup>. While there is no recorded objections from tangata whenua, the historical importance of this coastline as a fishery meant that more care should have been taken to protect a relatively fragile marine environment.

This lack of consultation on mining issues around Kaiti was echoed in 1970 when the Gisborne Refrigeration Company extended the local freezing works. To accommodate the extended works, 25,200m<sup>3</sup> of rock was excavated from the base of Kaiti hill, and then placed in the GHB's reclamation<sup>13</sup>. Within three months this site had been excavated, and there was talk of removing a further 2000-3000m<sup>3</sup> of material<sup>14</sup>. Extractive works such as this were common place, and were undertaken without

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<sup>7</sup> "Stone. Kaiti Beach." – 30.11.1925, p106 (GHB MB).

<sup>8</sup> Even this has been contested. Refer to Ward 1999, p53.

<sup>9</sup> "More litigation. Stone-getting contracts." – Poverty Bay Herald, 26.9.1927 (GHB CB).

<sup>10</sup> "Harbour works. Sponge Bay." – Gisborne Times, 8.10.1929 (GHB CB).

<sup>11</sup> "Harbour Board." – Poverty Bay Herald, 24.9.1928 (GHB CB).

<sup>12</sup> "Sponge Bay erosion." – 28.11.1932, p185 (GHB MB).

<sup>13</sup> "Freezing works extensions and Kaiti Beach reclamation." – 1.7.1970, p646 (GHB MB).

<sup>14</sup> "Reclamation. Kaiti beach." – Report of Engineer, 28.10.1970 (GHB MB).

consultation with tangata whenua. If the title to the land was held, then it was assumed that the landowner had a right to clear obstructions or take construction materials. There was little investigation into the effects of such works on local iwi: the transformation of this maunga of importance to Ngati Oneone remains as a local Maori grievance.

### Tuamotu Island

With the taking of rock and shingle for construction purposes from the Kaiti-Sponge Bay area, the character of this coastline was dramatically altered. However, the impact on the beach and cliff system was not as significant as the impact of rock extraction on islands offshore from this coast. Where one island is located today, two previously existed at the beginning of the 20<sup>th</sup> Century. These islands were both used extensively for rock extraction, to the extent that one was eliminated above the level of low-tide. In accounts of Cook's landing in Poverty Bay in 1769, Tuamotu Island was recorded as having a fortification on its summit, which is thought to have been a pa called Ruruhangehange<sup>15</sup>. A reasonably sized kainga was associated with this settlement and it remained on the island until at least 1885<sup>16</sup>. The extent of the fortifications and the size of the kainga suggest that the islands were important to tangata whenua. Early accounts of Tuamotu Island describe it as a place of abundant resources. The island was covered with patches of trees including karaka and ngaio and there were several large remnants of harakeke. Penguins nested on the island, and "the sea around Tuamotu Island teemed with crayfish and paua" and there were "many Moki and kelp fish swimming around"<sup>17</sup>. The smaller island between Tuamotu and Papawhariki Point, was also home to a similar range of flora and fauna.

Modification of the islands came not long after the establishment of the GHB in 1882. To fulfil its development plans, the GHB required substantial quantities of rock material for breakwaters, groynes and wharfs. The Gisborne area has few rock outcrops and Tuamotu Island was targeted because it was both close to the Port and was based of a relatively hard rock strata. In 1886, the GHB applied under the Public Works Act to have the island proclaimed as its property, which was authorised in 1887<sup>18</sup>. Land was also taken at Kaiti and Papawhariki to provide materials for harbour and railway construction<sup>19</sup>. The Harbour Board make some attempts to protect wahi tapu sites in these areas:

In order to reflect the very natural objections of the owners of the island to having that portion used [and] a graveyard disturbed, the Board will guaran-

<sup>15</sup> Or, 'Rarohau'. Salmond 1991, p135.

<sup>16</sup> 26.10.1886, p37 (GHB MB).

<sup>17</sup> "Oldtimer." – Letter to Editor, Gisborne Herald, 16.5.1893 (GisMUS VF-Natural History: Zoology).

<sup>18</sup> 26.10.1886, p37 (GHB MB).

<sup>19</sup> 24.2.1903, p139 (GHB MB).

tee not to interfere with that portion beyond works that may be absolutely necessary in the construction of the tramway<sup>20</sup>.

Inevitably, the increasing demand for rock meant that the sacred nature of the site was disturbed. Indeed, this very area was lowered by about 5m and the urupa was destroyed. In times when the construction works at the port ebbed, the GHB authorised other companies to take rock from the island. One company was authorised to extract rock for 15 years, with free rights of passage over the island and over Papawhariki Point<sup>21</sup>. The allocation of these rights began as early as 1889 and marked the beginning of a period of continuous rock extraction<sup>22</sup>.

Rock was extracted for road repairs, and was used extensively for the construction of structures during the creation of the diversion cut. Although the GHB had abandoned Tuamotu Island as a source of rock in favour of Whareongaonga Quarry in the 1920s, when the latter area proved to be unsuitable for rock extraction, the last remaining sources of rock were stripped from the island in relative short time. In 1927 alone, 5000 of the estimated 8000 tons of rubble available for use on the island was tendered for removal<sup>23</sup>. The two islands were exploited to such an extent that Tuaiti (sometimes known as Pukeiti) was entirely removed in 1928<sup>24</sup> – “as a result that landmark disappeared and left only one island where two had stood from time immemorial<sup>25</sup>.”

In the early 1900s, the question of the title to Tuamotu Island had been raised, prompting the GHB to pursue a full certificate of title to the island<sup>26</sup>. Compensation for the island had not been received by the initial owners and, after protests in 1891<sup>27</sup> and 1903<sup>28</sup>, they demanded the return of the island. There was no response from the GHB nor from higher authorities<sup>29</sup>. These concerns were resurrected in 1924 when the Board received a letter on behalf of the Maori owners of Tuamotu Island asking for compensation for the taking of the island under the Public Works Act in 1887<sup>30</sup>. The GHB admitted that it could find no record of payment being made to the Maori owners as compensation but it believed that it was not liable to make any payments as the passing of time relieved it from any liability there might have been. The Board even suggested payment might have been made and the record lost<sup>31</sup>. Even if payment was made, which is unlikely, it could not have com-

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<sup>20</sup> “Re stone/gravel from Tuamotu Island.” – GHB to Harris, no date, p123-124 (GHB LB).

<sup>21</sup> *Ibid*.

<sup>22</sup> 4.7.1889, p322 (GHB MB).

<sup>23</sup> “Stone supplies.” – Gisborne Times, 30.8.1927 (GHB CB).

<sup>24</sup> “Oldtimer.” – Letter to Editor, Gisborne Herald, 16.5.1993 (GisMUS VF-Natural History: History).

<sup>25</sup> “They filled the gap in the harbour wall.” – Gisborne Herald, 13.10.1971 (GHB CB).

<sup>26</sup> 30.4.1903, p146 (GHB MB).

<sup>27</sup> H. Te Kani to Harris and GHB, November 1891 (GHB LB).

<sup>28</sup> 30.4.1903, p146 (GHB MB).

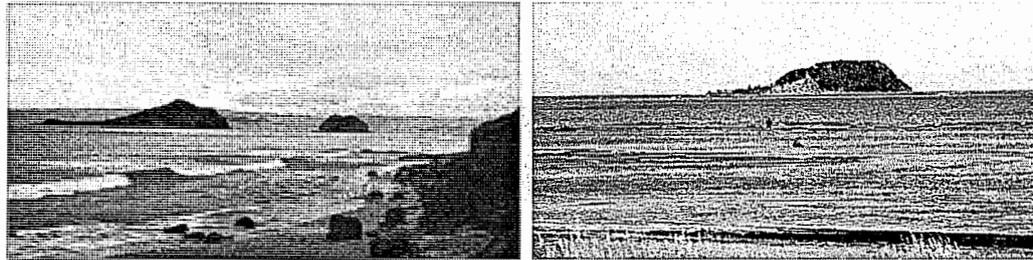
<sup>29</sup> 17.11.1891, p17 (GHB MB).

<sup>30</sup> “Harbour matters. Monthly Board meeting” – Poverty Bay Herald, 20.10.1924 (GHB CB).

<sup>31</sup> *Ibid*.

pensated Maori for the cultural affront of the transformation of these islands. The GHB evidently was allowed to transform these spaces without the encumbrance of a higher authority: ownership or Crown granted title was, at the time, a blank cheque for unlimited transformation of the environment.

Figure 7.1 – Tuamotu and (not) Tuaiti, 1903<sup>a</sup> and 2000<sup>b</sup>



- a. **Source:** Gisborne Museum and Arts Centre.  
 b. **Source:** Author. This photograph was taken from the opposite direction, but the non-existence of Tuaiti Island is, nevertheless, confirmed.

### Whareongaonga quarry

The demand for rock could not be met by the destruction of Tuamotu and Tuaiti alone, and it led to the establishment of quarries in Waiherere, Ormond Valley, and Waerenga-a-hika – all sites of special significance to local iwi. The Waiherere area had to have its status as a reserve under the Scenic Reserves Act annulled before the Board could use it as a quarry<sup>32</sup>. Such was the Board's determination to find a long-term source of construction material, that this proposal was accepted by the Lands Department in 1908. Even after the establishment of these quarries, however, the supply of rock was quickly exhausted and the Board began to extract rock from the Maraetaha and other rivers<sup>33</sup>. It also purchased rock from the Cook County quarry at Patutahi. All of these quarries were small and could not satisfy the GHB's ambitious plans for expansion. In the 1920s, it investigated a site at Whareongaonga which, if it had proven to be a satisfactory source of rock, would have provided a long-term solution.

The quarry at Whareongaonga, 13kms south of Te Kuri a Paoa, was established primarily to supply rock for the construction of breakwaters and the diversion cut. The GHB had investigated a range of options from land as far away as Paritu, Te Mahanga and Whangara Island. Paritu had sufficient quantities of stone, but inadequate shipping facilities. Whangara was considered to be too problematic in that the land was Maori owned, had never been partitioned, and was well known as being a

<sup>32</sup> "Waiherere quarry reserve." – 21.12.1908 (GHB MB).

<sup>33</sup> The extraction of boulders from Maraetaha is discussed later in this Section.

sacred place for Maori<sup>34</sup>. The sedimentary rock from Whareongaonga was favoured, even though Whareongaonga too, had cultural and spiritual ties for Maori. Whareongaonga also historically significant as the site where Te Kooti landed after his escape from the Chatham Islands in 1868. It also contained a high number of burial sites. The GHB attempted to purchase 80 hectares of Whareongaonga B Block from the Maori owners<sup>35</sup>. In March 1925, the GHB received a letter on behalf of the owners which offered a sale of the B Block for £3000<sup>36</sup>, and a meeting through the Native Land Board was held with the assembled owners to formalise the transaction<sup>37</sup>. The precise details of these transactions are disputed: according to the descendants of the Block the £3000 was initially intended as a price for rock extraction only, rather than as a transfer fee for the title to the land<sup>38</sup>.

Whatever the case, it was accepted by all parties that the Maori owners gave the GHB the right to extract rock from Whareongaonga B Block on the provision that an urupa was protected. Indeed, there are several urupa belonging to Ngai Tamahiri on the block<sup>39</sup>. The owners also included specific clauses in the deed of transfer to ensure their occupation and fishing rights were protected over the areas of the Block that were not required for the purposes of the quarry<sup>40</sup>. This is significant because it highlights how tangata whenua desired to maintain their customary rights as guaranteed to them through the Treaty of Waitangi. It might also support the contention that they were only selling rights to quarry the rock, rather than consciously engaging in a sale.

Having finalised the transaction in 1925, the GHB wasted no time in commencing work at Whareongaonga. In fact, it appears that work at the quarry began even *before* title to the land had been obtained. In March 1925, the same month Maori offered rights to quarry, quarries were established in the sides of valleys to the south and west of the bay at Whareongaonga<sup>41</sup>. These were supposedly to test the quality of the rock, but had become sizable gashes in the hillside well before the transfer of any money. Later that year, roads were constructed at the site, as well as a jetty, workers huts, a store, an office and a machine store<sup>42</sup>. In spite of the substantial infrastructural changes at the site, the Whareongaonga quarry proved to be uneconomic. The bay at the quarry was exposed and prevented loading of quarried material<sup>43</sup>. The quality of the rock was poor and it was found to be too soft for use in the breakwater<sup>44</sup>. Prior to purchase a number of geological reports contended that the

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<sup>34</sup> "New harbour. Stone for breakwater." – Gisborne Times, 26.2.1924 (GHB CB).

<sup>35</sup> "Chairman's address 1925." – (GisMUS GHB 1/2).

<sup>36</sup> "Whareongaonga." – Advisory Committee, 18.3.1925 (GHB MB).

<sup>37</sup> "Return of tribal land requested." – Gisborne Herald, p12, 13.3.1991 (GDC 362-04).

<sup>38</sup> "GDC reinstates land to original owners." – 16.9.1999 (GisMUS VF-Maori).

<sup>39</sup> Pers. comm. Mami West, Zoe Winitana and Rose Thompson.

<sup>40</sup> "Whareongaonga reserve re. purchase of." – 23.3.1925 (GHB MB).

<sup>41</sup> "Breakwater construction." – Poverty Bay Herald, 23.3.1925 (GHB CB).

<sup>42</sup> "Harbour works. Methods of construction." Poverty Bay Herald, 22.9.1925 (GHB CB).

<sup>43</sup> "Stone for harbour." – Poverty Bay Herald, 28.3.1927 \*GHB CB).

rock at the site was ideal for port construction. In a new report in May 1927, it was found that although there was a lot of stone at the site, most of it could not be used<sup>45</sup>. As a result there were serious doubts about whether to continue to quarry at Whareongaonga, and it was proposed to find an alternative source of stone<sup>46</sup>. In June of 1927, the GHB engineer recommended an abandonment of the quarry and, by December of that year, the final load of rubble was removed<sup>47</sup>. The alienation and transformation of a site of cultural importance to Ngai Tamanuhiri had been unnecessary because the Board had not carried out sufficient research prior to targeting the area.

Figure 7.2 – Whareongaonga quarry, 1926<sup>48</sup>



Once the Whareongaonga quarry was decommissioned the area could no longer be used for rock extraction, but activities of environmental concern remained at the site. The GHB investigated a range of alternative uses for the land in the hope that it would become a profitable endowment. At first, the Board attempted to use the land for farming and started a spraying programme to eradicate blackberry which grew wild on the land. The blackberry was sprayed with arsenic up to six times per vine<sup>49</sup>. The use of this toxicant reveals the Board's disrespect for the cultural and spiritual significance of land which had been used for centuries as an urupa. While the environmental impacts of this spraying on the surrounding waters are unre-

<sup>44</sup> "Not necessary. An inquiry refused." – Poverty Bay Herald, 37.9.1926 (GHB CB).

<sup>45</sup> "Harbour quarry. High percentage of waste." – Poverty Bay Herald, 6.5.1927 (GHB CB).

<sup>46</sup> "Harbour quarry. Old works to close." – Poverty Bay Herald, 7.5.1927 (GHB CB).

<sup>47</sup> "Mr Furkert's report. Harbour Board adopts advice." – Poverty Bay Herald, 30.6.1927 (GHB CB).

<sup>48</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>49</sup> Poverty Bay Herald, 29.3.1926 (GHB CB).

corded, it can be assumed that the customary fishing rights which the original owners had attempted to preserve were affected. Eventually, the GHB decided that the land was useless for farming<sup>50</sup>, and tendered it for lease in 1928. No tenders were received and the land was offered rent-free for three years on the provision that blackberry vines were cut by the lessee<sup>51</sup>. The Board again attempted to lease or sell the land in 1964, but it was unsuccessful<sup>52</sup>. In 1999, the 80 hectares of land at Whareongaonga, which contained the urupa and other wahi tapu sites, was handed back to the original Maori owners<sup>53</sup>.

### Extraction of rock from rivers

Before 1948, there were few policies or laws which controlled the taking of gravel and rock from rivers. Section 14 of the Coal Mines Amendment Act 1903 had vested the beds of all navigable rivers in the Crown<sup>54</sup>. While this formalised the Crown's assumption of ownership of river beds, it did not yield a system of management of river resources. Local authorities and companies tended to have free reign in the taking of such material, and the only issue for negotiation was the obtaining of rights to access rivers. For the period before the Second World War, therefore, there are few records of gravel and rock takings from rivers – no paperwork was ever required. Nevertheless, accounts from local history books suggest that the taking of shingle and rock from local rivers was commonplace in this time<sup>55</sup>. The 1948 Land Act introduced a limited form of management of these materials. The authorisation system for fluvial mining was devolved to catchment boards. While few instructions about how catchment boards were to interpret their new authority were provided, it was to be assumed that boards would consider their wider mandate under the Soil Conservation and Rivers Control Act 1941. Typically, catchment boards rejected authorisation only where they believed gravel or rock takings would impact upon river bank stability or water quality.

Not long after the 1948 Land Act, a variety of uses were found for rock and gravel in Poverty Bay rivers. Permits to extract shingle and gravel from the bed of the Waipaoa River in the 1950s were granted on lenient terms. Authorisation was granted to extract quantities of sand, shingle, gravel and other such materials "as the Licensee shall think fit for a term of two (2) years<sup>56</sup>." The only limitations placed on the permits were that: the Engineer of the Board had to be satisfied with the removal of the gravel or sand; and the licensee was to "make good any damage" incurred during the extraction<sup>57</sup>. The extraction of gravel and boulders from the

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<sup>50</sup> Poverty Bay Herald, 28.6.1926 (GHB CB).

<sup>51</sup> "Harbour Board monthly meeting." – Poverty Bay Herald, 30.4.1928 (GHB CB).

<sup>52</sup> "Tiny coastal cove holds fateful historic links." – 4.12.1964 (GHB CB).

<sup>53</sup> "GDC reinstates land to original owners." – 16.9.1999 (GisMUS VF-Maori).

<sup>54</sup> Boast 1996, p8.

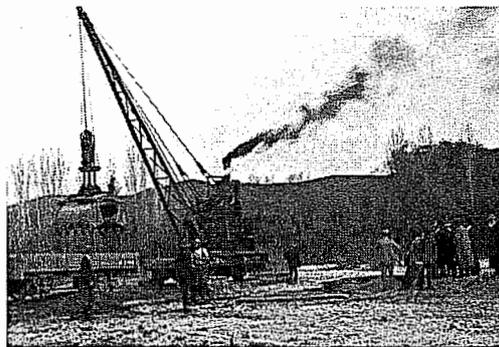
<sup>55</sup> Mackay 1948; Binney 1995.

<sup>56</sup> "Memorandum of agreement." – PBCB and A. Campbell, Gisborne, 1958 (PBCB 14/18).

<sup>57</sup> *Ibid.*

Maraetaha River has been of particular significance to Ngai Tamanuhiri iwi<sup>58</sup>. The first documented extraction from the Maraetaha came in the 1950s when rock was taken for the Waipaoa flood protection scheme. In 1955 owners of land alongside the Maraetaha River were advised that the Poverty Bay Catchment Board (PBCB) would be entering their property to test, and later remove, stone along the river flat<sup>59</sup>. Over 7600m<sup>3</sup> of stone was taken, significantly transforming the river bed in places and disturbing the “living stones of the river<sup>60</sup>.” The landowner was compensated a small sum for providing access and disturbance of stock<sup>61</sup>. However, the cultural affront to Ngai Tamanuhiri caused by the removal of basically all of the easily accessible and large boulders in the river went unacknowledged.

Figure 7.3 – Kaiteratahi gravel mining<sup>62</sup>



In 1968, the Commissioner of Crown Lands provided the PBCB with a “blanket licence which authorises your Board’s control of shingle removal operations over all Crown owned rivers [in the catchment]<sup>63</sup>.” With this, the Department of Lands and Survey authorised the PBCB to control the issuing of licenses for gravel extraction. Not long after this blanket licence was given to the Board, the

number of permits issued within the boundaries of the PBCB increased markedly. This was because the authorisation allowed the Board to use revenue from permits to cross-subsidise its core functions – flood and erosion control and for the general “betterment of rivers<sup>64</sup>.” Royalties were charged at 10 cents per cubic yard; a relatively low amount which encouraged volume purchasing and guaranteed considerable revenue to the PBCB. Extraction permits in the Waipaoa River increased from 4 to 17 from 1968 to 1973<sup>65</sup>. Conditions remained general and vague in that the extractive activities were to be carried out “to the satisfaction of the Engineer of the

<sup>58</sup> Pers. comm. Mami West.

<sup>59</sup> “WRFCB. Proposed taking of stone from Maraetaha River.” – A.G. Hicks, Secretary, PBCB, to P.A. Barton, Bartlettts, Gisborne, 3.5.1955 (PBCB 2/19/5).

<sup>60</sup> Pers. comm. Mami West.

<sup>61</sup> “WRFCB. Compensation for P.A. Barton, Maraetaha. River bed quarry.” – Engineer, PBCB, to Chairman, PBCB, 2.10.1956 (PBCB 2/19/5).

<sup>62</sup> **Source:** Gisborne Museum and Arts Centre. Photograph from 1909 – at this time, there were few records other than such photographs.

<sup>63</sup> “Removal of shingle from Crown rivers.” – C.L. Costello, Commissioner of Crown Land, to Secretary, PBCB, 2.9.1968 (PBCB 14/18).

<sup>64</sup> “Removal of shingle from rivers control by catchment authorities.” – I.E. Jones, Chief Engineer, PBCB, to Chairman, PBCB, 1.10.1969 (PBCB 14/18).

<sup>65</sup> “Removal of shingle, silt, etc., from Crown owned riverbeds.” – E.K. Wilson, PBCB, to Waiapu County Council, 9.7.1973 (PBCB 14/18).

Board<sup>66</sup>.” Eventually, the local Conservator of Wildlife expressed disappointment at the escalation of extraction permits<sup>67</sup>. He was particularly concerned about increased siltation as a result of extraction and commented that the Board was exhibiting an “attitude that has symbolised the use of our rivers in the past...In the long term and on a wider basis, such an approach only causes degradation of the environmental aspects of the systems<sup>68</sup>.” The PBCB denied the potential impact of increased extraction and continued to use the permit process as a revenue device<sup>69</sup>.

In order to construct a sea-wall to protect the Kaiti beach reclamation, the Gisborne Harbour Board once again extracted sandstone from the Maraetaha River in 1968<sup>70</sup>. There was renewed period of rock extraction from that river in the 1980s, with the removal of remaining boulders of significant size. Hikurangi Forest Farms requested permission to extract sandstone from a terrace of Maraetaha River on land which it managed. A 10-meter buffer zone was to be left beside the river, and the rocks sieved to remove the silt content. Oversized rocks and silt were to be returned to the site to level it, prior to regrassing<sup>71</sup>. Hikurangi Forest Farms also submitted an application for an extraction permit for Purupuruwhaka Stream – a tributary of the Maraetaha – on a site alongside Maraetaha 1D Block. Authority was given to extract approximately 500m<sup>3</sup> per year of shingle. On the permit, however, “shingle” had been crossed out and replaced with the word “boulders<sup>72</sup>.” Permission to remove these boulders was granted through the stroke of a pen. By this time, the process for authorising shingle takings and boulder extraction were significantly different, with the latter requiring increased levels of public input to the decision-making. The company received the right to take large boulders and to significantly transform the river environment without having to face public objections which would have inevitably received critical comment from Ngai Tamanuhiri. Further permits to extract rock and boulders from Maraetaha River were issued in 1991. This time the quantities were even larger – 1000-3000m<sup>3</sup> of boulders per year. Once again, a pro forma authorisation form for shingle was used with the word boulder being substituted for shingle<sup>73</sup>. This deceptive tactic which was used to avoid public scrutiny suggests that clearer guidelines should have been given to consent authorities and that Crown environmental agencies should have forced the logic of the Treaty on those authorities.

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<sup>66</sup> “Amendment to condition No.1 of permit” – I.E. Jones, Chief Engineer, PBCB, 9.8.1973 (PBCB 14/18).

<sup>67</sup> “Metal extraction: Motu Catchment.” – P.J. Burstall, Conservator of Wildlife, to County Clerk, Waikohu County Council, 4.2.1974 (PBCB 14/18).

<sup>68</sup> *Ibid.*

<sup>69</sup> “Metal extraction: Motu River.” – E.K. Wilson, PBCB, 18.2.1974 (PBCB 14/18).

<sup>70</sup> “Sea wall planned to protect beach.” – 19.3.1968 (GHB CB).

<sup>71</sup> Handwritten letter from Hikurangi Forest Farms to the ECCB, no date (PBCB 14/18).

<sup>72</sup> “Application for a permit to remove shingle from Crown owned riverbeds.” – Hikurangi Forest Farms, to ECCB, 1989 (PBCB 14/18).

<sup>73</sup> “Application for a permit to remove shingle from Crown owned riverbeds.” – Regional Conservator, GDC, for Timothy Guy, Gaddums Hill, Gisborne, Permit No. 9016 (PBCB 14/18).

## 7.2 Dredging

A second off-site outcome of the port developments related to both maintenance and capital dredging – the dumping of dredge spoil in Poverty Bay. Once the basic configuration of the Port was completed in the 1930s, it required regular dredging for maintenance thereafter. The effect of the dredging has transformed the aquatic environment within the harbour, and the deposition of spoil in Poverty Bay has also impacted on the ecosystem of the bay. With the formal establishment of the port in the 1880s, it soon became apparent that regular dredging would be required to maintain its functioning. Dredging was required to keep the harbour clear from silt deposits, but it was also employed to prepare areas for significant capital developments in order to make the river straighter and deeper<sup>74</sup>. From 1890, dredging of the port began and it remains a defining feature of the site to this day<sup>75</sup>. While in the 'river port' phase of its development, the harbour was particularly prone to siltation in times of flood<sup>76</sup>. In an attempt to keep the harbour channels clear of silt, the rivers were deepened considerably through maintenance dredging<sup>77</sup>. It was not until the river was diverted from the harbour basin that the port was relieved of much of the siltation problem.

Considerable amounts of material were removed in creating the port and in deepening the river channel. Through blasting and dredging, 19,000m<sup>3</sup> of rock and 10,700 m<sup>3</sup> of sand were removed between 1895 and 1899<sup>78</sup>. Later in the 1910s, up to 12,5000 tons of clay and 36,400 tons of sand and silt were removed by dredging – most of this material was deposited in the middle of the bay, with no consideration of where it might drift or upon what it might settle<sup>79</sup>. Spoil was also pumped over the breakwater on the outgoing tide<sup>80</sup>, with a significant negative potential to affect the fisheries at Kaiti Beach. Little consideration was given to the impact of the deposits of spoil on the benthic environment or on fauna further along the food chain. Several engineering reports were written in condemnation of the practice of dredging because, by 1906, the ineffectiveness of the activity was apparent. Once dredged, the river would become silted up again in relatively quick time<sup>81</sup>. It was also stated that the cutting of the papa rock had made improvements to the harbour more costly than if the rock had not been cut<sup>82</sup>. In some ways, therefore, an environment of historical and cultural significance to local iwi had been transformed with limited justification.

<sup>74</sup> "Harbour Board. Mr Napier Bell's report." – Poverty Bay Herald, 5.9.1899 (GHB CB).

<sup>75</sup> Immenga *et al* 1994.

<sup>76</sup> Whyte 1984, p69.

<sup>77</sup> "Harbour problem. Mr Reynolds submits his report." – Gisborne Times, 14.8.1917 (GHC CB).

<sup>78</sup> "Harbour Board. Mr Napier Bell's report." – Poverty Bay Herald, 5.9.1899 (GHB CB).

<sup>79</sup> "Engineer's annual report." – Poverty Bay Herald, 24.4.1914 (GHB CB).

<sup>80</sup> "Gisborne's Harbour affairs. Chairman's annual address." – Poverty Bay Herald, 29.4.1918 (GHB CB).

<sup>81</sup> "The Harbour problem." – Gisborne Times, 14.8.1917 (GHB CB).

<sup>82</sup> "Harbour problem. Mr Reynolds submits his report." – Gisborne Times, 14.8.1917 (GHB CB).

The environmental impacts of river dredging bring into question the authority of the GHB to carry out the activity. The Board was given ownership of the tidal reaches of the rivers, with the *ad medium filum aquae* rule applied to non-tidal portions on the river. However, as stated in Section 6.1, it had been discovered that the Gisborne Harbour Board (GHB) did not initially hold title to the riverbed from low water mark to low water mark because of an omission in the Crown Grant of 1884. The Board's legitimacy in transforming any portion of the river – whether tidal or not – is, therefore, questionable. Dredging work was carried out on the assumption of Crown ownership of rivers, with a requirement for Marine Department authorisation before dredging could proceed. Authorisation of the dredging works was carried out without consultation with local iwi. When the Harbour Board saw the need for dredging it applied to the Marine Department for authorisation and this was almost automatically provided.

After the diversion of the Turanganui River, the port was divorced from the considerable volume of sediment which was transported by the river. However, dredging was still required because sediment continued to enter through the harbour entrance. Poverty Bay receives approximately 20 million m<sup>3</sup>/yr of silt from the Waipaoa River<sup>83</sup>. Dredging has therefore been necessary on a regular and continued basis in order to maintain an operational depth of the harbour, and to keep the entrance clear of obstructions. The dredging regime was intensified after the construction of the overseas wharf in the 1960s. The harbour was deepened to receive overseas vessels, and a swinging basin was created by removing Waikanae Island and widening the entrance to the harbour. These two activities increased exponentially the need for regular dredging<sup>84</sup> – with a wider entrance to the harbour more silt could enter, and with the deeper water the natural scouring action of the river became ineffectual. The empowering acts of 1961 and 1964 which permitted the GHB to loan money to construct the overseas wharf also allowed the deepening of the harbour and a long-term programme of maintenance dredging.

### **Environmental impacts of dredging and spoil deposition**

Dredging has been carried out locally for over 100 years, and the spoil from dredging has been, for the most part, deposited in Poverty Bay. The existing disposal site is located south-east of the submarine sewer outfall, near the Temoana Rocks. It appears that the GHB was not forced to obtain permission to dump dredge spoil until relatively recently. Before 1974, the practice required a simple authority from the Ministry of Transport, which based its decision solely on the potential loss of navigation, rather than impact on the environment. After 1974, the GHB obtained authorisation under the Marine Pollution Act 1974 for this activity, even though its spoil did not meet the definition of a 'pollutant' in accordance with that Act<sup>85</sup>. It was not until the late 1980s that environmental impact reports were requested by

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<sup>83</sup> Port Gisborne Ltd. 1998, p7.

<sup>84</sup> *Ibid.*, p8.

government departments prior to the dumping of dredge spoil. In 1988, the Ministry of Transport requested that such a report be completed by the GHB when it applied for the renewal of its marine dumping permit. In response to this, the GHB sought to have the report waived, because the report was considered to be too expensive to produce and because such documentation "has not been needed before"<sup>86</sup>. Nevertheless, the Ministry of Transport required the Port to obtain a water right for dredging in 1988 and this was subsequently granted for a period of five years<sup>87</sup>.

Up until the late 1980s, therefore, the GHB did not have to evaluate and report the impact of its deposition of spoil in Poverty Bay and, as a result, little research was carried out into its effects. A consequence of this lack of research on the effects of dredging and dumping of spoil meant that little was known about the impact of such activities on the environment. In 1984, there had been calls from the Ministry of Agriculture and Fisheries to relocate the spoil dumping ground one mile further out to sea, as it was thought that silt and sand deposited here was disturbing crayfish breeding patterns. Because of the lack of research, however, this could not be verified and the Board successfully resisted the request<sup>88</sup>. With the introduction of the Resource Management Act (RMA) in 1991 assessments of environmental effects (AEE) have been required whenever the Port Company re-applied for its dredging and dumping permits. As a result, a substantial amount of information has been gathered on the impacts of dredging and the deposition of the spoil in the bay.

In research for AEEs, it has been found that the shipping approach channel and harbour floor have been stripped of fauna. While this is, in part, related to low natural diversity, dredging and spoil dumping were also identified as causes<sup>89</sup>. In recognition of the length of time dredging has been carried out in these areas (over 100 years), it has been particularly difficult to ascertain the level of natural and historical diversity. The long-term impact of dredging may, therefore, have been more significant than retrospective analyses can determine. Studies have found that gradual recolonisation of the area by fauna could be expected if dredging was to cease but, at present, recolonisation is periodically reversed by maintenance dredging and deposition<sup>90</sup>. It would be incorrect, however, to target the spoil dumpings as the principal causes of low levels of fauna in the Bay. The sea floor and waters of the bay are subject to a high sediment load and turbidity from the Waipaoa and Turanganui rivers. Habitat disruption and inundation from these 'natural'<sup>91</sup> sources has resulted in

<sup>85</sup> "Poverty Bay and coastal waters preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01/233/07).

<sup>86</sup> "Board asks for report to be waived." – Gisborne Herald, 12.5.1988 (GHB CB).

<sup>87</sup> "Coastal permit CP93001. Port Gisborne dredging and dumping permit." – Gisborne District Council, Special Hearings Committee, GDC 93/501, 9.8.1993 (TROTAK SPJ/438).

<sup>88</sup> "MAF's spoil move resisted." – Gisborne Herald, 17.4.1984 (GHB CB).

<sup>89</sup> Cole 1997, p16.

<sup>90</sup> Swainson 1998, p44.

the loss of species which cannot survive in a muddy sub-surface or in water of diminished quality.

Temoana Reef is an important customary fishing ground for tangata whenua with numerous species found there, including rock lobster, snapper, tarakihi, hapuka, shark, blue and red cod, flats/flounder, kina, booboos and crustaceans<sup>92</sup>. Deposition of dredge spoil had the effect of smothering the reef with a layer of fine sediment, thereby affecting the water quality and marine habitats of these fisheries. Research has proven that such impacts occur when dredge spoil is deposited in confined areas as mounds. On the other hand, the impact of spoil deposits in the bay, if spread out thinly, were considered to have a minimal impact compared to river discharges into the bay<sup>93</sup>. While it has been found that dumping in a confined area would initially see the loss of some fishing grounds, the more even spread of spoil throughout the bay appears to guarantee the survival of these fisheries<sup>94</sup>. Local iwi appeared to have accepted this view in 1998 hearings for resource consents, as mentioned below.

### **Port Gisborne's maintenance dredging application, 1993**

Dredging and dumping of spoil had been carried out since 1988 under the water permit issued by the Ministry of Transport. This permit expired in 1993, and the Port Company was required to obtain a coastal permit under the Resource Management Act. Because the zone of effects from the spoil dumping extended into waters which had previously been classified as suitable for shellfishing, the Port's proposed activity was determined to be a restricted coastal activity<sup>95</sup>. It therefore required rigorous public scrutiny and the application was met with concerted opposition from tangata whenua. In total, ten submissions were received, with three Maori groups opposing the application including Te Runanga o Turanganui-a-Kiwa (TROTAK). All three Maori groups objected to the dumping of the spoil, rather than the actual dredging process.

The main cause of iwi concern was the potential for spoil to disturb traditional food sources, and its impact on the mauri of the moana through defiling and polluting its

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<sup>91</sup> Evidence from Part I suggests that the present sediment loading of local rivers is not entirely 'natural'. Rather, human interference in the headwaters of catchments since colonisation has accelerated erosion and, subsequently, the silt levels in local rivers. The impact on fauna in the Bay is, therefore, an indirect outcome of the land use practices of colonisation.

<sup>92</sup> Evidence of N. Searancke, Ngati Oneone, in the matter of the Resource Management Act 1991 and Port Gisborne Ltd., applicant for Capital and Maintenance Dredging of the Port, 1998 (TROTAK SPJ/438).

<sup>93</sup> Decisions of the Commissioners to hear resource consent applications for Port dredging – p12, 1998 (TROTAK SPJ 438).

<sup>94</sup> Cole 1997, p19.

<sup>95</sup> "Coastal Permit CP93001. Port Gisborne dredging and dumping permit." –Special Hearings Committee, GDC 93/501, 9.8.1993 (TROTAK SPJ 438).

water<sup>96</sup>. In submitting evidence at the hearing, Peter Gordon, a local kaumatua stated the tangata whenua position:

We the kaumatua of Turanganui a Kiwa cannot approve the dumping of paru or sediment into our ancient fishing and shellfish gathering waters, and the domain of Tangaroa. In light of our substantial physical and spiritual relationship with our waters, it is wrong to pour dredgings into our harbour...[W]e who have lived here for 800 years, have the greatest right to ask that our ancient heritage be brought back for all the people of Poverty Bay to enjoy<sup>97</sup>.

While submitting his evidence, Peter argued that Poverty Bay is a taonga of particular importance to local iwi. The committee which heard the resource consents was also told that the mauri of this taonga should be protected by prohibiting the dumping of sediment in the area<sup>98</sup>.

Dumping spoil at sea was considered to be an affront to the cultural and spiritual traditions of iwi, as material derived from land, if disturbed, should be returned to the land<sup>99</sup>. Hence, "From an iwi or Maori people perspective...land based dumping would be, and indeed must be, the only option if our submission is to be taken seriously<sup>100</sup>." A representative from TROTAK recognised the economic burden of a land-based disposal option for the Port, but it was argued that the application should be refused unless such an option was implemented. This representative also stated that, if the application was granted, it should be subject to a commitment to land based dumping in the future<sup>101</sup>. As a result of the hearing, it was recommended to grant Port Gisborne the right to dredge the sea-bed from the harbour basin and the entrance channel, and to dump the dredged material in the area of the Bay which is known as the *Spoil grounds*. The permit was granted with strict conditions for a period of 15 years<sup>102</sup>. One of the conditions of the permit required Port Gisborne to investigate alternative land-based disposal options, with Maori representation in this process. By 1996, land-based options were being investigated by both the Port and iwi. While this condition appears to have incorporated one of the iwi concerns, the wider cultural reasoning of their objections came second to the Port company's economic logic. This suggests that the RMA represents only a cosmetic

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<sup>96</sup> Decisions of the Commissioners to hear resource consent applications for Port dredging – p19, 1998 (TROTAK SPJ 438).

<sup>97</sup> *Ibid.*

<sup>98</sup> *Ibid.*

<sup>99</sup> "Coastal Permit CP93001. Port Gisborne dredging and dumping permit." – Special Hearings Committee, GDC 93/501, 9.8.1993 (TROTAK SPJ 438).

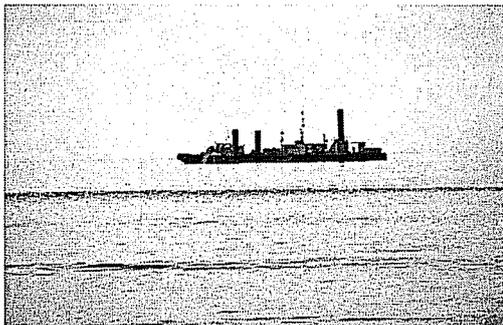
<sup>100</sup> Decisions of the Commissioners to hear resource consent applications for Port dredging – p19, 1998 (TROTAK SPJ 438).

<sup>101</sup> *Ibid.* p20

<sup>102</sup> Coastal Permit CP93001 - Port Gisborne dredging and dumping permit." – Gisborne District Council, Special Hearings Committee, GDC 93/501, 9.8.1993 (TROTAK SPJ 437).

change from previous resource management legislation wherein Maori values were given scant recognition<sup>103</sup>.

*Figure 7.4 – Deposition of dredge spoil off Waikanae Beach*



The soft sediments from the swinging basin and the shipping channel were not considered suitable for reclamation purposes, but could be used in a landfill where ground bearing capacity and the volume of material to be disposed of are not a concern.

The report on land-based disposal options was completed in 1998<sup>104</sup>. It concluded that the heavy metal concentrations of the sediment were not so high as to prevent the disposal of the material on the sea-bed, or in a reclamation to be used for industrial purposes. However, the heavy metal concentrations would prevent its acceptance and use in a co-disposal landfill, such as the Paokahu tip. The

It was concluded that the sediments were not dissimilar to existing sea-bed material, and therefore disposal on the sea-bed could be continued with minimal adverse effects. The report also found that there would be no economic advantage to Port Gisborne to change from sea based disposal to land based disposal of the dredged material<sup>105</sup>. At the time of writing, no land based disposal sites have been implemented. This report effectively discredited Maori grievances about spoil dumping without addressing fully their concerns. The logic that land-based disposal was difficult and expensive was allowed to over-ride the iwi suggestion that the disposal was culturally inappropriate. Again, this indicates what type of priorities are successfully negotiated under the RMA.

### **Port Gisborne's capital dredging application, 1998**

With the issuing of the coastal permit for maintenance dredging in 1993, the Port company has been able to maintain the 9.1m depth of the harbour basin that was established in 1967. In the late 1990s, however, Port Gisborne Ltd. applied to the GDC to carry out capital dredging to increase the depth of the harbour by 1.4m. The need for this new period of capital dredging was in response to increased trade from the port; the need to harbour larger boats – especially wood chip carriers – which float lower in the water, and to address general problems of overcapacity. Forestry now accounts for over 80% of the Port's trade and this is forecast to

<sup>103</sup> This theme is revisited in more substantial detail in Part III.

<sup>104</sup> Port Gisborne Ltd. 1998.

<sup>105</sup> *Ibid.*

increase as forests planted under the East Coast Project mature to a harvest age. The Port company anticipates an eight-fold increase in trade by the 2020<sup>106</sup>. However, this potential trade is restricted by its current facilities. The 9.1m deep harbour can only accommodate vessels up to 190m, and they can only be partly loaded as the channel is not deep enough for the vessels to float fully loaded<sup>107</sup>. Consequently, the Port sought to increase the depth of the harbour basin and the shipping channel by 1.4m, which would require the removal of approximately 500,000m<sup>3</sup> of surface sediments and papa rock. Regular maintenance dredging would also be necessary thereafter<sup>108</sup>. To obtain authority for the capital dredging and associated maintenance dredging, Port Gisborne Ltd. applied for a total of 14 resource consents. Submissions were received in response to 10 of these. In its application, the Port proposed three disposal sites for the spoil. The existing disposal site and a new site which was further away from the shoreline were proposed for spoil from capital dredging. The muddy sediments from maintenance dredging would also be disposed at the outer-site, while the sand-laden sediments from maintenance dredging were to be deposited at a proposed near-shore disposal site<sup>109</sup>. At the existing disposal ground, it was proposed to develop a reef from the dredged material.

These activities had the potential to significantly modify the marine environment, resulting in close attention from local iwi. TROTAK opposed the capital dredging and maintenance work proposed by Port Gisborne on several grounds:

- Dredging and subsequent dumping would impact upon the Bay's numerous wahi tapu sites (For example, anchor rocks from the seminal canoes).
- The near-shore dumping of sediment parallel to the Waikanae and Midway beaches in combination with the city sewage outfall would be of detriment to the environment. There was concern that the discharge from the outfall would be trapped in the vicinity of both beaches.
- The investigation into land-based disposal, as required by the 1993 resource consent for maintenance dredging, had not been given sufficient attention. In particular, it was believed that the consent application had failed to take into account the cultural, historic, and spiritual values of tangata whenua<sup>110</sup>.

In opposing the capital dredging, and more specifically the disposal of the spoil, tangata whenua recognised the importance of the port to the local economy. However, they were opposed to the suggested methods for disposal which they saw as a threat to local fisheries. The dredging was also opposed because the resultant material would have been transported out of the customary area of Ngati Oneone, whose rohe incorporates the harbour basin<sup>111</sup>.

<sup>106</sup> *Ibid.*, p9.

<sup>107</sup> *Ibid.*, p2.

<sup>108</sup> *Ibid.*

<sup>109</sup> Decisions of the Commissioners to hear resource consent applications for Port dredging – p19, 1998 (TROTAK SPJ 438).

<sup>110</sup> "Port Gisborne Ltd. - Capital dredging and maintenance." – B. Tupara, Te Runanga o Turanganui a Kiwa, to Gisborne District Council, 9.10.1998 (TROTAK, SPJ 437).

Again, the hearing committee decided to recommend the Minister of Conservation to grant the restricted coastal activity permit to the Port company (subject to conditions). The Minister of Conservation consequently approved the permit on 22 June 1999 for five years, and reiterated the conditions laid down by the hearing committee. The conditions included a requirement that dredge material was to be spread out evenly over the disposal grounds, rather than in one mound. Another condition related to the establishment of a liaison committee – with tangata whenua representation – to monitor disposal practices. Tangata whenua had advocated for both of these conditions, so it may appear that their concerns were adequately incorporated into the decision. Another concession to tangata whenua aspirations related to the location of the dump site for dredged material. Deposition of the dredged material at the existing disposal site was to be of bedrock material only, because this would retain the papa rock within the rohe of Ngati Oneone. It was also concluded that the deposition of muddy or sandy material at the existing disposal site would have a detrimental effect on the Temoana reef, a traditional fishing ground for local iwi. Once again, however, the broader cultural aspirations of the objectors had been given less attention than the economic ‘necessity’ of an expanded Port. In arriving at the decision to permit capital dredging, the social and economic importance of the port became the primary issue for the hearings committee<sup>112</sup>. Overall it was concluded that the proposed activities were in the best interests of the city and the region.

Some tangata whenua groups initially decided to appeal the decision to the Environment Court. However, TROTAK reached an agreement with Port Gisborne whereby their concerns would be addressed through the liaison group<sup>113</sup>. The purpose of the liaison group is to over-view the implementation of the consents and the monitoring programmes for the capital dredging and disposal of the material, while ensuring local input from tangata whenua and recreational users. Tangata whenua have two representatives on this committee. It remains to be seen whether the liaison group will effectively address the concerns of local iwi. While a more substantial account of the local impact of the RMA is provided in Part III, on the basis of the few examples provided in this section, it can be seen that local Maori seldom obtain resource management decisions which reflect their objections to resource consent applications. Although Maori were *involved* in the decision-making on dredging and spoil deposition as never before, the *outcome* of this involvement is not necessarily an improvement on the time when the GHB simply applied to the Ministry of Transport for permission and inevitably received it.

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<sup>111</sup> Decisions of the Commissioners to hear resource consent applications for Port dredging – 1998 (TROTAK SPJ 438).

<sup>112</sup> *Ibid.*, p12.

<sup>113</sup> “RMA 2081/98. Te Runanga o Turanganui a Kiwa v Gisborne District Council.” – B. Turpara, Kiwa Consultants, per TROTAK, to Executive Officer, Environment Court, 23.4.1999 (TROTAK SPJ 437).

## 7.3 Water extraction for irrigation

An environmental issue of particular concern to Rongowhakaata has been the use of Te Arai River as a source of water for irrigation. Although other rivers have been used for this purpose, Te Arai is the focus of this section because water has been taken from it at a level which has impacted significantly upon customary fisheries. In traditional times, the river was a bountiful source of whitebait, herrings and eels and was proudly nurtured by Rongowhakaata iwi<sup>114</sup>. Today, however, the river is seldom used as a fishery because its flow has been reduced to the point where sediment is not flushed from the river and nutrients have accumulated in almost stagnant pools.

Te Arai River, a western tributary of the Waipaoa, has a total catchment area of 189km<sup>2</sup>. This area has a permeable and fertile subsoil which is particularly suited to horticulture and orcharding<sup>115</sup>. As a result, the valley contains 110ha of horticulture, with 88ha of pasture and process crops. The horticultural and cropping uses of this land are dependent upon irrigation. The bush in the headwaters of the catchment has remained, so the quality of the water is potentially higher than in other rivers and streams in the Gisborne district which carry more sediment. Historically, therefore, Te Arai river has been used extensively for its clean water supply. Gisborne City has sourced its potable water from the catchment – near the 1050ha of native bush in the headwaters – reducing the potential downstream flow. Water is piped to Manutuke, then across to Gisborne. In 1905, the *Waingake te Arai report* was adopted, which saw the first external water supply to reach Gisborne in 1908. Six years later, it was apparent that this water supply was insufficient because of drought conditions. The flow of Te Arai declined significantly until another source was adopted. It was not until 1947 that an alternative source – the Mangapoike Dam and pipe line – reached completion<sup>116</sup>.

### The demand for, and impact of, water extraction

The Gisborne City Council's use of the river, alone, would commonly lead to 100% extraction of the flow during periods of drought and low flow. As the Gisborne City Council was using water from Te Arai River prior to the introduction of the Water and Soil Conservation Act 1967 (WASCA), the abstractions were permitted to continue on the basis of a notice of existing use in 1969<sup>117</sup>. If the Council had sought a permit for its extraction after the implementation of the WASCA, its take would have been reduced, but the notice of existing use allowed it to carry over its previous allocation of water. At about the same time as the enactment of the WASCA, other uses were being found for Te Arai water. In the 1960s, agriculture

<sup>114</sup> Pers. comm. Stanley Pardoe, Darcy Ria and George Ria.

<sup>115</sup> ECCB 1987.

<sup>116</sup> "Gisborne waterworks." – no date (PBCB 5/9/2).

<sup>117</sup> ECCB 1987, p28.

and horticulture intensified in Te Arai valley. With the arrival of the Watties cannery to the region in the 1950s, cropping expanded rapidly on the plain and, eventually, arable and horticultural land uses increased in the valley of Te Arai. Local conditions had changed markedly and the decision to roll-over the *status quo* conditions for the City Council's water take was misplaced. In relatively quick time, the demand for irrigation water began to exceed the potential supply from the river. Rationing of river water was implemented in 1969<sup>118</sup>, but with the demand steadily increasing, it was soon recognised that a more formal system of management was required. In some ways, this recognition was belated: about the same time, farmers in the valley had committed themselves to dramatically increasing their production of peas for Watties, requiring even more irrigation water<sup>119</sup>.

Figure 7.5 – Water extraction by pump



Water extraction from Te Arai was regulated through pressure meters and gauges. When the flow fell below 272,000l/hr, pumping for irrigation was reduced. This restriction, however, was evoked at the discretion of the PBCB and, on many occasions, the Board did not exercise its discretion quickly enough<sup>120</sup>. Water from Te Arai River became an over-allocated resource: by 1970, a maximum of

7.12m litres per day had been allocated to local farmers, but the recommended maximum take from the river was only 6.54m<sup>121</sup>. The latter value was, in any case, set far too high because it was very close to the *actual* flow in the river during summer months<sup>122</sup>. At times, therefore, water was taken by downstream users at a quicker rate than the replenishment rate of the river. This deficit meant that the depth of the river noticeably declined and, in some places, Te Arai would be reduced to a series of unconnected pools.

By the late 1970s, there was much local and Maori concern about the impacts of such extreme levels of water extraction from the Te Arai River. At first, these concerns related more to the potential impacts on agriculture rather than on the river itself. With the flow rate in the river greatly reduced over summer, the possibility of

<sup>118</sup> "Water problems looming for Te Arai valley area." – Gisborne Herald, 14.8.1969 (PBCB 30/14).

<sup>119</sup> "Water allocation. Te Arai River." – I.E. Jones, Chief Engineer, to Water users on the Te Arai River, 22.11.1972 (PBCB 2/19/1).

<sup>120</sup> *Ibid*.

<sup>121</sup> "Water usage on the Te Arai River." – Handwritten report, 10.12.1970 (PBCB 2/19/1).

<sup>122</sup> "Water allocation. Te Arai River." – I.E. Jones, Chief Engineer, to Water users on the Te Arai River, 22.11.1972 (PBCB 2/19/1).

saline intrusion from the tidal reaches of the river was significant. Concerns over salinisation of the river were first voiced in 1970 and, despite improvements in the management of the river, these concerns remain today. Investigations into the use of saline water for irrigation were carried out in 1982<sup>123</sup>. Salinity greater than 1500ppm is considered excessive but the PBCB recommended that 'trickle' irrigation and monitoring of the salt accumulation in the plant root zone should not prevent the use of the river for irrigation purposes<sup>124</sup>. This illustrates the prevalent attitude towards the river. In times of water shortages, alternative methods of irrigation were investigated rather than a reduction in the level of extraction. If saline water could be used, then even it was exploited. It was considered essential to obtain a sufficient quantity of water for the increase in horticulture. Little attention appeared to be given to the impacts this water use had on the environment.

While the results of the study did not specifically indicate that the saline-fresh water interface had migrated upstream, the possibility of this was inferred from the data, leading to a call for better management of the water resource. Insufficient data was gathered about the migration of the salinity interface because it was assumed that this interface was located "quite a considerable distance downstream of [the] last permitted take, [and] therefore [led to] no impact on users"<sup>125</sup>. The impacts of salinisation were considered only with respect to the impact on the water takes, not the river environment itself. Downstream of the 'last permitted take' were a number of fisheries of customary importance to Rongowhakaata. While there was potential for the extension of the saline zone to affect eel and whitebait fisheries, these fisheries would have been more significantly transformed by the much reduced flow in the river. When the river's flow reduced to the point where it took on the appearance of a series of still-water pools, water temperature would rise perceptibly with dramatic consequences for aquatic life. Elvers and whitebait, particular, are reasonably intolerant to such temperature increases.

Over time, Te Arai was seen to become more silt laden, its bed became muddier and pesticide residues and other forms of water pollution increased – the same amount of sediment had to be carried by an ever decreasing volume of water and, at the same time, runoff from horticultural spraying had increased in the catchment. There were several point sources of pollution which, in conjunction with the low flow, contributed to the gradual destruction of fisheries in the river. Several water rights were authorised to discharge waste into small tributaries of Te Arai. These permits allowed the discharge of piggery, dairy, and winery waste water<sup>126</sup>. The catchment board also admitted that the increase in horticultural and agricultural land uses in the catchment resulted in increased erosion and nutrient inputs into the river, which also transformed water quality<sup>127</sup>. Moreover, the low flows reduced the

<sup>123</sup> Heslop 1982, p3.

<sup>124</sup> *Ibid.*

<sup>125</sup> Pers. Comm. Ruth Corbett, Water Resources Officer, GDC, 10.5.2000.

<sup>126</sup> ECCB 1987, p30.

capacity of the river to flush out toxins and sediment, with an additional impact on water quality. A contaminated and, effectively, sterile sludge built up behind Pyke's weir – an obstruction which, itself, had been established to facilitate irrigation<sup>128</sup>.



Before 1991, water takings were regulated under the WASCA which specified that abstractions should not lead to “destruction of normal aquatic life by toxic substances, altered pH or by temperature or pollution”. The abstraction of such large volumes of water from Te Arai had a significant impact on the river, and the decrease in the flow indeed led to the alteration of aquatic habitats. During the 1970s, however, the PBCB did not adequately study these transformations. It had not evaluated the threshold levels of substances toxic to aquatic life in the river, so it had no factual basis from which to reduce the abstraction of water nor to reduce the spraying of chemicals close to the river<sup>129</sup>. While the PBCB suspected that reduced

flow and decreased water quality was affecting whitebait, eels, and mullet, it completed little in the way of monitoring to prove these effects.

Moreover, despite its suspicions, the Board attempted to convince the Ministry of Agriculture and Fisheries (MAF) that “there are no large scale irrigation projects...anywhere in this board's district, where the abstraction of water would adversely affect fresh water fisheries<sup>130</sup>.” From subsequent correspondence, it appears that the catchment board was generally uncooperative with MAF officials who had requested to be informed of any water right applications in the area. After the enactment of the Fisheries Act 1983, the Ministry was responsible for commenting on water right applications in relation to adverse environmental impacts on fisheries<sup>131</sup>. However, it appears that the PBCB did not always pass on the relevant information to MAF. Officials from the Ministry became so frustrated with the

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<sup>127</sup> *Ibid.*

<sup>128</sup> “Water quality. Te Arai River at Pyke's Weir.” – 19.11.1976 (PBCB 5/9/2).

<sup>129</sup> I.E. Jones, Chief Engineer, to Director, Fisheries Research Division, MAF, 7.3.1979 (PBCB 5/9).

<sup>130</sup> “Reference your letter 17<sup>th</sup> October 1975.” – I.E. Jones, Chief Engineer, PBCB, to Senior Fisheries Management Officer, Fisheries Management Division, MAF, Wellington, 28.10.1975 (PBCB 5/9/2).

<sup>131</sup> “Water right application notification.” – J. Irwin, Statutory Planner, MAF Fish, Nelson, to S. Djack and B. Turnpenny, ECCB, 1.5.1989 (GDC 360-01).

PBCB that it reminded the Board of its duty to “consult the appropriate authority controlling fisheries and wildlife where they are likely to be affected<sup>132</sup>.” It was within MAF’s mandate to intervene to protect Maori fisheries – indeed, assessing whether there was a need for this was the Ministry’s intention<sup>133</sup>. Without adequate knowledge passed on to the Ministry about environmental effects of irrigation, MAF never intervened.

In 1989, the Gisborne District Council (GDC) – which had by that time superseded the catchment board – contended that the river was now unable to sustain a trout fishery, but it could sustain some native fish populations<sup>134</sup>. It was also noted that locals would catch whitebait, eels and herrings in the lower reaches of the river. Further research into the fisheries of Te Arai River was undertaken in 1989 by the Department of conservation to provide data on the existing fish species and to consider the influence of water abstraction on fish distribution<sup>135</sup>. The research concluded that there was a significant variation in the abundance of Cran’s bully and eel at sites above and below the City Council intake, with the lowest numbers sampled from sites directly above and below the intake. Higher densities were found 1km downstream as a result of permanent flow and colonisation.

As a result of the research, the Department of Conservation recommended that a minimum flow of 25l/s should be maintained below the City Council intake at all times. This was in contrast to the 10l/s which had been adopted by the PBCB and later the GDC. It was also recommended that abstractions in the lower Te Arai River cease when the flow at Pyke’s Weir falls below 30l/s – again, this threshold was well above that which had been set by the Board. The report concluded that a fish pass should be provided to assist upstream passage past the intake for young eels, galaxids, bullies and torrent fish. This study did not assess the impact of the abstractions in the lower river, but this was recommended for further research<sup>136</sup>. While the Catchment Board and the GDC believed that the recreational and fishing potential of the river was low<sup>137</sup>, the Department of Conservation suggested that Te Arai was a regionally important fishery. It concluded that it was “one of the few remaining East Coast Rivers with unmodified headwater catchments. It supports whitebait and eel fisheries, has high water quality and is sufficiently close to Gisborne to be of significant amenity value<sup>138</sup>.” The Catchment Board’s downplaying of the value of the river as a fishery suggests that it was not a good steward of the water resource.

<sup>132</sup> Senior Fisheries Management Officer, Fisheries Management Division, MAF, Wellington, to PBCB, 17.10.1975 (PBCB 5/9/2).

<sup>133</sup> “Water right application notification.” – J. Irwin, Statutory Planner, MAF Fish, Nelson, to S. Djack and B. Turnpenny, ECCB, 1.5.1989 (GDC 360-01).

<sup>134</sup> Water Resources Planner, GDC, to Otago Catchment Board, 29.7.1989 (GDC 373-03).

<sup>135</sup> Stephens 1989.

<sup>136</sup> *Ibid.*, p7.

<sup>137</sup> ECCB 1987.

<sup>138</sup> Stephens 1989, p1.

### Belated water planning for Te Arai

Although the problem of over-allocation had become evident in 1970, full attempts at regulating the abstraction of water from Te Arai were not made until 1987. The failure of the Catchment Board to act in this time represents a failure of the WASCA to be implemented by the Water and Soil Conservation Organisation. It also represents the contradictory nature of the act itself. The WASCA required catchment and water boards to take into account the needs of industries, communities, water supply, and all forms of water based recreation, fisheries and wildlife habitats<sup>139</sup>. However, the Act was based on an awkward balancing of economic and environmental goals and did not specify whether Maori cultural values towards the water system were to be taken into account as a special requirement<sup>140</sup>. Moreover, the act did not make water allocation plans – the strongest mechanism for water resource management of rivers under the WASCA – mandatory for catchment boards. This mechanism only received “strong statutory support<sup>141</sup>,” whereas, in the case of Te Arai River, there was a pressing need to force the Catchment Board to adopt a better form of management. Although the PBCB discussed the possibility of implementing a full water allocation plan for the river in 1972, it was not until 1987 that this became a reality.

In 1973, the Director of Soil and Water Conservation wrote to all regional authorities commenting on the need to implement water allocation plans. It was suggested that a principal goal under the WASCA was to:

...make provision for the maintenance of adequate flows to meet not only the consumptive and non-consumptive uses of water and the problems of waste disposal but also the needs of recreational users, fish and wildlife. These latter aspects become increasingly important as rural or urban demands on water reach a level approaching the yield of the resource<sup>142</sup>.

This statement appears to apply directly to the circumstances surrounding water abstraction on Te Arai and, indeed, it was interpreted in this way by the PBCB. Yet, because the membership of the Board reflected fully the rural interests who profited from irrigation<sup>143</sup>, it was most difficult for PBCB staff to convince their superiors to implement a water allocation plan in this instance. A stronger statutory commitment to water planning was needed if the PBCB was ever to care for Maori fisheries in Te Arai River.

In the early 1980s, it was recognised that the irrigative uses of Te Arai River were not sustainable and action was finally taken by the Catchment Board in an attempt

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<sup>139</sup> ECCB 1987, p12.

<sup>140</sup> Roche 1994.

<sup>141</sup> *Ibid.*, p10.

<sup>142</sup> “The preparation of water allocation plans.” – A.W. Gibson, Director, Soil and Water Conservation, Wellington, to all District Commissioners of Works, 31.7.1973 (PBCB 2/91/2).

<sup>143</sup> Refer to Chapters 4 and 5.

to control the abstraction of water. An interim policy was implemented in 1982 in advance of additional research which was required for a full allocation plan. The interim resolution gave priority to farm and domestic supplies and existing water rights. Any new water rights applications were considered in the order they were received; essentially a first-in-first-served allocation up to a predetermined safe level of abstraction, and were issued for a two year term<sup>144</sup>. During drought conditions the Board would restrict the abstraction of river water, and encourage the use of groundwater as a supplement. The interim policy was modified in 1984 with the introduction of a two-tier system because it was believed that further abstractions would endanger the businesses of existing users. As previously, therefore, the requirements of *irrigators* were the focus of this policy, rather than the requirements of the river. The first tier of rights was for those applications to take water which had been received after 1984. Permit holders in this tier were restricted to taking water during relatively high flows. Those who possessed a water permit before 1984 were allowed to take water during both low and high flows<sup>145</sup>. While this system prevented the escalation of water deficits in the summer, it did nothing to address the existing problem of over-allocation. In its first year of operation, the policy could not prevent water flows reaching critical levels for 18 days of the year<sup>146</sup>.

As a result of the failure of the interim policy, the *Te Arai water allocation plan* was developed from 1987 to 1990 to better manage the 24 abstraction rights along the river. The goal of this plan was "the wise allocation of the water resources of the Te Arai catchment in such a way that will seek to provide the most efficient, fair, sustainable and beneficial use for present and future generations<sup>147</sup>." This wording reflected the objectives of the WASCA – it did not necessarily answer Maori concerns about the cultural integrity of traditional fisheries. The plan also sought to encourage the multiple use of water as both a recreational and commercial resource, something which was not provided for under the interim policy. In order to "maximise the utilisation of the Te Arai Water resources while ensuring the sustainability of the resource<sup>148</sup>," a minimum water quantity standard was established and rationing and rotation systems were also implemented. The tiered approach to permits remained and, during low flows, the total water allocation was limited to 130l/s whereas the total allocated between 1987 and 1990 was 173l/s. When the water flow dropped beneath a safe threshold, a rotation and reduction system was implemented. At all times, there was to be a minimum residual flow of 10l/s in the river. If the water level fell to this level, then all water rights would be suspended<sup>149</sup>. While

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<sup>144</sup> Heslop 1983, p5.

<sup>145</sup> Water Resources Planner, GDC, to Otago Catchment Board, WP/800 410 7/7/1, 29.6.1987 (GDC 373-03).

<sup>146</sup> Heslop 1983, p3.

<sup>147</sup> ECCB 1987, p10.

<sup>148</sup> *Ibid*, p12.

<sup>149</sup> "Water management." – Planning and Regulatory Committee, GDC, to Chief Executive, GDC, 12.2.1998 (GDC 98/067).

this should, theoretically, prevent water deficits in the future, 10l/s is a dramatically reduced flow from that which existed in Te Arai before the 1960s.

In order to implement the allocation plan, a committee was established to liaise with the Catchment Board and, later, with the GDC<sup>150</sup>. This committee was comprised of holders of permits for water abstraction, and its key function was to ascertain the total water requirement for horticulture, and to fairly ration water in times of drought. Because the committee was asked to oversee the implementation of allocative mechanisms, it became a powerful voice for the control of the river. As far as can be ascertained from Council correspondence, there was no intention to guarantee representation of tangata whenua on this committee. This has deprived local iwi of an opportunity to have their requirements incorporated into resource decisions. The management of the river, therefore, remains on the basis of what is best for horticulture rather than what is best for the river and its traditional fisheries.

### Summary

The Crown's management of water resources and foreshore areas has required the Waitangi Tribunal's attention on many occasions. The *Mohaka River report*, for example, criticised the way in which s 21 of the WASCA abrogated existing rights to river water and gifted them to the Crown. The WASCA and its amendments in 1971, 1973 and 1981 did not allow for the exercise of kaitiakitanga by Maori nor for their participation in decision-making<sup>151</sup>. It was concluded, therefore, that the Act impacted upon the tino rangatiratanga of tangata whenua over water resources. The Waitangi Tribunal has also found that dividing rivers into units of management under English common law was a foreign concept to Maori<sup>152</sup>. Rather than believing that rivers can be divided into riverbed and foreshore, in Maori terms the river is a resource; a single indivisible entity, which cannot be divided for management purposes. Similarly, the tribunal has been asked to comment upon the validity of the Crown's assertion of management powers over foreshores in the coastal marine area<sup>153</sup>. In respect of rock and water extraction in the present casebook area, there are several examples which reinforce the claim that the Crown either over-stepped its Treaty mandate in these areas or failed to prevent their mismanagement by catchment and harbour boards.

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<sup>150</sup> *Ibid*.

<sup>151</sup> Waitangi Tribunal 1992, p59-60.

<sup>152</sup> Te Ika Whenua Rivers Report 1998, p337; Refer also to the Mohaka River Report 1992 and the Whanganui River Report 1999.

<sup>153</sup> Refer, for example, to Boast 1996; Boast and Edmunds 1996; Ward 1999.

## Alterations to wetland habitats

Pullar's map of pre-human vegetation on the Gisborne plains – Figure 2.2 on page 15 – depicts an extensive series of what he called raupo swamps. Many of these wetland areas would not have been solely characterised by raupo. Indeed, they ranged from fresh and brackish raupo areas, to salt water marshes and sedge fields, and to estuarine mudflats. Today, wetlands are predominately restricted to such tidal and sub-tidal estuarine environments as the Wherowhero Lagoon. At one time, however, there appears to have been as many inland freshwater swamps as there were lagoons on the coastal margin of the casebook area.

The historical variability in the course of the Waipaoa, Te Arai and Taruheru rivers (Chapter 3), led to the creation of substantial swamps on the Gisborne plains. Former river beds were filled by rainwater and were gradually colonised by indigenous flora and, of particular relevance to this report, many types of kai Maori. Today, evidence of these

swamps in former river beds is hidden by urban and rural development. While even “[m]ost of the land now called Kaiti was then very swampy and wet<sup>1</sup>,” many of these areas have disappeared under the European model of environmental management and land use.

The plains on both sides of the Taruheru were particularly swampy and, on the western side of the Gisborne plains:

There were...extensive swamps or wetlands, particularly on the western margins of the valley between Manutuke and Waituhi. Abandoned river courses would also be important swamps or wetlands, with examples occurring at Matawhero, Wærenga a Hika, and the old course of the Te Arai. These would have been important reservoirs of sizeable eel populations. Migration routes of eels, of critical importance in mass harvesting considerations, would have been along the western margin of the valley from the Waipaoa estuary to the large swamps north-west of Manutuke<sup>2</sup>.

Pullar and Penhale also point to the significant number of swamps in old river beds of the Waipaoa<sup>3</sup>. They highlight the drainage of one of these swamps – Torries Lagoon – in the 1890s, but there are few records of the destruction of these habitats of importance to local Maori. Jones suggests that many of the kainga of Maori in traditional times were located alongside wetlands because they provided a reliable source of such kai as eels, black pipi and freshwater lobsters<sup>4</sup>. Swamp and lagoon environments would also have yielded many of the craft fibres which, today, require extensive exploration, even requiring some species to be imported from other rohe.

Today, few of the inland swamps remain; they have been drained to make way for farmland or have been starved of water by the Waipaoa River flood control scheme and other such developments. Substantial drainage projects were carried out on the flats, no better exemplified by the Whatatuna channel which drains a significant area of former swamp country. From a tangata whenua viewpoint, the most objectionable of the wetland transformations are relatively recent. The drainage of the Awapuni lagoon in the late 1950s was supposedly settled in the 1990s when the Crown granted to Rongowhakaata and Te Aitanga-a-Mahaki the Awapuni station farm. The history of this drainage and the Crown actions to secure title which preceded it deserves a wider hearing because a number of Crown omissions and acts in defiance of Treaty principles have not been declared in public. Another recent destruction of wetlands which is assessed in this Chapter is the narrowing of the Waikanae Creek channel through refuse disposal and subsequent reclamation. All these examples highlight the cultural disdain of Crown agents and local authorities for wetland environments and associated Maori values. Moreover, they all represent

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<sup>1</sup> Mackay 1927, p125.

<sup>2</sup> Jones 1988, p6.

<sup>3</sup> Pullar and Penhale 1970, p424.

<sup>4</sup> *Ibid.*, p44.

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the failure of the Crown to incorporate Treaty principles into environmental legislation so to protect Maori interests.

*Figure 8.1 – The head of the Awapuni Moana and Waikanae Creek in relation to the Borough of Gisborne, 1942<sup>5</sup>*



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<sup>5</sup> Source: Gisborne Museum and Arts Centre.

## 8.1 Drainage of Awapuni Moana

The drainage of the Awapuni Moana which was variously known as Kopututea<sup>6</sup>, Awapuni Lagoon or Awapuni Roto represents the most obvious despoilment of a wetland in the Gisborne casebook area. Figures 2.2 on page 15, 4.3 on page 83 and 8.2 on page 216, indicate that, historically, the Awapuni Moana was a significant component of the hydrological landscape in Gisborne. It was also a significant resource space for tangata whenua and contained many types of kai Maori and numerous species of plants which were used in traditional crafts. Pressure from local authorities and private individuals to obtain a Crown grant to the lagoon compelled Maori landowners around the lagoon to apply for a declaration of customary title in 1914. The Native Land Court did not hear this case until 1928, whereupon the judge ruled against the application on the basis of insufficient proof to displace Crown title to 'an arm of the sea.'

Later, in 1953, the Waipaoa River flood control scheme was used as an excuse by the Crown to legislatively secure title to the lagoon under the Reserves and Other Lands Disposal Act 1953. The Department of Lands and Survey later reclaimed the lagoon and converted it to a dry stock farm. This land was returned to Rongowhakaata and Te Aitanga-a-Mahaki in the 1990s in Crown recognition that it had violated Maori rights. This Section contends, however, that the return of a farm in place of a biodiverse wetland represents inadequate reparation. Not only was a natural taonga destroyed, Maori were dispossessed of nearly 40 years of use of valuable accretion lands at the margin of the lagoon. In this latter respect, new information has come to light about the shrinkage of the lagoon between the 1928 hearing and the 1953 act of parliament. Crown agents knew of these changed conditions but did not inform Maori owners of land adjacent to the lagoon of their right to claim for accretions. Rather, the Crown deliberately took title to lands to which it should not have been eligible.

### Traditional use of Awapuni Moana

It would be wrong to ascribe to the Awapuni Moana a static description of its character as a resource space for Maori. The lagoon possessed a dynamic ecology which matched its dynamic morphology. The morphology of the lagoon was historically variable, and it changed configuration in relation to the position of the Waipaoa River and its mouth. At times, the lagoon was effectively the river bed of the Waipaoa, which exited to the sea to the north of the lagoon through what is today the Waikanae Creek<sup>7</sup>. In other ages, the Waipaoa would enter the lagoon and exit through the sand dunes about mid-way between the present river mouth and Gisborne township<sup>8</sup>. Even within the time-frame of colonial history, which is relatively

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<sup>6</sup> This name is usually given to the stream that connected Awapuni Moana to the Waipaoa River. At times, however, the name was extended to the lagoon itself. Refer to the Williams and Graham Survey Map 1868 on page 19.

<sup>7</sup> Engineer, PBCB, to Chairman, PBCB, 7.10.1952 (PBCB 2/21).

brief in terms of geological evolution, the lagoon was seen to change its configuration on many occasions:

A variety of early maps placed before the Court in evidence indicate that the lagoon opened to the ocean at various points along Poverty Bay at varying times in the history recorded by those maps. On other maps, the lagoon is shown forming part of the Waipaoa River, and in later maps, is shown to open into the Waipaoa River before the Waipaoa meets the sea<sup>9</sup>.

[The] Waipaoa River roamed fairly freely across all this area and the lagoon itself would have different exits into the sea at different times and after different storms. At one time it was given the name Kopututea and, as I understand it, it was in effect possibly even a river at that stage. At other stages Kopututea referred only to the outlet of the lagoon to the sea<sup>10</sup>.

From 1841 to its demise in 1953, the Kopututea connected Awapuni Moana to the Waipaoa. As will be shown, the main issue of contention in the colonial history of this hydrological system was the extent to which high tide waters moved up the Waipaoa, through the Kopututea and into the lagoon. While the controversy about whether the Moana was Crown foreshore by virtue of saltwater intrusion is relatively well known, to this date there has been insufficient attention to the influence of the Waipaoa River on the lagoon. As is shown below, floodwaters containing a high proportion of sediment regularly affected the lagoon between its survey in 1924 and the enactment of the Reserves and Other Lands Disposal Act 1953. Consequently, accretion at the lagoon's edges substantially reduced the area under saltwater influence – The 730 acres to which the Crown assumed title in 1953 was a gross exaggeration of the lagoon bed beneath the boundary of the high water mark.

It is without doubt that historical changes in the relationship between the Waipaoa and the Awapuni Moana led to variation in the species composition of the latter over time<sup>11</sup>. Yet, with the interchange between sea and freshwater, it is likely to have been at all stages of its existence a highly biodiverse environment containing many of the resources which Maori revere. Around the time of European settlement, the lagoon was highly regarded as a source of kai. Fowler, for example, recounted the many thousands of waterfowl which inhabited the lagoon and were regularly harvested by Maori from throughout the district<sup>12</sup>. One report suggests that Awapuni Moana was a “a source of eels, wildfowl and other fresh-water foods for the inhabitants<sup>13</sup>.” These other types of kai included “kakahi, kuha ngupara (freshwater shellfish) and patiki mohoao (black flounder)<sup>14</sup>.” The Awapuni Moana was a prolific

<sup>8</sup> District Engineer, Public Works Department, to Engineer in Chief, Public Works Department, 14.7.1936 (M 4/1877).

<sup>9</sup> 141 Gisborne MB 219-226, 13.3.1997 (GisMLC 91632).

<sup>10</sup> Evidence of E. Barber. Minutes of the a hearing dated 31.7.1992, p32 (GisMLC 91632).

<sup>11</sup> Pullar 1962.

<sup>12</sup> Fowler 1974.

<sup>13</sup> “How Paokahu lost its lagoon.” – New Zealand Listener, 12.6.1980 (GisMLC 91632).

<sup>14</sup> *Ibid*.

source of the black pipi – a delicacy which was highly prized by local Maori, but which has since become all but extinct in Turanganui-a-Kiwa<sup>15</sup>.

Figure 8.2 – Panorama indicating the extent of Awapuni Moana in 1887<sup>16</sup>



The natural abundance of the lagoon meant that it was used extensively by Maori people to meet their food gathering needs:

In the old days going back in the 1800s...the Awapuni Lagoon was used by many people and many tribes, and many hapus and they used the lagoon for resources. In my knowledge of resources and lakes there is possibly only two things that used to live in the lakes, tuna...and carp...In this Awapuni Lagoon they [had these and] even resources out of the sea, crayfish, flounders. So that was an important part of our people's diet<sup>17</sup>.

As a result of the popularity of the lagoon as a source of kai, "at one stage there were 12 or 13 kainga around the lake. The idea of those kainga being there was to protect the kaimoana<sup>18</sup>." These acts of 'protection' suggest that the lagoon was managed carefully both ecologically and politically as a taonga. It has been accepted by the Maori Land Court that most of these kainga belonged to hapu of Rongowhakaata, but it is also true that people from other iwi were allowed to use the lagoon.

The difference between use rights in the lagoon and dwelling next to the lagoon was keenly contested in the Native Land Court around 1870. The first passage of the blocks around Awapuni Moana through the Land Court provides evidence which attests to the importance of the lagoon as a resource gathering space. A review of these hearings in 1993 concluded that:

<sup>15</sup> Pers. comm. Darcy Ria and Stanley Pardoe.

<sup>16</sup> **Source:** Gisborne Museum and Arts Centre. The Awapuni Moana is located at the right of the photograph, with the Waimata River in the left-hand foreground.

<sup>17</sup> Evidence of P. Smiler: "Extract of minutes from 133 Gisborne MB 186-236, 8.6.1992." (GisMLC 91632).

<sup>18</sup> Statement of E. Barber: "Extract of minutes from 133 Gisborne MB 98-118, 6.3.1992." GisMLC 91632.

It is recognised then, from the way that the investigations of 1869 dealt with the land around the lagoon, that there was a strong Rongowhakaata influence, that Rongowhakaata had claim to ahi kaa in 1840. There is strong reason by the siting of dwellings in that lagoon shore (and given the strong evidence in 1867 of the tie with the lagoon for fish) that those Rongowhakaata people had a form (as it were) of ahi kaa in respect of the lagoon... That the group recognised by the court in 1869 as primarily Rongowhakaata, lived by the lagoon, for the primary purpose of feeding and protecting the resource in the lagoon, it is reasonable by Maori custom that they were the ones over whose lands 'outsiders' crossed to get to the lagoon to fish<sup>19</sup>.

At these hearings a number of hapu asserted their historical mana whenua around the lagoon. This land was strategically important, representing not only a direct link to Awapuni Moana, but also access to the sea. All hapu were, therefore, keen to secure their right to own the land. At the same time, however, there was universal acknowledgment of common usage of the lagoon. The question for debate, therefore, was not who used the lagoon, but *who gave authority* to use the lagoon. Reviews of these early cases clearly state that the important units of political management in the control of Awapuni resources were hapu rather than iwi<sup>20</sup>. There was as much competition amongst hapu of Rongowhakaata as there was conflict between hapu of that iwi and hapu of Te Aitanga-a-Mahaki.

Another issue of importance for this project is the significance given to fishing in the Awapuni Moana as evidence of customary occupation of the land around it. One claimant, for example, stated that "one or two places [had] been occupied by him for the purpose of fishing in Te Awapuni Lake<sup>21</sup>." In the Land Court archives relevant to this area, there are scores of examples of such simple evidence as this. In these hearings, witnesses accounted for their use of the lagoon for fishing in the hope that this would prove a right to own land surrounding the lagoon. At the north/east end of the lagoon a significant debate emerged between hapu of Rongowhakaata and Te Aitanga-a-Mahaki about who should come to own the land there. Both iwi aspired to the land because it provided access to traditional fishing areas in the Bay, within Awapuni Moana and at the head of the Waikanae Creek.

This use of fishing as evidence of *ownership* may in part represent the corruption of tikanga Maori within the exigencies of the European judicial system of the Court. Yet, it also represents the inseparability of land and water in the thought of local Maori. While the Crown found it convenient to use categories like 'land', 'bed' and 'foreshore', local hapu clearly represented Awapuni Moana as a singular resource unit in these early hearings. As Dawson Pete was to contend much later in the Maori Land Court, "The lagoon and the Awapuni Blocks in Maori terms, pre Euro-

<sup>19</sup> "Extract of minutes from 134 Gisborne MB 118-130" – 18.12.92, Rota J (GisMLC 91632).

<sup>20</sup> Evidence of K. Smiler: "Awapuni Moana" – Application 91632, Hingston J (GisMLC 91632).

<sup>21</sup> 2 Gisborne MB 222-8, 2.7.1875 (GisMLC 91632).

pean, are the same thing, not distinguishable<sup>22</sup>...” A Land Court judge would later conclude that:

It can be accepted that the Maori saw in the lagoon the water and the food, but it can also be accepted, that those who had ahi kaa status in respect of the water and the resource also had such rights in the land that supported the water. There cannot be any artificial separation of tenure as there is in English law<sup>23</sup>.

As will be intimated below, the ultimate drainage of the Awapuni Lagoon represents the failure of European systems of law and environmental management to take into account Maori understandings of an integrated environment.

Much later, after the Crown had decided to return the former bed of the lagoon to Maori, the complex relationship between use rights in the lagoon and mana whenua around it was to prove difficult for the Maori Land Court judge who was called upon to decide the rightful owners of the land:

(a) Guide to establishing pre Treaty ownership is evidence before the Court in 1869 and 1880 – claimants argued that fishing claims by usage... [established] rights of customary use to the land... (b) But should the lagoon be found to belong to land bordering the lagoon OR was the lagoon a separate title... Those using the lagoon represented a wider class of people...who is the wider class? ... (c) While certain people lived around the lagoon others had the right to fish there. (d) Should the ownership of the resource mean ownership of the bed below it<sup>24</sup>?

The complexity of the relationship between customary ownership and occupancy in the 1870s made the case in the 1990s particularly difficult to decide.

While many gave evidence at the hearings in 1990, 1992 and 1997 relating to communal use of the lagoon, other submitters highlighted the fiercely competitive defence of fishing spaces:

I cannot see that any group around the lagoon would say yes come in. I would think that every group would hold its little boundary very tight as they held the coastal sea boundaries and that any other people would have to get special permission to come through and use those water rights...I do not accept as any argument whatsoever that everyone used them<sup>25</sup>.

It would be incorrect, therefore, to over-exaggerate the communal use of the lagoon. These matters would have been resolved through complex negotiations and

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<sup>22</sup> Evidence of D. Pere: “Extract of minutes from 134 Gisborne MB 118-130” – 18.12.1992, Rota J (GisMLC 91632).

<sup>23</sup> Determination of Rota J: “Extract of minutes from 134 Gisborne MB 118-130.” – 18.12.1992 (GisMLC 91632).

<sup>24</sup> Hand-written review notes of the 18.12.92 decision (GisMLC 91632).

<sup>25</sup> Evidence of P. Gordon in: “Extract of minutes from 133 Gisborne MB 98-118.” – 6.3.1992, Rota J (GisMLC 91632).

through the unravelling of mana, whakapapa, manakitanga and aroha. However, evidence from both the 1870s and the 1990s was sufficient to suggest that in pre-colonial times resource conflicts in relation to use of the lagoon *were* resolved. Privileges to the resources of the lagoon under tikanga Maori were positioned on a *continuum* between mana moana and use rights. Later, the European legal system would force the issue of authority over the lagoon into a *dichotomy* – owner/title : non-owner/no title.

Essentially, the question for debate was, “Is it a case of use or a case of being allowed to use it<sup>26</sup>?” It is beyond the mandate of this report to comment on the fairness of the decisions in the 1990s. The reason for reporting these debates is solely to suggest that, while it is retrospectively difficult to assess who had mana whenua over the area in question, it is certain that one type of exercise of this mana was to allow collective, pan-hapu use of the lagoon. These debates in the 1870s and 1990s reveal that the Awapuni Moana was regarded as a taonga by all Maori in Turanganui-a-Kiwa. While a complex web of historically granted use rights, customary ownership and occupation emerged around the lagoon, one thing remained constant – its immense value as a source of resources to Maori. In 1875, in recognition of this complex web of tikanga and privilege, the Native Land Court made a complex decision in regard to the northern/eastern end of the Awapuni Moana. Although Rongowhakaata were awarded ownership of most of the land around the lagoon, an 8ha inalienable fishing reserve was established at Waiohiorore for Te Aitanga-a-Mahaki<sup>27</sup>. This secured for the iwi access rights to the lagoon and to the nearby beach for fishing, and was viewed as a compromise to recognise the tribe’s former use rights in the lagoon.

At the southern/western end of the lagoon fishing was also used as evidence of ownership of surrounding land<sup>28</sup>. Hapu who dwelled south of the Waipaoa River mouth would cross the river and enter the lagoon to fish through the Kopututea<sup>29</sup>. In relation to the southern parts of Paokahu blocks, there were also many claims based on evidence of common use of the Awapuni Moana<sup>30</sup>. One kaumatua from Ngati Kaipoho suggested that Ngati Kaipoho, Ngati Maru and the people of Ripetata Kahutia “did common acts of ownership together<sup>31</sup>.” Interestingly, the Land Court judge accepted the evidence relating to common use of the lagoon, but he viewed this as an outcome of Ngati Maru’s mana moana<sup>32</sup>. Part of the exercise of

<sup>26</sup> “Extract of minutes from 133 Gisborne MB 98-118” – 6.3.1992, Rota J (GisMLC 91632).

<sup>27</sup> 2 Gisborne MB 222-8, 2.7.1875 (GisMLC 91632). The day after this reserve was established, the benefactors chose to split the 20ha in two: one lot of 4ha at the site and another at the mouth of the Waikanae Creek (Waiohiorore No. 2): “Waikanae and Waiohiorore Blocks.” – 2 Gisborne MB 229, 3.7.1875 (GisMLC 91632).

<sup>28</sup> “Extracts of minutes from 6 Gisborne MB 286-296, 28 August 1880, Gisborne, Judge Halse.” (GisMLC 91632a); “Paokahu Block. 6 Gisborne MB 286-296 28.8.80.” (GisMLC 91169).

<sup>29</sup> 9 Gisborne MB 116-117 – Rota J. Subdivision claims, Paokahu, 5.10.1883.

<sup>30</sup> “Extracts of minutes from 6 Gisborne MB 286-296. 28.8.1880, Gisborne, Judge Halse.” (GisMLC 91632a).

<sup>31</sup> “Paokahu Block. 6 GisMB 286-296, 28.8.80.” (GisMLC 91169).

<sup>32</sup> “Extract of minutes from 6 Gisborne MB 277-283. 27.8.1880, Gisborne, Judge Halse.” (GisMLC 91632a).

this mana was to permit neighbouring hapu to use Awapuni Moana, but this permission did not in any way detract from the status of this authority. Specific examples which were provided of common use included fishing, shellfish gathering and flax collection from the lagoon.

### **Competition to assert 'ownership' over Awapuni Moana**

The collective sharing of Awapuni Moana in pre-colonial times contrasts significantly to the competition to secure title to the lagoon from around the turn of the 20<sup>th</sup> Century. Prior to 1898, there is no commentary of Crown agents or private individuals attempting to claim title to the lagoon. The quantity and quality of access to the lagoon would have changed with the extinguishment of customary title over the land surrounding the lagoon and with the subsequent sale of some of this land. However, there remained many access points to the lagoon and, as far as is known, collective harvesting of the lagoon's resources continued to be the accepted practice<sup>33</sup>. Many pakeha came to use the lagoon as well as Maori, and it was used extensively by duck shooters and fishers of both cultures<sup>34</sup>.

This collective use of the resources of the lagoon was challenged in 1898 when lawyers for W.H. Cooper applied for a ten year lease of Awapuni Moana<sup>35</sup>. The stated intention of this lease was to use the lagoon for fishing in the summer months and then for commercial duck harvesting in the winter<sup>36</sup>. While no mention is made as to why a lease was required for these objectives, it can be assumed that Cooper wanted exclusive use to exploit the resources of the lagoon. Lands and Survey eventually received the request, only to forward it on to the Department of Marine because it believed that Awapuni Moana was subject to tidal flows<sup>37</sup>. Little progress was made with this claim and another request to Lands and Survey was made in 1907 to either sell or lease the lagoon<sup>38</sup>. Solicitors were engaged by the applicant and the application was again forwarded to the Department of Marine<sup>39</sup>. The involvement of the Department of Marine at this stage suggests that Awapuni Moana was predetermined by Crown agents as an arm of the sea. To this date, almost no evidence had been gathered as to whether the lagoon met the requirements of an estuary to which there could be Crown title – That Awapuni was an arm of the sea was assumed on the basis of hearsay and this assumption biased all subsequent Crown transactions in relation to the lagoon.

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<sup>33</sup> Secretary of Marine, to Director-General, Department of Lands and Survey, 1.4.1952 (M 4/1877)

<sup>34</sup> HM Customs to Marine Department, 9.3.1898 (M 4/1877).

<sup>35</sup> Marine Department, to HM Customs, Gisborne, 8.2.1898 (M 4/1877).

<sup>36</sup> HM Customs to Marine Department, 9.3.1898 (M 4/1877).

<sup>37</sup> "Awapuni Lagoon." – Department of Lands and Survey, Wellington, to Commissioner of Crown Lands, 24.3.1898 (L&S 8/96).

<sup>38</sup> "Awapuni Lagoon." – Commission of Crown Lands to Under Secretary of Lands, 4.11.1919 (L&S 8/96).

<sup>39</sup> Kane and Dunlop, Solicitors, to Minister of Marine, 28.4.1919 (M 4/1877).

In 1907, a Lands and Survey staff member suggested that "the Natives claimed it as a fishing ground under the Treaty of Waitangi. I believe the intention is to reclaim it. I should think section 147 of the Harbours Act [1878] would debar the Natives from getting a title<sup>40</sup>." The Chief Surveyor for the land district ordered a survey of the lagoon in relation to the request for a lease<sup>41</sup>. One month later, the surveyor declared that the lagoon was a tidal estuary and therefore fell under the provisions of s 147 of Harbour Act 1878<sup>42</sup>. Other than a survey, there appears to have been little research to determine whether the lagoon was, indeed, influenced by saltwater or whether it had been a saltwater estuary for a sufficiently long period of time. In 1949, extensive research was required to support this assertion and, even then, there was considerable doubt as to whether the ecological history of the Awapuni Moana reflected salt or fresh water. In 1919, the Marine Department stated that it had no record of the extent of the lagoon, its depth nor the extent of accretion at its margins<sup>43</sup>. Lands and Survey had previously transferred all its files from the survey to the Marine Department which suggests that this survey had been far too limited for the Chief Surveyor to declare the lagoon a tidal estuary in 1907.

The Maori owners of the land around the lagoon applied to the Maori Land Court for an investigation of the title of Awapuni Moana in March of 1914. On the basis of presumed tidal influences on the lagoon, the case was effectively dismissed in early 1918<sup>44</sup>, but remained on the agenda of the Court until 1928 when it was eventually heard in full. It is unclear as to what prompted the owners to make the application for title. The applications in 1898 and 1907 would have contributed to Maori fears of a concerted attempt to expropriate the Awapuni Moana, but the interest of local authorities in the lagoon would also have been cause for alarm. In the 1910s, there were at least two local authorities which had declared their intention to secure title to the lagoon. The Poverty Bay River Board wanted to obtain the lagoon so that it could drain it and convert it into a pastoral farm<sup>45</sup>. The revenue from this farm would then be used to develop a flood protection scheme for the Waipaoa:

The chairman suggests that an endeavour should be made to obtain the Awapuni lagoon as an endowment, as if it was reclaimed it would form a valuable property. At present this [lagoon is] vested in the Minister for Marine. It was resolved on the motion of the chairman... that a deputation consisting of as many members as convenient can attend, go to Wellington during next session and endeavour to have this given effect to<sup>46</sup>.

<sup>40</sup> Department of Lands and Survey, Gisborne, to Chief Surveyor, Napier, 3.10.1907 (L&S 8/96).

<sup>41</sup> "Huriwai Block." – Chief Surveyor, Napier, to Surveyor General, Wellington, 22.10.1907 (L&S 8/96).

<sup>42</sup> "Huriwai block." – Chief Surveyor, Napier, to Surveyor General, Wellington, 21.11.1907 (L&S 8/96).

<sup>43</sup> Report on Awapuni Roto – 10.5.1919 (M 4/1877).

<sup>44</sup> "Awapuni Lagoon." – T. Brook, Land Officer, Department of Lands and Survey District Office, Gisborne, to Registrar, Native Land Court, Gisborne, 15.4.1914 (GisMLC 91632).

<sup>45</sup> Minutes of a meeting of the Poverty Bay River Board – 3.10.1914 (GisMUS 79-02).

<sup>46</sup> Minutes of a meeting of the Poverty Bay River Board – 14.4.1915 (GisMUS 79-02).

At that time, the title to Awapuni Moana was not vested in the Crown – its title had never formally been extinguished, although many local authorities *suspected* that the lagoon was tidal and, therefore, the Crown's as of right.

The River Board abandoned its potential claim to the title of the lagoon when it obtained legal advice that the lagoon was under the control of the Gisborne Harbour Board (GHB)<sup>47</sup>. In the Marine Department's view this advice was incorrect because the lagoon was tidal and, under s 129 of the Harbours Act 1908 (later, s 144 of the Harbours Act 1923), was therefore a Crown asset<sup>48</sup>. The relevant clause, which was to become particularly important in 1928, was that:

...no part of the shore or the sea, or any creek, arm of the sea, etc, and so far up as the tide flows and reflows shall be granted, conveyed etc, to any Harbour Board or any other body whether incorporated or not, without the authority of a Special Act.

No Special Act had been passed to vest the title of Awapuni in the name of the GHB, so the Marine Department asserted that it held a *prima facie* title to the lagoon.

The GHB was the most eager of all authorities to show an interest in the Awapuni Moana during the period 1898 to 1953. In 1917, it asked the Marine Department to advise it on the possibility of turning the lagoon into a harbour<sup>49</sup>. This prompted the Marine Department to commission additional research into the tidal influences on Awapuni Moana. The Works Department researched the lagoon, concluding that "the water...is tidal, and at low tide leaves but a small stream meandering along the lagoon with mud flats on either side, which are covered at high tide<sup>50</sup>." The Marine Department advised the GHB against its scheme for a lagoon port because Awapuni Moana "practically empties when tide goes out, and lagoon can never be made use of for Harbour construction purposes<sup>51</sup>." The application of the GHB was therefore declined on the basis of impracticality rather than ownership uncertainty<sup>52</sup>. However, the relatively unsubstantial research efforts of the Works Department convinced the Marine Department once more that the lagoon was tidal.

The GHB called for a re-investigation of the possibility of a harbour in the lagoon in 1923<sup>53</sup>. One month thereafter it was suggested in the local newspaper that the Board take steps to have the lagoon vested in its name and it was assumed that "at

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<sup>47</sup> Minutes of a meeting of the Poverty Bay River Board – 16.5.1919 (GisMUS 79-02); "Awapuni Lagoon." – Poverty Bay Herald, 16.6.1919 (M 4/1877).

<sup>48</sup> Internal memorandum, Marine Department, 17.12.1925 (M 4/1877).

<sup>49</sup> "Awapuni Lagoon." – p218, 15.1.17 (GHB CB).

<sup>50</sup> Public Works Department Gisborne, to Marine Department, Wellington, 11.6.1919 (M 4/1877).

<sup>51</sup> R.W. Holmes, Marine Engineer, to Secretary for Marine, 6.10.1919 (M 4/1877).

<sup>52</sup> Internal memorandum, Marine Department, 17.12.1925 (M 4/1877).

<sup>53</sup> "Awapuni Lagoon." – Finance Committee, GHB, 24.9.1923 (GHB Com MB); "Arapuni [sic.] scheme." – Gisborne Times, 24.4.1923 (GHB CB).

present it was vested in the government<sup>54</sup>." Later in the year, the GHB applied to take land between the sea and the lagoon as access for a future lagoon harbour<sup>55</sup>. In particular, the Board took parts of Paokahu No. 4 under the Public Works Act to secure this thoroughfare<sup>56</sup>. Some of this land was later taken back by the Crown for an extension to the aerodrome<sup>57</sup>. The board also applied successfully for another survey of the lagoon, which was completed in 1924<sup>58</sup>.

Through its lawyer, the GHB made another request to the Marine Department to grant it the lagoon. This time, the stated purpose of the request for vesting was for *reclamation* rather than usage as a harbour. The main argument of the GHB was that:

The land at present is of no value to anyone. It is an eyesore and a menace to health...It is extremely unlikely that it will ever be of value to anyone except the Board<sup>59</sup>.

This insult to the historical, cultural and ecological significance of the Awapuni Moana represents an important theme for this Chapter – local authorities in Gisborne were significant agents of ecological imperialism. This imperialism reflected a monocultural worldview which depicted wetlands as wastelands and underestimated the ecological value of wetlands and the Treaty rights of tangata whenua.

In March of 1927, the GHB made yet another application to the Marine Department to have the tidal portions of Awapuni Moana vested in its name with a view to reclamation<sup>60</sup>. This reversal from a situation where the lagoon was wanted for a harbour to a claim that it was needed for a reclamation appears to suggest that the GHB did not know what it would have done with Awapuni if it had been successful in securing its title. Indeed, after the 1928 Native Land Court hearing on the matter, the Marine Department refused to transfer title to the Board. The Department would not provide a grant to the area unless the GHB submitted a definitive proposal for subsequent use of Awapuni<sup>61</sup>. The Marine Department also suggested that "it is not now the practice to give away any tidal land to a Harbour Board unless it is essential to their purposes<sup>62</sup>." This might suggest that the Marine Department *would have* disposed of the lagoon to the GHB, but only for a fee<sup>63</sup>.

<sup>54</sup> "The harbour scheme." – Poverty Bay Herald, 21.5.1923 (GHB CB).

<sup>55</sup> "Awapuni Lagoon. Harbour Board to acquire access." – Gisborne Times, 28.8.1923 (GHB CB).

<sup>56</sup> "Awapuni Lagoon. Compensation for land." – p33, 23.3.1925 (GBHB CB).

<sup>57</sup> "Awapuni land taken by P.W.D." – Works Committee, GHB, 26.8.1948 (GHB Com MB).

<sup>58</sup> "Plan of the Awapuni Lagoon. Blks V & VI, Turanganui S.D." – Cook County, Gisborne Land District, Plan DP2833, 11.6.1924.

<sup>59</sup> Chrisp and Chrisp, Barristers and Solicitors, per GHB, to Under-Secretary, Marine Department, 30.9.1926 (M 4/1877).

<sup>60</sup> "Awapuni Lagoon tidal area." – p386, 21.5.1923 (GHB MB); Poverty Bay Herald, 28.3.1927 (GHB CB); "Awapuni Lagoon." – p220, 28.3.1927 (GHB MB).

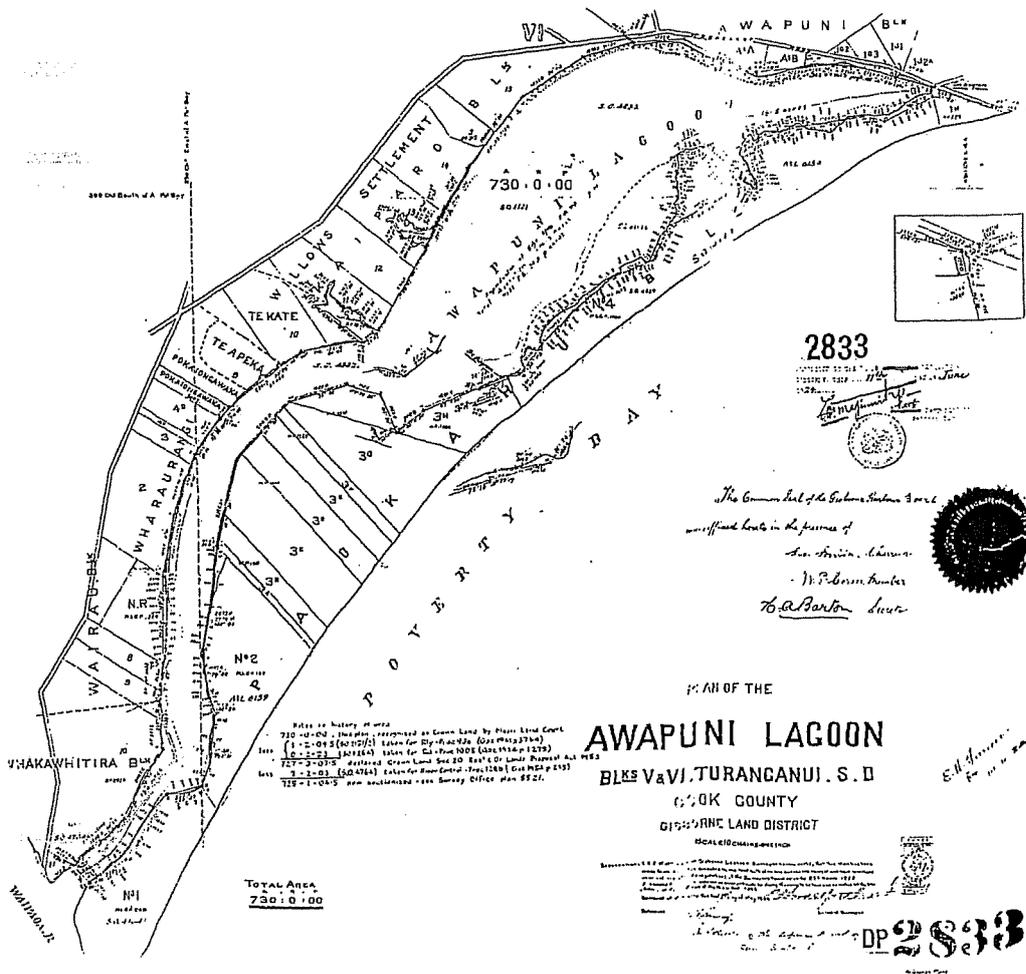
<sup>61</sup> "Awapuni Lagoon. Vesting in Board." – p413, 24.6.29 (GHB MB).

<sup>62</sup> Secretary of Marine, to Marine Engineer, GHB, 1926 (M 4/1877).

<sup>63</sup> Boast 1996, p54.

However, the Department also stated that “there seems to be no particular purpose to be served by vesting the lagoon in the Board if there is no intention of putting it to good purpose<sup>64</sup>.” All of these communications were based on the *assumption* of Crown ownership – The Marine Department believed it could reject the Board’s plans because it had a title to the lagoon.

Figure 8.3 – Awapuni survey map (DP2833), 1924<sup>65</sup>



A report of this time suggested that the Board wanted to reclaim and farm the bed of the lagoon, and then use the revenue “to lighten the burden of rates” on the local community<sup>66</sup>. The GHB’s plans were so vague that it could only suggest that “[w]ith

<sup>64</sup> Secretary of Marine, to Crisp and Crisp, Barristers and Solicitors, per GHB, 14.10.1926 (M 4/1877).

<sup>65</sup> Source: GisMLC 91169. Importantly, the size of the lagoon was calculated at 730-0-00 acres (bottom left).

<sup>66</sup> “Awapuni Lagoon. Harbour Board request.” – Poverty Bay Herald, 24.6.1929 (GHB CB).

the lagoon in Board's possession some good use could be made of it in the future<sup>67</sup>." Later still, the Board contrived a scheme to land flying boats on parts of the lagoon with other parts to be reclaimed<sup>68</sup>. The Board's repeated requests re-accelerated the process of hearing the claim to title in the Maori Land Court. Yet, there were no justifiable reasons for the Board to expect to receive title to the bed of the lagoon. The capricious nature of its desires for Awapuni Moana suggests deceit – Given the patent unsuitability of the lagoon for a port, it was likely that the Board conspired for an endowment block from the start of its campaign.

### The 1928 hearing to decide title to Awapuni Moana

By January of 1928, it was reported in local newspapers "that some of the natives, whose properties are adjoining to the lagoon, were objecting to the Board's request<sup>69</sup>." The *tangata whenua* application which had initially been lodged in 1914 was finally scheduled for a Court hearing on 6 January 1928. After the Maori claimants had stated their case in brief, the hearing was adjourned until early February for the Crown to construct a reply<sup>70</sup>. For reasons which have not been recorded, it was not until May that the case was finally heard.

Some of the more revealing Crown views about Awapuni Moana were not conveyed at the hearing itself, but in correspondence prior to the hearing. In advice to Lands and Survey about Awapuni Moana, the Solicitor General, for example, positioned the application in the context of the collective use and customary value of similar lakes and wetlands which had come before the courts:

It was probable that even by Maori custom the bed of a river or a lake was never considered as having been owned by any one body of natives. Probably it was used by several friendly tribes, and the Maori custom is probably the same as that existing at English common law. The question of the ownership of the bed never arose. At best the rights can be rights of navigation and fishery. These are not interfered with but preserved by refusal to grant a title to the claimants<sup>71</sup>.

Rather than the collective use of a lagoon under *tikanga* Maori being reason to protect Maori interests, it appears that the Solicitor General's intention was to use this knowledge against *tangata whenua*. The Crown's logic was twofold. First, because all Maori 'owned' the lagoon, then nobody owned it. This represents a direct dismissal of *tikanga* Maori in relation to the management of customary resource spaces. Second, Maori rights to their fisheries were no greater than the *general* rights

<sup>67</sup> "Awapuni Lagoon. Harbour Board request." – Poverty Bay Herald, 24.6.1929 (GHB CB).

<sup>68</sup> Poverty Bay Herald, 22.7.1929 (GHB CB).

<sup>69</sup> "Harbour Board. Monthly meeting." – Poverty Bay Herald, 31.1.1928 (GHB CB).

<sup>70</sup> Department of Lands and Survey to Marine Department – Report No. 22/2615, 11.1.1928 (M 4/1877).

<sup>71</sup> "Awapuni Lagoon. Waipaoa River." – Solicitor General to Under Secretary for Lands, 4.2.1928 (L&S 8/96).

of all New Zealanders to fisheries, and the securing of Crown title would not affect either set of rights. This reduction of tangata whenua fishing rights to general rights conflicts with guarantees under Article II of the Treaty. Moreover, any general rights which remained after 1928 were defeated when the lagoon was drained in the late 1950s.

At the hearing itself, the Crown Solicitor was evidently expectant of a quick hearing, volunteering to state the Crown's case first rather than the usual practice of allowing the applicant to begin proceedings. After this suggestion was dismissed, Pitt – the advocate for the Maori applicants – carefully constructed a case for tangata whenua:

Our case is that bed of lagoon is customary land and that it is not land covered by tidal waters. This place is called Awapuni meaning a land-locked or confined area of water. The name was applied to this lagoon long before the advent of the pakeha. In the Kaiparo hearing and also that of Paokahu it is shown that some 200 years ago the waters of Waipaoa stream flowed through the lagoon [and] came out at almost present position of Abattoirs...

[T]he result [of the diversion of the Waipaoa by local iwi in 1841] was that the mouth at the Abattoirs closed up. Our people contend that the only flow of salt water into the lagoon is at exceptional high spring tides when the backwaters of the river flow over into the old river course. Certain food was obtained from the lagoon not obtainable when salt water is constant: the Kakahi, Kuharu, Ngupara and the Patiki Mohoa. This food was there in great quantities and supplied the needs of the persons resided around the lagoon... We have growing in the lagoon [a type of] raupo which will not grow in salt water... We submit that when the tide is out the water of the lagoon is fresh... When first surveyed it was called a lagoon... Front portion of Wairarapa Lake is subject to salt water overflow and yet the Crown had to purchase the lake<sup>72</sup>.

There were two components to the tangata whenua case: customary usage; and, historical and contemporary evidence of freshwater influence.

Whereas Pitt's evidence was extensive and thoroughly researched, the evidence for the Crown appeared to be particularly ill-prepared. Crown witnesses were unusually confident that the complex issue of salt-water incursion could be proved beyond doubt and with simple assessments. In keeping with the requirements of the Harbours Act 1923, the Crown's statement before the Court was based on evidence of tidal fluctuation and capacity for navigation:

...the tide extended right up almost to the Abattoirs. On a tide falling in the river it was running out just as fast from the lagoon. I tested the water above the footbridge and the water was salty... I found a couple of boats tied up

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<sup>72</sup> Evidence of W. Pitt on behalf of Ruihi Heihi and ors., applicant, 56 Gisborne MB 275-282, Jones J., 14.5.1928 (GisMLC 91169).

just inside the mouth of the lagoon...The mouth was too deep to cross without the use of a boat<sup>73</sup>.

Our contention is that the whole bed of lagoon is vested in the Crown. That contention is based on fact that all such things are the property of the Crown by the common law of Great Britain. It is also contended that part of it is navigable – that the water is navigable and is therefore the property of the Crown irrespective of whether it is fresh or salt...The word tide is not confined only to the salt water...If it is anything at all it is probably an arm of the sea<sup>74</sup>.

In making his decision, Judge Jones accepted Pitt's evidence that the Waipaoa had flowed through the lagoon at various times in its history. Nevertheless, he then rejected contemporary evidence of freshwater influence:

At present, however, the lagoon has a mouth or opening into the Waipaoa River some five or six chains wide and through this opening the tide regular ebbs and flows, rising and falling with the tidal water of the Waipaoa River. There is no doubt that this then in its present position is an arm or creek of the sea which is defined by the law books as 'where the sea flows and reflows and so far only as the sea so flows and reflows'<sup>75</sup>.

While this appeared to be a definitive finding, Jones then provided an intriguing qualification to his decision:

But this by no means settles the question. It is of importance to ascertain how the bed of the lagoon became an arm of the sea since if it became such by some sudden erosion or convulsion of nature it would not pass to the Crown. It is the law that 'if a subject has land adjoining the sea and the violence of the sea swallows it up but so that there be a reasonable change of identifying the land, then if the sea leaves the land or the owner by his industry regains it, the subject does not lose his land though the inundation continues for 40 years'...In this case there is not sufficient evidence of how the land became over-run by the sea water to justify the Court in displacing the prima facie title of the Crown...It may be that the provisions of the Harbours Act estops the Native Land Court from issuing a title but it is not necessary to finally decide that question in the present proceedings.

It was on the basis of this determination that Jones rejected the tangata whenua application "without prejudice" to future claims by the applicants. Presumably, Jones conceived the possibility of future research which might prove exactly how the Awapuni Moana had become a saltwater-freshwater estuary rather than a freshwater lagoon.

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<sup>73</sup> Evidence of H.L. Primrose, Survey Department, Gisborne, for Crown, 56 Gisborne MB 275-282, Jones J., 14.5.1928 (GisMLC 91169).

<sup>74</sup> Evidence of F. Nolan, Barrister, for Crown, 56 Gisborne MB 275-282, Jones J., 14.5.1928 (GisMLC 91169).

<sup>75</sup> "Awapuni Lagoon decisions." – 56 Gisborne MB 282, Jones J., 14.5.1928 (GisMLC 91169).

The Crown solicitor interpreted the qualification to mean that Maori might have a legitimate claim to accreted land at the margins of the lagoon<sup>76</sup>. Nevertheless, it was asserted that:

So far as this aspect of the matter is concerned, it is highly improbable that the natives would be able to succeed in a claim for very many years to come. In view of the fact that the Department's survey plans show no change in the contour of the lagoon during the last fifty years, accretion, if it occurs at all, will be a very slow process<sup>77</sup>.

Time proved this to be an entirely inaccurate statement. The increase in sediment in the Waipaoa River and a number of floods in the late 1930s and early 1940s conspired to alter the lagoon dramatically, with substantial accretion at its margins. Notwithstanding this error, which is analysed in more detail below, a finding *without prejudice* left open the possibility of more than just a claim to accreted lands. The determination in 1928 allowed for the possibility of a successful Maori claim to the entire bed of the lagoon. As a Maori Land Court judge was to suggest in 1990, "the evidence from both parties may have been more anecdotal than objective and in being so, gave less weight to...how and when the lagoon became over-run by salt water, than was deserved<sup>78</sup>." After all, evidence of the Crown expert was based on tasting the water to ascertain whether it was salty – scarcely convincing even by the scientific standards of the time. Boast suggests that "there [wa]s not sufficient evidence of how the land became overrun by seawater to justify the Court in displaying the prima facie title of the Crown<sup>79</sup>," but this did not necessarily rule out a *future* displacement of Crown title. If it could subsequently be proven that saltwater intrusion was the result of "sudden erosion or convulsion" there remained a possibility for a later ruling in the applicants' favour<sup>80</sup>.

## Towards drainage

The 1928 ruling was misinterpreted by a number of parties. Over time, the accepted shorthand for the decision was that "the Native Land Court in 1928 decided in favour of the Crown<sup>81</sup>." The Court had rejected without prejudice an application of Ruihi Heihi and others because, while the burden of proof was placed on the applicant, the assembled evidence had been circumstantial; it had not necessarily confirmed nor conferred to the Crown a title to Awapuni Moana. Nevertheless, the decision reinvigorated some of the requests for a grant of the lagoon which had first been aired in the early 1910s. It was now *assumed* that Awapuni Moana was a Crown arm of the sea which would be readily granted to a worthy cause.

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<sup>76</sup> "Re. Awapuni Lagoon." – F.W. Nolan, Crown Solicitor, to Commissioner of Crown Lands, 15.5.1928 (W1 48/159).

<sup>77</sup> *Ibid*.

<sup>78</sup> "Awapuni Lagoon." – 132 Gisborne MB 1-16, Russell J., 19.10.1990 (GisMLC 91169).

<sup>79</sup> Boast 1993, p158.

<sup>80</sup> "Awapuni Lagoon." – no author, no date (W1 48/159).

<sup>81</sup> "Awapuni Lagoon." – Secretary for Marine, to Director-General, Department of Lands and Survey, 31.3.1952 (M 4/1877).

In particular, the GHB requested one more time for the lagoon to be vested in its name<sup>82</sup>. In 1936, the GHB works committee visited the site to ascertain whether it could be reclaimed, deciding that it was feasible to reclaim the lagoon by means of a weir across its channel<sup>83</sup>. The proposal also included the diversion of silt from the Waipaoa into the lagoon area to act as fill<sup>84</sup>. After this proposal had been forwarded to the Marine Department for comment, that Department suggested that the plan was unwise given the possibility of it being affected by a future control scheme for the Waipaoa River<sup>85</sup>. The Ministry of Works also rejected the scheme on the basis that it would take too long to infill the lagoon through the chosen methods<sup>86</sup>.

It was the prospect of the Waipaoa River flood control scheme (WRFCs) which was to hasten the fate of the lagoon. In Chapter 4, it was concluded that the WRFCs disturbed (unnecessarily) the intricate drainage patterns of the Poverty Bay flats, inhibiting the flow of some tributaries into the Waipaoa and, in other places, starving wetlands of water supply. The Poverty Bay Catchment Board (PBCB) *wilfully* decided that the lagoon should be starved of both downstream flows of fresh-water from the Waipaoa and upstream flows of tidal water from the sea:

For purposes of flood control the stopbanks must seal off the lagoon and so prevent floodwaters from entering the lagoon and rising to dangerous levels around its margin, particularly at the Gisborne end<sup>87</sup>.

While it was logical to prevent floodwaters from entering the lagoon, this objective did not necessarily have to entail the elimination of *all* water supply from the Waipaoa. A flood-gate was eventually installed in the stopbank which dissected the Kopututea. This flood-gate is normally kept shut to prevent seawater from entering the creek; it could easily have been designed to be open unless the Waipaoa was about to flood, in which case it could have been quickly lowered.

This latter option was not adopted by the PBCB because – like its predecessor, the Poverty Bay River Board – it had foreseen in the lagoon the potential for an endowment block:

Mr. Todd [the PBCB engineer] has a suggestion to make about the Awapuni Lagoon...the idea of reclamation...There seems to be a multiplicity of owners. Somebody should take title to it before any work is done there. All the assets as a result of the work would go into somebody's pocket. We would

<sup>82</sup> Boast 1996, p56.

<sup>83</sup> "Awapuni Lagoon." – Works Committee, GHB, 6.5.1936 (GHB Com MB).

<sup>84</sup> "Awapuni Lagoon." – p2, 25.5.1936 (GHB MB).

<sup>85</sup> "Awapuni Lagoon." – p18, 28.9.1936 (GHB MB)

<sup>86</sup> District Engineer, Public Works Department, to Engineer in Chief, Public Works Department, 14.7.1936 (M 4/1877).

<sup>87</sup> "Waipaoa River flood control proposals." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 3.3.1949 (PBCB 2/19).

like an expression of opinion from the Board before the meeting finishes today<sup>88</sup>.

Just as the 1898 application for a lease was to spawn a number of competing requests for a Crown grant, the plans of the PBCB for an endowment were also to be trumped by alternative projects. On hearing of the PBCB plan, the Cook County Council held a meeting of local authorities "to discuss the subject of reclamation and utilisation of waste lands in Poverty Bay<sup>89</sup>." All local authorities attended this meeting and all agreed that the lagoon should be drained in conjunction with the implementation of the WRFCS. Not surprisingly, however, there was no agreement as to who should receive the reclaimed land.

In the meantime, the PBCB commissioned research into the physical and financial viability of its own plans for reclamation. Ironically, some of this research was potentially damaging to the Crown's assumption of title to the lagoon. At the time, the PBCB investigated the possibility of reclaiming the lagoon and purchasing accretions on its margins from neighbouring owners. Naturally and artificially reclaimed land would be managed as one farming unit, providing revenue to pay for the flood control scheme. From its WRFCS research, the Board knew of the probability of accretion along the margin of the lagoon. Under common law rules, this accretion would belong to the adjacent landowners who, in the case of the lagoon margin, were predominately Maori. Although the PBCB had expected some degree of accretion, it was surprised by the results of its research:

The lagoon has shrunk considerably in recent years by rise in bed levels due to siltation. The tidal channel being 1 to 2 ch wide and the tidal flats are now practically all above H.W.O.S.T. [high waters of spring tide, so] accretion will have added to all titles<sup>90</sup>.

The conclusion of the Board's engineer – a hydrological expert who was not likely to have been incorrect in the matter – was that neighbouring Maori owners had a right to claim substantial accretions. If much of the lagoon was above the mark of high water springs, at least as much but probably more would have been above the high water mark. In reports to his superiors, he admitted that "natural siltation occurring during past floods has now raised lagoon bed levels to a remarkable extent" and "titles adjoining the former lagoon will have gained a total of over 600 acres (out of 730 acres original lagoon area) by natural accretion<sup>91</sup>." This dramatic change was the result of "floods of 1944, 1948 and 1950 [which] have raised the level of the bed of the lagoon and adjoining area to a considerable extent<sup>92</sup>." On the

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<sup>88</sup> "Special meeting of the Poverty Bay Catchment Board to discuss the report on the Waipaoa flood control scheme." – 15.3.1949 (PBCB 2/19).

<sup>89</sup> 10.3.1952, p166 (GHB MB).

<sup>90</sup> "Awapuni Lagoon. Preliminary survey inspections." – A.D. Todd, handwritten notes, 4.4.1949 (PBCB 2/21).

<sup>91</sup> "Preliminary report: Awapuni Lagoon drainage." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 8.4.1949 (PBCB 2/21).

<sup>92</sup> "Awapuni Lagoon." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 14.2.1952 (PBCB 2/21).

basis of his findings, the engineer recommended that Maori request a survey in order to claim the land. This recommendation was not passed on to the Maori owners.

Later, the PBCB engineer recommended a floodgate culvert within the stopbank over Kopututea in order to exclude saltwater intrusion into the lagoon<sup>93</sup>. Reclamation *per se* was no longer needed, because “reclamation of the area has proceeded naturally to a stage where the problem is simply drainage, exclusion of salt water and elimination of salt in solution in the soil moisture<sup>94</sup>.” This also highlights the extent of accretion from the 1924 survey to 1949 when the PBCB began its detailed evaluation of the lagoon. The rate of accretion was not so sudden as to become Crown Land under the established principles of assessing accretions and, as it was caused by *fluvial* processes, would definitely belong to adjacent owners<sup>95</sup>. According to the PBCB engineer, “[I]f the land is purchased now owners are almost certain to ask for a re-survey in which case the amount to be purchased by the Crown will be greatly in excess of title areas<sup>96</sup>.” Except for parts of the western bank of Awapuni Moana where land had been taken for road and railway reserves, and the small section taken by the GHB as an accessway in 1924, local Maori had retained ownership of substantial portions of land around the lagoon. As a result, they would have received title to an expanding pool of potentially valuable accretions after re-survey<sup>97</sup>. This potential expansion of Maori land was only curtailed by the *artificial* reclamation of the lagoon by the Crown.

More importantly, Maori owners were *already* eligible for a significant proportion of that land pool because of the *extant* level of accretion which had been highlighted in PBCB research. On the basis that accretions would represent a much larger area than the land which could have been reclaimed, the PBCB decided that it should not attempt to reclaim Awapuni Moana to pay for the WRFCS<sup>98</sup>. It also notified the Department of Lands and Survey about this conclusion and, significantly, it alerted that Department about the level of accretion around the edge of the lagoon<sup>99</sup>.

<sup>93</sup> “Preliminary report: Awapuni Lagoon drainage.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 8.4.1949 (PBCB 2/21).

<sup>94</sup> “Awapuni Lagoon. Preliminary survey inspections.” – A.D. Todd, handwritten notes, 4.4.1949 (PBCB 2/21).

<sup>95</sup> “Draft office manual: Reclamation and accretion.” – Issue II, No.45, October 1962 (L&S 22/5146).

<sup>96</sup> “Awapuni Lagoon. Preliminary survey inspections.” – A.D. Todd, handwritten notes, 4.4.1949 (PBCB 2/21).

<sup>97</sup> This argument would have been complicated by the passing of the Maori Affairs Act 1953 during the same year as the Reserves and Other Lands Disposal Act. In respect of accretions, s 407 of Maori Affairs Act restricted the jurisdiction of the Maori Land Court to the original water boundary on a parent title. Theoretically, this may have blocked owners from claiming accreted land, but there were actions available to Maori landowners outside of the Maori Land Court process e.g., the Land Transfer Act. Moreover, this aspect of the 1953 Act was later repealed (“Accretion to Maori Land.” – Chief Surveyor, to Maori Land Court, 1.4.1966 (L&S 22/5146)).

<sup>98</sup> “Preliminary report: Awapuni Lagoon Drainage.” – Engineer, PBCB, to Chairman, PBCB, 8.4.1949 (PBCB 2/21); “Special meeting of the Poverty Bay Catchment Board to discuss the report on the Waipaoa flood control scheme.” – 15.3.1949 (PBCB 2/19).

<sup>99</sup> W.L. Newnham, Chairman, PBCB, to Director-General, Department of Lands and Survey, Wellington, 21.3.1952 (PBCB 2/21).

It was at this time that other government departments began to advocate more forcefully for the reclamation of the lagoon. The Public Works Department had advised the PBCB on its flood control scheme and, in this capacity, was a principal advocate for the simultaneous reclamation of the lagoon.

With the Flood Protection Scheme materialising it would be likely that there would be a possible means of converting a waste area into productive land worth something in the vicinity of £100,000 for the 730 acres of land beneath the high water mark<sup>100</sup>.

It seems to me that the area is far too valuable, potentially, for anyone but the Crown to own and I am in general agreement that, parallel with the taking of certain lands along the Waipaoa River for river control purposes, the Crown should proclaim the whole of the Awapuni lagoon and surrounding land which will benefit from the Lagoon reclamation, i.e. all the area between the proposed Centennial Marine Drive and railway and aerodrome<sup>101</sup>.

These statements are particularly revealing. First, the depiction of Awapuni Moana as a 'waste area' reveals again the cultural disdain of Crown officials for environments of importance to Maori. Resource spaces which should have been protected as of right under the Treaty were viewed as unproductive sites to be recreated in the image of western agriculture. Second, Crown agents designed strategies for the elimination of the lagoon on the basis of out-dated information. While there may have been 730 acres beneath the high water mark in 1924, this certainly was not the case any longer. The second quotation reflects the extent to which the Works Department would pursue a land grab in and around Awapuni Moana.

The views of the Works Department were widely discussed by Lands and Survey staff. The Commissioner of Crown Lands recalled the 1928 hearing and its concession to the possibility of future claims for accretion lands:

I think that there has been more than a little accretion since that date [1928]. I presume the action would, of course, be to proclaim the whole area and leave it to individual claimants to press their claim<sup>102</sup>?

After these opinions were circulated among the relevant government departments, the eligibility of Maori for claims to accretion lands was confirmed in correspondence within and between the Soil Conservation and Rivers Control Council<sup>103</sup>, and the departments of Lands and Survey<sup>104</sup>, and Public Works<sup>105</sup>. In time, internal cor-

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<sup>100</sup> "Reclamation of Awapuni Lagoon." – Public Works Department, to Soil Conservation and Rivers Control Council, 4.12.1950 (W1 48/159).

<sup>101</sup> "Reclamation of Awapuni Lagoon, Gisborne." – Public Works Department, to Department of Lands and Survey, 15.1.1951 (W1 48/159).

<sup>102</sup> "Re. Reclamation of Awapuni Lagoon: Gisborne." – E.P. Wakelin, Commissioner of Crown Lands, to Director General of Lands, 30.1.1951 (W1 48/159).

<sup>103</sup> "Proposed reclamation of Awapuni Lagoon, Gisborne." – Department of Lands and Survey, to Soil Conservation and Rivers Control Council, 16.2.1951 (W1 48/159).

responsiveness between the Works Department officials recognised the potential for Maori to benefit substantially from claims to accretions. These officials believed that the reclamation should continue, not just because it would yield important farmland but also because it would be of potential benefit to neighbouring Maori landowners. At this time, it was purported that the Maori owners should receive some of the reclaimed land in order to develop their properties into more economically viable units<sup>106</sup>. At the least, it was suggested that the land value of the Maori properties could increase by association with a larger land area, and through better drainage on their margins and freedom from flooding of the lagoon<sup>107</sup>.

Initially, it appears that government departments were amenable to the view that Maori deserved to be incorporated into the outcome of the reclamation, either through compensation for lost accretion lands or through grants to parts of the reclamation<sup>108</sup>. The Director General of Lands and Survey wrote to the Department of Marine suggesting that:

...the level of lagoon has been raised considerably due to successive floods in last few years, to extent that all is practically above mean sea-level. Therefore, no reason why owners of adjoining land could not now make application for accretion to be included in their titles<sup>109</sup>.

It also suggested that the reclamation lands had a reasonably high market value. This quotation cites mean sea-level, whereas the PBCB had earlier confirmed that most of the lagoon was by then above the mark of high water springs. It is unclear whether this translation was a simple error of understanding. However, even if Crown agents believed only that the margins of the lagoon had accreted so that it was mostly above mean sea-level, they retained enough information to know that confirming title to the Crown at the high water mark of 1924 was a gross injustice. It was a significant omission of the Crown that it knew of the potential for Maori owners to benefit from an application for a re-survey, but did not impart that information to the potential beneficiaries. Mutual exchange of information is accepted in Treaty jurisprudence as part of the Treaty principle of reciprocity.

The fact that the Crown knew of the inaccuracy of the 1924 survey is important for a number of reasons. First, some Crown departments wanted to use the information for what they perceived to be the benefit of Maori owners. They knew that Maori were eligible for the accretions and accepted that Maori should either claim

<sup>104</sup> "Reclamation of Awapuni Lagoon: Gisborne."— Commissioner of Crown Lands, to Director-General of Lands, 30.1.1951 (L&S 8/96).

<sup>105</sup> "Proposed Reclamation: Awapuni Lagoon."— Ministry of Works, to Commissioner of Works, 11.7.1952 (L&S 8/96).

<sup>106</sup> *Ibid*

<sup>107</sup> *Ibid*

<sup>108</sup> "Reclamation of Awapuni Lagoon: Gisborne."— E.P. Wakelin, Commissioner of Crown Lands, to Director-General of Lands, 30.1.1951 (L&S 8/96).

<sup>109</sup> Director-General, Department of Lands and Survey, to Secretary of Marine, 29.2.1952 (M4/1877).

title to them or, more preferably, benefit from a wider reclamation project including both the bed of the lagoon and the accretions. Yet, the Crown and its agents had never made an attempt in deliberations from 1898 to 1953 to understand Maori needs and values in relation to Awapuni Moana. It *assumed* that Maori would prefer farm land over a functioning lagoon, rather than consulting tangata whenua on the matter. Second, the implications of the extent of accretion processes hastened unfairly the search for a legislative solution to the title of the lagoon. The purpose of the Reserves and Other Lands Disposal Act 1953 was, supposedly, to secure “the title of the Crown to the bed of the lagoon against possible claims by adjoining owners in the event of the dewatering of the bed by natural causes or artificial works.” It appears, however, that departments of the Crown were more concerned about *extant* levels of dewatering, not future outcomes whether natural or artificial. Third, in the context of knowledge about the level of accretion, the preference to “proclaim the whole area and leave it to individual claimants to press their claims<sup>110</sup>” was inherently unfair. Maori who owned land adjacent to the lagoon should have been informed prior to this and given the opportunity to call for a re-survey.

### **The outcomes of the Reserves and Other Lands Disposal Act 1953**

The outlook of Lands and Survey became more avaricious after a didactic letter from the Secretary for Marine reminded it about “the Crown’s [historical] unwillingness to readily part with the ownership of the foreshore<sup>111</sup>.” A lengthy list of legislative and common law examples of this tenacity which ranged from the Crown Grants Act 1866, to the Municipal Corporations Act 1872 and the Harbours Act 1878 was presented to Lands and Survey staff as an attachment to the letter. While this list may have re-convicted Lands and Survey that the bed of the lagoon was the Crown’s for the taking, the letter was entirely silent about the issue of accretion. The Commissioner of Crown Lands at one point mentioned that “there might be hundreds of owners of Maori lands” leading to the possibility of a “protracted procedure” for “voluntary negotiations<sup>112</sup>.” In the months before enactment of the Reserves and Other Lands Disposal Act, however, the accretion issue disappeared in correspondence amongst government departments.

In the respect of ascertaining Maori needs and values, government departments did not even accept the recommendations of the Director-General of Lands and Survey<sup>113</sup> to share information with the Department of Maori Affairs. The Soil Conser-

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<sup>110</sup> “Reclamation of Awapuni Lagoon: Gisborne.” – E.P. Wakelin, Commissioner of Crown Lands, to Director-General of Lands, 30.1.1951 (L&S 8/96).

<sup>111</sup> “Awapuni Lagoon.” – Secretary for Marine, to Director-General, Department of Lands and Survey, 31.3.1951 (M 4/1877).

<sup>112</sup> “Awapuni Lagoon. Reclamation and development.” – E.P. Wakelin, Commissioner of Crown Lands, Department of Lands and Survey District Office, Gisborne, to the Secretary, PBCB, 1952 (PBCB 2/21).

vation and Rivers Control Council had been urged in early 1951 to consult with both the Marine and Maori Affairs Departments<sup>114</sup>. Lands and Survey contacted the Marine Department immediately, but it was not until March of 1953 that it alerted fully the Department of Maori Affairs to its intentions to secure title to the full 730 acres<sup>115</sup>. That Department had earlier been convinced by Lands and Survey that claims by local Maori for accretion lands were not likely to be successful because accretion was, supposedly, imperceptible in the lagoon<sup>116</sup>. The latter Department had based its argument on the 1924 survey which by 1953 was entirely unrelated to the true extent of the lagoon. Because of this, the local office of Maori Affairs failed to advise Maori owners around the lagoon of their potential rights and, rather, commented to the Wellington office that:

It would seem that if the bed of the Lagoon was reclaimed the value of the lands surrounding the Lagoon would probably be enhanced through more effective drainage and possibly they could then be better utilised for farming purposes than at the present time<sup>117</sup>.

As a subsequent petition to parliament was to suggest, this correspondence “reveals that it was presumed that in 1953 there would be no objections from Maoris concerned in the 1928 investigation<sup>118</sup>.” The notion that Maori would welcome the transformation of the lagoon was entirely unfounded. In addition, other Departments of the Crown had not explained to Maori Affairs nor the owners the full extent or implications of accretion processes. Rather, illusory benefits of the reclamation project were highlighted to them, and the true ecological, cultural and *economic* costs of securing Crown title to the 730 acres were not adequately assessed.

In particular, there was a paucity of research into the eco-cultural values of the lagoon. In the Secretary for Marine’s didactic letter to Lands and Survey about the Crown’s right to the foreshore, the Secretary confessed that it “may be that the Natives have some exclusive fishing rights in Lake Awapuni but I am investigating that aspect and will let you know the result<sup>119</sup>.” This investigation included only a cursory evaluation of old and biased records from the 1898 attempt of settlers to

<sup>113</sup> “Proposed reclamation of Awapuni Lagoon, Gisborne.” – Director-General, Department of Lands and Survey, to Chairman, SCRCC, 16.2.1951 (W1 48/159); “Proposed reclamation of Awapuni Lagoon, Gisborne.” – Director-General, Department of Lands and Survey, to Chairman, SCRCC, 16.2.1951 (L&S 8/96);

<sup>114</sup> “Proposed reclamation of Awapuni Lagoon, Gisborne.” – Director-General, Department of Lands and Survey, to Chairman, SCRCC, 16.2.1951 (W1 48/159).

<sup>115</sup> “Awapuni Lagoon near Gisborne.” – D.M. Grieg, Department of Lands and Survey, to Under Secretary for Maori Affairs, 25.3.1953 (GisMLC 91169).

<sup>116</sup> “Re Awapuni Lagoon.” – District Officer, Maori Affairs, Gisborne, to Head Office, Maori Affairs, Wellington, 22.4.1953 (GisMLC 91169).

<sup>117</sup> *Ibid*.

<sup>118</sup> “Petition of the Members of the Rongowhakaata tribe, Te Aitanga-A-Mahaki tribe and the Proprietors of Mangatu Blocks A Maori Incorporation as Trustees for the Owners of Paokahu 5&6 Block and Kopututea 1&2 Block re Awapuni Lagoon.” – September 1980 (GCC 01-212-03).

<sup>119</sup> “Awapuni Lagoon.” – Secretary for Marine, to Director-General, Department of Lands and Survey, 31.3.1951 (M 4/1877).

obtain a lease to the lagoon. These records showed that pakeha fishers used the lagoon around that time, so the Secretary for Marine concluded that:

It seems therefore that the natives had no exclusive title to the fishing in that Lagoon and this Department possesses no evidence that the Maoris have such right. Unfortunately this Department's file was burnt<sup>120</sup>.

Not for the first time in the history of Treaty settlement in New Zealand, the parliamentary fire which destroyed Marine Department records conveniently obscures potential evidence against the Crown. Only some records of the pre-1900 attempt by local Maori to have the lagoon declared a customary fishery remain. A 1907 Lands and Survey report stated that "the Natives claimed it as a fishing ground under the Treaty of Waitangi<sup>121</sup>." Because of this lack of archival records, it remains uncertain as to whether Maori may have been deprived of certain fishing rights sometime before 1900.

Whatever the case, the more important point is that Maori were not given the opportunity to state their relationship with Awapuni Moana in the time before the passing of the 1953 Act. The Crown advertised its intent in local newspapers, but there was no attempt to contact the descendants of the original claimants<sup>122</sup>. On the basis of the 1914 application to the Native Land Court and of evidence presented in the 1928 case, the Crown knew that local Maori were particularly attached to this lagoon. The failure to contact the initial descendants of Ruihi Heihi and others reflected the predatory nature of the Crown's attitude to Awapuni Moana. A petition to parliament later suggested that:

The omission by the Crown to directly approach the representatives of the original applicants for the investigation of the title to Te Awapuni and also the failure of the Crown to notify the original applicants or their descendants of the Crown's intention to change Te Awapuni from an arm of the sea (which I say the Crown held as Trustee) into farm land is a great wrong to our people<sup>123</sup>.

The outcome of the Crown's passive advertising of its intentions was that "naturally there were no objectors – all were deceased and no other attempt to contact other leaders was made<sup>124</sup>." In effect, the Crown confirmed its title and reclaimed the land "without consultation with anybody<sup>125</sup>."

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<sup>120</sup> Secretary of Marine, to Director-General, Department of Lands and Survey, 1.4.1952 (M 4/1877).

<sup>121</sup> Department of Lands and Survey, Gisborne, to Chief Surveyor, Napier, 3.10.1907 (L&S 8/96).

<sup>122</sup> "Petition of the Members of the Rongowhakaata tribe, Te Aitanga-A-Mahaki tribe and the Proprietors of Mangatu Blocks A Maori Incorporation as Trustees for the Owners of Paokahu 5&6 Block and Kopututea 1&2 Block re Awapuni Lagoon." – September 1980 (GCC 01-212-03).

<sup>123</sup> *Ibid*.

The 1953 Act itself was drafted relatively late, providing potential objectors with little capacity to comment. The draft Bill was subtly altered before the passing of the Act. In the Act itself, the bed of the lagoon was vested in the Crown "subject to the rights, if any, of the owners of the adjoining land." In the draft, the comparable clause stated that the vesting would be "subject, however, to riparian rights of the persons entitled to the lands adjoining" the lagoon<sup>126</sup>. The phrase 'rights, if any' was considerably less specific than 'riparian rights'. The amended wording may represent a more inclusive and, therefore, more just outcome. Alternatively, it may have been designed to detract attention from riparian issues, reflecting the wider attempts to obfuscate the potential for claims to water margin accretions.

Section 20(1) of the Reserves and Other Lands Disposal Act 1953 pre-empted the natural process of accretion and any new scientific evidence which may have confirmed the origins of saltwater in the lagoon:

The bed of the Awapuni Lagoon...together with any part or parts thereof that may be dewatered and become dry land due to natural causes or as a direct or indirect result of drainage, reclamation or protection works or of any other artificial works of whatsoever nature, are hereby declared to be vested in Her Majesty as Crown land subject to the Land Act 1948.

The word 'may' again highlights that the *extant* levels of accretion were ignored, as if there had been no change to the physical configuration of the lagoon since 1924. Section 20(2) defined the extent of the lagoon as:

All that area in the Cook County, Gisborne Land District, situated in Blocks V and VI, Turanganui Survey District, containing by admeasurement seven hundred and twenty-seven acres three roods seven perches and five-tenths of a perch, more or less, being all the area edged green on the plan deposited in the Land Registry Office at Gisborne, under Number 2833...

This area marked green excluded small areas which had already been proclaimed Crown land for roading and railway reserves<sup>127</sup>.

<sup>124</sup> "Petition of the Members of the Rongowhakaata tribe, Te Aitanga-A-Mahaki tribe and the Proprietors of Mangatu Blocks A Maori Incorporation as Trustees for the Owners of Paokahu 5&6 Block and Kopututea 1&2 Block re Awapuni Lagoon." – September 1980 (GCC 01-212-03).

<sup>125</sup> Submission of P. Kaua, Gisborne, at the Hearings to Decide a Specified Departure, 1972 (GCC 33/1).

<sup>126</sup> Draft clause: Reserves and Other Lands Disposal Bill 1953 (M 4/1877).

<sup>127</sup> Intriguingly, plan 2833 includes hashed lines to represent accretion to August 1953, providing further evidence of Crown knowledge of the extent of accretion (See Figure 8.3 on page 224). These lines were the result of partial surveys, rather than a full re-survey of the lagoon. They appear to be somewhat less generous about the extent of accretion than had been suggested in the PBCB engineer's reports of 1949. However, even these small areas represented significant levels of accretion. For example, 27ha would have been added to the title of Paokahu 4 alone, if it had been resurveyed in advance of the 1953 Act. Significantly, the area marked green was drawn considerably inland from the outer extent of these hashed lines ("Plan of the Awapuni Lagoon. Blks V & VI, Turanganui S.D." – Cook County, Gisborne Land District, Plan DP2833, 11.6.1924.)

Although the Lands Department would obtain the reclaimed land for a farm, other authorities were charged with the responsibility of carrying out the reclamation. The PBCB was principally responsible for the construction work which was seen as an adjunct to the hydrological manipulations of the WRFCS. The Soil Conservation and Rivers Control Council subsidised half of the cost for drainage work on the lagoon<sup>128</sup>, with Lands and Survey accountable for the balance. The task of closing the gate within the flood control stopbank<sup>129</sup>, thereby reducing the flow of sea water into the lagoon, was completed in 1957<sup>130</sup>. Although a pump was used to drain some of the lower lying areas, no infill was used in the conversion of the lagoon to a dry stock farm – The lagoon had accreted so much that drainage measures were sufficient to create farmland. The Awapuni Moana ceased to exist in early 1958.

Figure 8.4 – Last remnant of Kopututea: the Awapuni Creek, 2000



## Prologue

Even after the completion of the drainage work the despoilment of this once great resource space continued. The freshwater Awapuni Creek, and its tributary streams which remained after the drainage, apparently sustained a prolific number of tuna, but this was not necessarily welcomed by the new managers of the farmland:

I have had a particular problem with eels in connection with a flood pump draining a coastal area adjacent to Gisborne. The eels are extremely numerous and are causing overloading of the pump. A conventional grill on the intake to the pump well does not stop smaller eels. It just seemed possible to me that a modified form of your electric fence placed in the channel... might be very successful<sup>131</sup>.

<sup>128</sup> "Awapuni Lagoon drainage." – PBCB, to Commissioner of Crown Lands, 17.12.1957 (L&S 8/96).

<sup>129</sup> See Figure 4.5 on page 99.

<sup>130</sup> "Awapuni land drainage." – PBCB Report 29, 2.5.1957 (L&S 8/96).

The creek supported a number of waterfowl and sedges as well. As will be shown in the following Chapter, however, these last remaining species of importance to Maori were negatively affected by the final insult to this once great taonga: the establishment of the Paokahu landfill adjacent to, and spreading over, the former bed of the lagoon.

The development of the Paokahu landfill yielded new information about the origin of the lagoon. PBCB and Gisborne City Council research in the vicinity casts doubt on some aspects of the Land Court determination in 1928. Test bores were cored to ascertain the composition of soil layers under the proposed Paokahu landfill in 1972. These cuttings unveiled layers of clay and topsoil which were “consistent with the lagoon being an old river channel<sup>132</sup>.” In some layers, these bore holes yielded evidence of vegetation which was intolerant of saltwater, but in others there was evidence of vegetation which is associated with saltwater intrusion<sup>133</sup>. However, the former species tended to dominate the latter, especially in all upper layers of the soil horizon excepting the topmost. This suggests that the Awapuni Moana might have been a predominately freshwater lagoon until a relatively short time before the 1928 hearing. Whatever the case, these substantial research projects from the 1960s to the 1990s suggest that there was no *certainty* that the Awapuni Moana was a saltwater estuary. Rather, they suggest that the lagoon fluctuated between predominately seawater to predominately freshwater conditions in keeping with forces of ‘sudden erosion or convulsion.’

Even at the time of the hearing in 1928, the Commissioner of Crown Lands knew that “large freshwater springs entered the lagoon from the west<sup>134</sup>.” Later, tests by the Gisborne District Council confirmed that springs which fed the Awapuni Creek were surprisingly substantial<sup>135</sup>. A locally based scientist of the DSIR was asked to comment on the extent of saltwater intrusion into the lagoon in 1952. While he commented that high seas can cause tidal waters to “invade a good part of the floor of the lagoon<sup>136</sup>,” he also suggested that observations of saline water spread were highly variable and required much longer periods of observation to accurately determine their extent. This scientific caution can be contrasted with the Crown’s expert in 1928 who based his conclusion of saltwater intrusion on one taste of the water.

<sup>131</sup> “Waikato electric fence” – G.I. Burnett, to D.S. Phillips, Raukura Agricultural Research Centre, Hamilton, 14.10.1965 (PBCB 2/38/10).

<sup>132</sup> “Cook County Council specified departure application 72/5. Gisborne City Council.” – Summary of matters discussed by the objections committee with the Chief Engineer, PBCB, 15.9.1972 (GCC R5A).

<sup>133</sup> W.A. Pullar, Soil Survey Office, Gisborne, Soil Bureau DSIR, to Resident Engineer, Ministry of Works, Gisborne, no date (PBCB 2/21).

<sup>134</sup> Department of Lands and Survey to Marine Department – Report No. 22/2615, 11.1.1928 (M 4/1877).

<sup>135</sup> “Paokahu landfill stormwater and leachate resource consent applications.” – GDC Report 97/275, 29.10.1997 (GDC 93004).

<sup>136</sup> “W.A. Pullar report.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 7.10.1952 (PBCB 2/21).

Later research by the same scientist in conjunction with PBCB staff found that:

With regard to shore lines, it would seem to me that the northern side of Awapuni Lagoon was shaped by the river flowing inside a sand spit rather than by the sea itself. The curvature is too sharp to be attributable to sea action. The shaping of the northern side of the recently formed Muriwai Lagoon was certainly done in this manner and the two look similar<sup>137</sup>.

The validity of this new information was never tested in Court, nor in Crown debate. It appears to support the circumstantial evidence of the advocate for the Maori applicants in 1928. While more research would have been needed to displace the *prima facie* title of the Crown, it is suggested that the 1953 Act was based on assumption rather than fact. The Marine Department had assumed that the lagoon was an arm of the sea in 1898, and this assumption biased all future interpretations of the lagoon.

In the 1970s, the threat of compulsory acquisition of a site for the Paokahu landfill and, conversely, a successful petition for the return of Centennial Marine Drive aroused local Maori agitation about the drainage of the Awapuni Maori. The first petition to parliament for the return of the former lagoon bed was lodged in 1971 by the beneficial owners of Paokahu 5 & 6 Blocks. In 1980 this petition was amended to include the owners of Kopututea Block<sup>138</sup>. Pita Kaua, who had been Court Clerk in the 1928 hearing, made submissions to Ministers of the Crown in 1974, 1977 and 1978. Local Maori also petitioned the Waitangi Tribunal<sup>139</sup>. The main emphases in these petitions were that:

...the Crown did not advise the people of the Crown's intention with respect to the Lagoon. The local people advise that they were not notified of the Crown's intention to transform Te Awapuni into farm land<sup>140</sup>.

No consideration was given to the interests of the Paokahu people when the Awapuni Lagoon was declared to be Crown land in 1953. It is unconscionable that any action be taken for resettlement of the area until the question of the customary rights of the Maori people has been determined<sup>141</sup>.

The 1980 petition also suggested that the phrase "provision be made securing the title of the Crown to the bed of the Lagoon against possible claims by adjoining

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<sup>137</sup> A.D. Todd, to W.A. Pullar, 13.2.1962 (GisMUS Pullar).

<sup>138</sup> "Petition of the Members of the Rongowhakaata tribe, Te Aitanga-A-Mahaki tribe and the Proprietors of Mangatu Blocks A Maori Incorporation as Trustees for the Owners of Paokahu 5&6 Block and Kopututea 1&2 Block re Awapuni Lagoon." – September 1980 (GCC 01-212-03).

<sup>139</sup> Evidence of E. Barber: "Extract of minutes from 133 Gisborne MB 98-118" – 6.3.1992, Rota J (GisMLC 91632).

<sup>140</sup> "Petition of the Members of the Rongowhakaata tribe, Te Aitanga-A-Mahaki tribe and the Proprietors of Mangatu Blocks A Maori Incorporation as Trustees for the Owners of Paokahu 5&6 Block and Kopututea 1&2 Block re Awapuni Lagoon." – September 1980 (GCC 01-212-03).

<sup>141</sup> "The petition of: members of the Rongowhakaata tribe, the Te Aitanga-a-Mahaki tribe and the Proprietors of Mangatu Blocks as trustee for the Paokahu and Kopututea owners of Gisborne." – L.R. Moeau, 4.11.1985. (GisMLC 91169).

owners in the event of the dewatering of the bed” in the 1953 Act reflected Crown doubts about the 1928 investigation. According to the petitioners, the outcome was that, “The Crown deliberately divest[ed] the adjoining owners of any proprietary and/or customary rights they may have had to Te Awapuni<sup>142</sup>.” This is an accurate summary of the impact of the 1953 Act – A once great fishery had been taken from them and the level of accretion was rapid enough that neighbouring Maori owners would have been eligible to a significant amount of land through accretion in a relatively short time period, but this possibility had been taken from them. Yet, the many petitions and submissions of Maori on this topic suggest that they were unaware of the accretion which had *already* occurred up to 1953.

Although government representatives were often sympathetic to these submissions, for a long time they would not address the matter directly, but rather would suggest the need for petitioners and Lands and Survey (later LandCorp) to negotiate compensation<sup>143</sup>. It required the possibility of a public claim through the Waitangi Tribunal to inspire the Crown to resolve directly the petition:

The way is now clear, following changes to the Treaty of Waitangi 1975, for the petitioners to present a claim to the Waitangi Tribunal...To the extent that the claims of the petitioners are considered and settled through either of those channels, no formal inquiry as sought in the petition would be necessary<sup>144</sup>.

On this basis and also because there was the possibility of settling the issue directly, the Maori Affairs Committee of parliament decided to give the 1985 petition favourable consideration<sup>145</sup>.

In 1990 the Minister of Lands, Peter Tapsell, applied to the Gisborne Maori Land Court to vest the bed of former lagoon in the name of the petitioners. In an unusual move, Tapsell addressed the Court in person<sup>146</sup>:

...a clear and careful study of the records show that Aitanga Mahaki and Rongowhakaata have been subject to an injustice as the result of a system over which they had no control and it seems to me not too much to ask of the system that it should now demonstrate sufficient flexibility to allow that injustice to be corrected at the earliest possible moment.

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<sup>142</sup> “The petition of: members of the Rongowhakaata tribe, the Te Aitanga-a-Mahaki tribe and the Proprietors of Mangatu Blocks as trustee for the Paokahu and Kopututea owners of Gisborne.” – L.R. Moeau, 4.11.1985. (GisMLC 91169).

<sup>143</sup> M.J. Fryer, Registrar, Maori Land Court, Gisborne, to District Manager, LandCorp, 16.8.1989 (GisMLC 91169).

<sup>144</sup> “House of representatives. Maori Affairs Committee.” – Report of B.C. Gregory, Chairman, 16.6.1987 (GisMLC 91169).

<sup>145</sup> Extract from the Journals of the House of Representatives, No. 85/301, 16.6.1987 (GisMLC 91169).

<sup>146</sup> Submission of P. Tapsell: “Awapuni lagoon.” – 132 Gisborne MB 1-16, 19.10.1990, Russell J. (GisMLC 91169).

In this hearing, it was suggested that the 1953 Act had acted against the logic of the 'without prejudice' ruling in 1928. That ruling had left open two possibilities for future Maori claims, but...

These avenues for re-dress were closed to the applicants in 1953...thus depriving them and their descendants of any opportunity to benefit either through re-investigation or through any accretion that may have accrued to adjoining titles...

That the 1953 legislation was confiscatory in its effect in that it removed land rights accorded to all New Zealanders in respect to the doctrines on erosion and accretion...

That as a consequence of these actions those who may have had an equitable interest, may have been deprived of an opportunity to develop an economic base from what was the lagoon<sup>147</sup>.

This appears to be a frank admission of the Crown's wrongdoing in the matter. Again, however, discussion of accretions relates only to Maori eligibility for land *after* 1953.

The attempt to hand back the Awapuni Moana station led to a protracted dispute in the local Maori Land Court about who should become the rightful recipients of the station farm. An account of this dispute is not required here, but it is well documented in files held at the Tairāwhiti branch of the Court<sup>148</sup>. As a conclusion to this Section, it is pertinent to account for Peter Tapsell's final statement at the 1990 hearing. He concluded his declaration by stating that the handover of the Awapuni station farm was "full and final settlement of this grievance<sup>149</sup>." At the end of Judge Russell's summation, Lewis Moeau of Rongowhakaata and Te Aitanga-a-Mahaki descent interrupted with a declaration that:

There is only one concern that I have and I thought I heard the words 'in full settlement' and Mr Minister, with due respect, I wonder whether we should accept the return of the land as full settlement<sup>150</sup>.

Perhaps the Minister of Land's assertion that farmland could compensate for the loss of a significant wetland *reflects* rather than resolves the history of Awapuni Moana. The lack of respect for the cultural value of such environments to Maori people and the cultural hegemony of 'productive land' resonates throughout that history. In addition, the Crown deliberately withheld information from local Maori which should have meant that most of this farmland was theirs as of the early 1950s. Lewis Moeau's declaration may require more attention.

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<sup>147</sup> Submission of P. Tapsell: "Awapuni Lagoon." – 132 Gisborne MB 1-16, 19.10.1990, Russell J. (GisMLC 91169).

<sup>148</sup> Files: GisMLC 91169, GisMLC 91632 and GisMLC 91632a.

<sup>149</sup> Submission of P. Tapsell: "Awapuni lagoon." – 132 Gisborne MB 1-16, 19.10.1990, Russell J. (GisMLC 91169).

<sup>150</sup> Statement by L. Moeau: "Awapuni lagoon." – 132 Gisborne MB 1-16, 19.10.1990, Russell J. (GisMLC 91169).

## 8.2 Private drainage and civic reclamation projects

The drainage of Awapuni Moana represents a dramatic example of the loss of wetland habitats. More often, the transformation of swamps, mudflats and estuaries was much less dramatic. Nonetheless, the cumulative outcome of the growth of pastoral agriculture and horticulture, and its concomitant destruction of wetlands over time, was no less systematic in its effect. Likewise, civic reclamations along the Taruheru River for beautification, amenity and recreational purposes as well as industrial reclamations at the mouth of Waikanae Creek were typically small. However, they too were significant over time, leading to the eradication of the last remaining examples of pipi beds and eeleries. There are few records for these types of wetland destruction, something which probably reveals a legislative lack of regard for resource spaces of importance to Maori. Given the lack of such records, this Section presents the few documented case studies which might be considered typical of the drainage and reclamation practices on the Poverty Bay flats.

### Alterations to wetland drainage systems

Given the complex and extensive inscription of former river beds on the Poverty Bay flats, swamps and wetlands were plentiful on the floodplain<sup>151</sup>. The transformation of this floodplain into one of New Zealand's principal horticultural and agricultural areas was, therefore, at great cost to local ecology. Pullar contended that:

Over 43% of the soils of the Gisborne Plains require artificial drainage and early into the period of European settlement a major drainage system was constructed consisting of large drains at Muriwai, Taurau Valley, Opou, Repongaere and Ormond. These were enlarged and deepened in the 1920s and again in 1957. Smaller drains track across country from one depression to another and often follow roadsides. To assist the quick discharge of storm-water the Pakowhai Stream and the Taruheru River have been straightened<sup>152</sup>.

There appears to have been significant projects of drainage for farm development in the 1870s, during which time the Whatatuna and Lavenham drains were first installed<sup>153</sup>. The Whatatuna drain removed one of the district's most substantial freshwater wetlands which was located on Opou Block. Up until that time, local Maori had used the wetland in conjunction with the Pipiwahakao forest to forage for many of their food and fibre requirements<sup>154</sup>. Large scale drainage projects such as this accompanied the large scale confiscation of Maori land at Opou and Ormond – Land was typically 'improved' before it was passed on to settlers.

<sup>151</sup> Jones 1988; Pullar 1962; Pullar and Penhale 1970.

<sup>152</sup> Pullar 1962, p55.

<sup>153</sup> Oliver and Thompson 1971.

<sup>154</sup> Pers. comm. Tom Smiler.

Drainage for farmland was not the only cause of wetland destruction at that time. The extensive swamps on the true right of the Waipaoa, especially between Patutahi and Manutūke were considered a “national embarrassment” after the Minister of Public Works “found himself, fittingly enough, stuck in the Patutahi bog<sup>155</sup>.” Not surprisingly, perhaps, the Cook County promptly received a government grant to improve the road, leading to the destruction of a long corridor of wetlands<sup>156</sup>. The securing of dry ground for this road – a straight line which dissected the tributary streams of the Pakowhai, Muriwai and Coops lagoons – led to the partial dewatering of these wetlands<sup>157</sup>. Similar effects were produced by the construction of the Napier-Gisborne railway: the straight lines of European engineering proved disastrous for the delicate ecologies of Maori resource spaces.

Figure 8.5 – The Whatatuna drain



Likewise, these drainage projects were expanded again after the Second World War to accommodate both war veterans and the evolution of the Waipaoa River flood control scheme (WRFCS). It has already been suggested in Section 4.3, that the WRFCS led to several opportunistic transformations of wetlands into farm property. Many new connections to the Whatatuna drain resulted from the hydrological disruptions of the WRFCS.

Legislative changes also accelerated the level of wetland drainage. The Soil Conservation and Rivers Control Act 1941 established substantial subsidies for private

<sup>155</sup> Oliver and Thompson 1971, p113.

<sup>156</sup> Rooding, 2.7.1905 (GisMUS 88-37).

<sup>157</sup> L&S 1980.

<sup>158</sup> “Waipaoa River flood control scheme.” – PBCB, to Members, PBCB, 12.11.1952 (PBCB 2/19).

<sup>159</sup> “Drainage districts. River districts.” – Clerk, PBRB, to SCRCC, 4.9.1946 (PBRB 17/3)

landowners to drain swamps. While subsidised drainage of private land required the supervision of catchment boards, approval for wetland reduction was all but automatic<sup>160</sup>. There was no scope for public objection and, as was suggested in Chapter 4, the 1941 Act provided no safeguards to protect Maori fishing interests, nor any provisions for Maori participation in the management of waterways. The impact of Soil Conservation and Rivers Control Council (SCRCC) subsidies was particularly transformational in the Poverty Bay catchment. In 1962, for example, subsidised drainage was so extensive that the PBCB could proudly proclaim that "Forty-four drainage jobs were completed and proposals for a further 40 were awaiting action pending the provision of the local contribution to the cost<sup>161</sup>." With subsidies, existing collective drainage projects from the 1870s and 1920s were extended once more, and it also became economically viable to drain smaller wetlands on individual properties.

The first local impact of these new subsidies occurred soon after the War, when the Department of Lands and Survey acquired 658ha at Rakaukaka to settle returned servicemen<sup>162</sup>. In 1949, the Department authorised a substantial drainage project at Rakaukaka<sup>163</sup> and, with the assistance of SCRCC subsidies, it eventually connected these drains to the Whatatuna culvert<sup>164</sup>. The increased flow through the Whatatuna culvert prompted a request to extend the drainage system on the flats<sup>165</sup>. Naturally, landowners in the vicinity of the Whatatuna culvert accepted the opportunity to ride on this new wave of drainage in the area and removed what little of the former wetland areas that remained. The work was approved by the PBCB which then obtained a 1:1 subsidy from the SCRCC<sup>166</sup>. Murton depicted the wetlands near Rakaukaka prior to their drainage as extensive – about the same size as the neighbouring Pīpiwhakao forest<sup>167</sup>. Around the same time, a SCRCC subsidy led to the removal of all remaining wetland areas on the true left of the Taruheru River<sup>168</sup>. According to Murton, these wetlands were also extensive in pre-colonial times, especially those near Whataupoko<sup>169</sup>.

The impact of SCRCC subsidies was also evident in the case of the Wherowhero Lagoon. Like the Awapuni Moana, Wherowhero would have regularly changed its configuration in relation to the movement of the Waipaoa River. At times, the

<sup>160</sup> Acheson 1962.

<sup>161</sup> "Work undertaken by Catchment Board during year." – Gisborne Herald, 12.10.1962 (GisMUS VF-Natural Events).

<sup>162</sup> Department of Lands and Survey, to Engineer in Chief, Public Works Department, November 1947 (W1 48/783).

<sup>163</sup> "Rakaukaka drainage" – Cook County Council, to Commissioner of Crown Lands, 27.5.1949 (L&S 4/34).

<sup>164</sup> "Rakaukaka drainage." – Commissioner of Crown Lands, to Cook County Council, 14.3.1950 (L&S 4/34).

<sup>165</sup> "Whatatuna drainage area. Improvements to Whatatuna Stream channel." – Public Works Department, to Soil Conservation Department, 21.3.1950 (W1 48/159).

<sup>166</sup> "Whatatuna drain." – Gisborne Herald, 22.3.1950 (W1 48/159).

<sup>167</sup> Murton 1969, Figure 12.

<sup>168</sup> "Draining flats. Taruheru proposal" – from Gisborne Herald, 15.3.1946 (L&S 15/244/12).

<sup>169</sup> Murton 1969, Figure 12.

northern part of the Wherowhero lagoon system was known as the Kowhai lagoon<sup>170</sup>, and appears to have been an individual hydrological unit of predominately freshwater<sup>171</sup>. In modern times, the lagoon is comprised of 93ha of open water and 40ha of surrounding swamp<sup>172</sup>. Both types of environment, as well as the Orongo Lagoon immediately south of Te Kuri a Paoa, were considerably larger in the pre-War period<sup>173</sup>. Although it has been substantially transformed during the 20th Century, Wherowhero continues to provide habitat to a wide range of species<sup>174</sup>, many of which are important to local Maori, especially Ngai Tamanuhiri. The upper reaches of the lagoon once sustained black pipi, suggesting that it was much more of a freshwater environment than it is now.

Figure 8.6 – The northern pools of Wherowhero Lagoon



Some of the transformations to the lagoon's size and configuration include:

- Dewatering of the Pakowhai Swamp section of the Wherowhero wetland complex after construction of railway embankments<sup>175</sup>. Tributaries to this area were cul-

<sup>170</sup> "Muriwai 1942" – J. Robinson, 1979 (GisMUS VF-Natural History: Botany).

<sup>171</sup> L&S 1980.

<sup>172</sup> National Wetland Survey 1972: Muriwai Lagoon (LA 3/4).

<sup>173</sup> Green and Pullar 1960.

<sup>174</sup> L&S 1980, p4; "Cook County District Scheme." – Department of Internal Affairs, Gisborne, to Conservator of Wildlife, Rotorua, 30.1.1980 (WS 11/21/10).

verted through the rail and road system and sent directly into the open water area of the lagoon. Therefore, the swampy margin decreased because it lacked a constant supply of water.

- The artificial drain which enters the south end of the lagoon dewatered considerable areas of wetland between the Muriwai township and Te Kuri a Paoa<sup>176</sup>. It is not known when this was first constructed, but it has been deepened several times in the post-War period. This drain is part of a larger system which has led to the widespread dewatering of Orongo Lagoon.
- Disruption of freshwater tributaries (especially the Karaua Stream) as a result of the WRFCS<sup>177</sup>.

Analysis of aerial photos over time suggests a substantial reduction in the extent of Wherowhero and Orongo. Even a simple evaluation of a 1:50,000 topographic map<sup>178</sup>, reveals an overwhelming number of straight blue lines – the unmistakable mark of drainage culverts – from the railway to the open water areas of Wherowhero and Orongo.

Substantial changes to the drainage pattern around Wherowhero lagoon were made after the Second World War. In part, these related to the WRFCS, but they were also brought about by changes in land management practices and the availability of subsidies. Pakeha farmers and the East Coast Commissioner applied for assistance to carry out drainage work on properties at Muriwai in 1950<sup>179</sup>. The proposal included a 1.3km drain which was to run parallel to the railway reserve to intercept all run-off from the land west of the railway. The drain was then led to the Pakowhai Stream, cutting the supply of water to the wetland area around the estuary. This proposal was accepted by the PBCB as an improvement, as were a series of adjunct drainage projects which lead to the removal of 8ha of the Karaua Swamp – a sedge grass area and habitat for weka at the northern end of the lagoon<sup>180</sup>. Pakowhai Stream was further straightened and divorced from the wetland margin in 1955, removing another 4ha of swamp<sup>181</sup>. In 1968, the capacity of all these drainage devices was increased to prevent flooding over the stopbanks of the culvert<sup>182</sup>, and the drainage area was extended to a large area of Crown titled swamp. This ‘flooding’ had previously renourished the northern area of the swamp system with water. While it is not recorded how much swamp was removed in the 1968 developments, over 182ha were “improved” by its implementation, principally by a lowering of the water table<sup>183</sup>.

<sup>175</sup> “Muriwai 1942” – J. Robinson, 1979 (GisMUS VF-Natural History: Botany).

<sup>176</sup> National Wetland Survey 1972: Muriwai Lagoon (IA 3/4).

<sup>177</sup> Refer to Section 4.3.

<sup>178</sup> Map Y18 – Gisborne – 260 Series.

<sup>179</sup> “Drainage. D.C. Morice and others, Muriwai” – PBCB, 3.2.1950 (W1 48/159).

<sup>180</sup> “Drainage. S. and M. Spence and D.C. Morice.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 7.11.1951 (PBCB 2/48).

<sup>181</sup> “Pakowhai Stream. Flood control.” – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 21.4.1955 (PBCB 2/48).

<sup>182</sup> “D.C. Morice and Proprietors of Pakowhai Inc. Drainage scheme.” – G.I.S. Burnett, Assistant Engineer, PBCB, to Chief Engineer, PBCB, 31.1.1968 (PBCB 2/48).

*Figure 8.7 – Straight line drains near Muriwai which deprive Orongo of water*



At the southern end of the system, efforts were made to separate entirely the drainage overlap between the Orongo and Wherowhero wetlands. Drainage channels were cut near the Muriwai Beach Road to limit the exchange of water between the two wetlands in 1956<sup>184</sup>. Later, with the addition of permanent pumping devices and floodgates to prevent saltwater intrusion, and with the extension

of the drainage channels south of Te Kuri a Paoa, the Orongo Lagoon was all but starved of freshwater. In traditional times, there was sufficient water in the Orongo and Wherowhero lagoons that they were effectively one system and Te Kuri was an island rather than a peninsula<sup>185</sup>. Orongo has shrunk significantly in recent years: whereas it was once a saltwater estuary<sup>186</sup>, which yielded a reliable supply of crayfish and paua for local iwi, it is now a small, brackish lagoon<sup>187</sup>:

Changes: slow transition from silt marsh to freshwater vegetation. The diversion and deepening of Orongo Stream led to a rapid change in the lagoon. This was intended to completely dry out the lagoon, but it has not worked. Water level is about ½ of original level. There has been seasonal variation since then<sup>188</sup>.

This extensive and complex wetland system would have provided kai Moana and craft fibres for a significant number of people but, today, it has receded into a series of disconnected pools and estuaries.

Outwardly, it might appear that Maori owners were heavily involved in these drainage projects. Some drainage channels were dug across their property, while many others border the land of Pakowhai and Te Kuri Inc., especially alongside Crown Land occupied to the north of the lagoon. The appearance of Maori involvement in the draining of this swampland is deceptive. The land in question was at the time managed by pakeha lessees or the East Coast Commissioner. That these stewards could carry out drainage with only limited attention to the environmental desires of

<sup>183</sup> "D.C. Morice and Proprietors of Pakowhai Inc. Drainage scheme." – G.I.S. Burnett, Assistant Engineer, PBCB, to Chief Engineer, PBCB, 31.1.1968 (PBCB 2/48).

<sup>184</sup> "Drainage. D.C. Morice and Proprietors of Pakowhai and Te Kuri Inc. Blocks." – A.D. Todd, Engineer, PBCB, to Chairman, PBCB, 5.4.1956 (PBCB 2/48).

<sup>185</sup> Pullar 1963.

<sup>186</sup> "National wetland survey: Coops Lagoon, Orongo." (IA 3/2).

<sup>187</sup> "Muriwai 1942" – J. Robinson, 1979 (GisMUS VF-Natural History: Botany).

<sup>188</sup> "National wetland survey: Coops Lagoon, Orongo." (IA 3/2).

Maori landowners is cause for possible concern. The Commissioner's involvement yields similar conclusions to the account of deforestation of Mangatu Blocks in Section 2.2. Because most of the contemporary Maori leaders in the area are now deceased, it is impossible to know whether landowners were allowed any say in these matters. The PBCB records of subsidised drainage suggest that they may not have had *any* involvement: they are never mentioned in correspondence between land managers and PBCB staff<sup>189</sup>. Some records suggest that lessees had considerable freedom to transform these properties and any swamp or accretion land alongside them:

Mr. R.D. Black has reclaimed an area of 26 acres of Crown land swamp adjacent to his leased property at Pakowhai. This land has no access and could only be used effectively in conjunction with Black's property and it is proposed to dispose of the land to him preferentially, subject to him arranging and paying for the necessary survey<sup>190</sup>.

In retrospect, it is impossible to tell whether this land should have accrued to the title of Maori landowners rather than Mr. Black. While this raises the intriguing possibility of impropriety in these matters, there are insufficient records of these types of transactions to ascertain whether there has been a breach of Maori rights.

All the aforementioned drainage projects were implemented with SCRCC subsidies, usually a 2:1 payment under the *Minor river* scheme<sup>191</sup>. In the light of the fact that the Karaua, Pakowhai and Wherowhero streams fed an important resource gathering space for local Maori, none of these small streams could be considered 'minor.' Higher-order SCRCC schemes required rights of public objection but there were no opportunities for public participation under the *Minor river* scheme. Most of the projects established in the 1950s and 1960s failed to create valuable farm land. New subsidies were provided in the early 1970s to complete the work, leading to a new period of wetland drainage<sup>192</sup>. In 1968 and 1969, the Conservator for Wildlife encouraged the PBCB to halt future drainage projects to preserve and, perhaps, restore the remaining freshwater ponds at the head of the Lagoon<sup>193</sup>. The PBCB replied that the protection "of a shallow lake in this area would detrimentally affect the drainage of adjacent farm land<sup>194</sup>." In the mindset of catchment board staff,

<sup>189</sup> **File:** PBCB 2/48.

<sup>190</sup> "Swamp reclamation. R.D. Black Trust." – C.L. Costello, Commissioner of Crown Lands, to Secretary, PBCB, 19.4.1972 (PBCB 2/48).

<sup>191</sup> "Pakowhai Stream. G.R. Black and R.D. Black." – Chief Engineer, PBCB, to Soil Conservation Committee, PBCB, 5.6.1965 (PBCB 2/48)

<sup>192</sup> "R.D. & D.P. Black & D.C. Morice, Muriwai." – G. Humble, Drainage Officer, PBCB, to Chief Engineer, PBCB, 26.5.1972 (PBCB 2/48).

<sup>193</sup> "Establishment of wildlife reserve near Gisborne." – P.J. Burstall, Conservator of Wildlife, Rotorua, to CCC, Gisborne 2.12.1968 (PBCB 2/48).

<sup>194</sup> "Re. Proposed wildlife reserve. Muriwai." – P.J. Burstall, Conservator of Wildlife, Rotorua, to Chief Engineer, PBCB, 31.10.1969 (PBCB 2/48).

farmland was part of the landscape as of natural right; wetlands and mudflats were considered alien to their natural environment.

### 'Beautification' – reclamation of city rivers

In Chapter 6, the outcomes of attempts by the Gisborne Harbour Board (GHB) to modify the Turanganui, Waimata and Taruheru rivers for construction of the port were assessed. The activities of the GHB also stimulated a variety of civic transformations of the riparian margins of these rivers. The GHB's construction of breastworks along the Taruheru and Turanganui, for example, led to attempts to 'beautify' the river banks on the landward side of the breastworks. In 1913, the local *Beautifying association* requested permission to flatten the slope on the bank of Reads Quay for 60 metres. The Harbour Board granted permission to carry out this work, even though the *Beautifying association* had only a temporary right of occupation in the area<sup>195</sup>. The landscaping and grassing of the banks was based on monocultural understandings of a 'tidy' landscape – native species were removed and drainage and other works on the river margins removed habitat for pipi and other kaimoana.

Breastwork and reclamation was planned along the true right of the Taruheru from Roebuck Road to Carnarvon Street in 1932. Local engineers contended that there would be "little to complain about as a result of these works<sup>196</sup>." Initially, however, the Marine Department rejected the proposal. Until the 1950s, the Department would only reject a petition for reclamation along the Taruheru if there was potential to accentuate flood damage. Reclamation reduced the width and capacity of the river channel, possibly exaggerating the effect of floodwaters of the Waipaoa when they entered the Taruheru<sup>197</sup>. When the flood protection scheme was finalised, the channel capacity of the Waikanae and Taruheru waterways was considered surplus to requirements. As a result, the GCC and the GHB received the blessing of the Marine Department to reclaim large portions of both waterways<sup>198</sup>. This finding was welcomed by the people of Gisborne who could see the opportunity to convert mudflats into "useable land right in the centre of the city<sup>199</sup>." The plan for breastworks and reclamation from Roebuck Road to Carnarvon Street, which had been rejected in 1932, was permitted at a later date and the reclaimed land became the Gisborne Botanical gardens.

The Marine Department's tacit permission to remodel the Taruheru after construction of the WRFCS led to renewed vigour for the removal of mudflats along the river bed and for radical transformation of the riparian margin. Local authorities including the GCC, the Catchment Board and the Cook County Council held con-

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<sup>195</sup> "Harbour Board monthly meeting." – Poverty Bay Herald, 28.7.1913 (GHB CB).

<sup>196</sup> "Removing mudflats." – Poverty Bay Herald, 26.9.1932 (GHB CB).

<sup>197</sup> "Taruheru breastwork sanction withheld." – Poverty Bay Herald, 16.12.1932 (GHB CB).

<sup>198</sup> "Reclamation of City riverbanks." – Gisborne Herald, 27.3.1957 (M3 13/133/1).

<sup>199</sup> *Ibid*.

ferences to discuss reclamation issues in 1952 and 1957. At the latter event it was concluded:

That this Conference agrees in principle to plans being prepared for the reclamation from time to time of such areas of the beds of the Turanganui and Taruheru Streams as will not in future be required for waterways<sup>200</sup>.

There were nine applications for aesthetic reclamations to the Marine Department in the years thereafter. While some of these authorisations were never fulfilled<sup>201</sup>, the reclamations which did proceed led to the removal of many of the mudflats from which Maori had traditionally gathered pipi.

The Peel Street reclamation – which became known as the Band Rotunda area – was initially advanced on the basis of aesthetic concerns: to tidy the “mud flats exposed by tide” which were considered “unsightly<sup>202</sup>.” The Ministry of Works became involved in July 1960 and advised that:

[T]he Council prepare a plan showing the area of mudflats which can be reclaimed at the Taruheru River between the boat sheds and the Peel Street bridge on the Town Side. The proposal was that concrete and brick rubble from Government owned buildings which were to be demolished should be used to form the area and the City Council fill it in by sweepings and clean rubbish to be deposited by or under the control of the Council. If the [Harbour] Board agreed to the proposal the matter would be taken up by the Ministry of Works with the City Council<sup>203</sup>.

The GCC and the GHB together applied for this reclamation in October 1960<sup>204</sup>, and part of the reclamation – a trial – was authorised by Order in Council in May 1961<sup>205</sup>. The agreement was for the Board to lease the foreshore area to the Council for a period of 21 years<sup>206</sup>. Of potential concern to Ngati Oneone and other iwi in the area, the GCC had intended to use nearly 12,00m<sup>3</sup> of “spoil” from the reservoir site on ‘Nob Hill’ – part of the culturally and spiritually important maunga Titirangi – to construct the reclamation<sup>207</sup>. Rubble from the surplus government buildings was used in the Kaiti Beach reclamations.

Later, port trade declined with a decrease in the arrival of overseas ships<sup>208</sup>. As a result the GHB and the GCC focused once more on ‘beautifying’ the river bank

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<sup>200</sup> 3.4.1957, p272 (GHB MB).

<sup>201</sup> “Reclamation authorities.” – I.D. Britton, for Director, Marine Division, MoT, to Secretary, GHB, 30.10.1975 (MoT 43/2/6).

<sup>202</sup> “Reclamation of river mud flats advocated.” – Gisborne Herald, 18.5.1960 (GisMUS VF-Environment).

<sup>203</sup> Resident Engineer, MoT, to Secretary GHB, 15.7.1960 (GHB LB).

<sup>204</sup> 17.10.1960, p308 (GHB MB).

<sup>205</sup> “Concerns over River reclamation scheme.” – Gisborne Herald, 16.5.1961 (GisMUS VF-Environment).

<sup>206</sup> “Reclamation on Taruheru River.” – 21.8.1961, p19 (GHB MB).

<sup>207</sup> “Harbour Board to move on Taruheru River reclamation.” – Gisborne Herald, 22.8.1961 (GisMUS VF-Environment).

and foreshore. With the recommencement of dredging in the river, spoil was deposited on the banks of the Taruheru, rather than being deposited at sea, as a means to reclaim parks from mudflats. The destruction of pipi beds again followed these reclamations. Areas of the Waikanae Stream and beach were reclaimed<sup>209</sup>, along with parts of the Taruheru riverbed to create car parking. Ownership of these areas was transferred to the GCC because, by this stage, the GHB was "getting nothing out of the land now<sup>210</sup>," illustrating how the foreshore was seen as a mere commodity. By this stage, the GCC's intention was to create recreational spaces. There was a substantial reclamation at the confluence of the Waimata and Taruheru in the early 1970s to provide for a marina<sup>211</sup>. This yielded about 10ha of land and had been pre-approved by the Marine Department as early as 1933<sup>212</sup>.

In keeping with the tenets of civic beautification as promulgated by the GCC, attempts were made to 'tidy' the last remaining mudflats which, in the view of engineers, could not have been reclaimed. The *Gisborne Jaycees* – a service club – had made requests to both the GCC and the GHB to plant an invasive wetland grass on what was left of the Band Rotunda mudflats after reclamation<sup>213</sup>. Subsequently, in 1958, the GCC requested the GHB's approval to plant *Spartina townsendii* grass around and below the low water mark on the reclamation<sup>214</sup>. This sea grass spreads quickly and effectively hides mudflats from view. The GHB recognised the possibility of the undesirable spread of the grass and of its capacity to block waterways, so it sought advice from the PBCB engineer. The PBCB suggested that in the respect of the "possibility of it blocking tidal water ways...there was little danger where there was a flow of water<sup>215</sup>." On the basis of this information, the GHB accepted the planting of the grass as long as it was not held responsible for ensuing damage or nuisance<sup>216</sup>.

The granting of this permission was an unfortunate mistake. In terms of hydrological impact, *Spartina* reduces the capacity of rivers by binding the sediments of mudflats and narrowing river channels<sup>217</sup>. It is "efficient at trapping sediments so has been widely planted, often ill-advisedly, to aid land reclamation<sup>218</sup>." Partly as a result of this characteristic, the spread of *Spartina* through the Taruheru River, in particular, has heightened the possibility of flooding in times of high rainfall<sup>219</sup>. Ecologi-

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<sup>208</sup> Whyte 1984, p91.

<sup>209</sup> "Waikanae Beach strip access." – 20.12.1971 (GHB MB); "Waikanae Creek. Reclamation." – 20.3.1967 (GHB MB).

<sup>210</sup> "Harbour Board to move on Taruheru River reclamation." – Gisborne Herald, 29.8.1961 (M3 13/133/1).

<sup>211</sup> "Unprecedented facilities for boating in Gisborne area." – Gisborne Herald, 7.10.1971 (GHB CB).

<sup>212</sup> "Reclamation authorities." – I.D. Britton, for Director, Marine Division, MoT, to Secretary GHB, 30.10.1975 (MoT 43/2/6).

<sup>213</sup> "Spartina grass." – p273, 15.8.1960 (GHB MB).

<sup>214</sup> "Works committee report." – I.J. Quigley, p170, 14.7.1958 (GHB MB)

<sup>215</sup> "Works committee report." – I.J. Quigley, p186, 11.8.1958 (GHB MB).

<sup>216</sup> *Ibid*

<sup>217</sup> "Council adopts Taruheru River flow programme." – Gisborne Herald, 22.5.1997 (GisMUS VF-Environment).

<sup>218</sup> Johnson and Brooke 1998.

cally, *Spartina* renders mudflats uninhabitable for a number of species including pipi<sup>220</sup>. As will be shown, by this stage, few Maori were consuming pipi in the Taruheru because of pollution<sup>221</sup>. Even if the water quality in the city rivers was to improve, however, it would be almost impossible to re-establish pipi beds in the river in future. The acclimatisation of *Spartina* in the river has precluded future ecological restoration in these once revered gathering sites for kai Maori. The sea grass has also invaded the Wherowhero Lagoon where it threatens the habitat of wading birds and pipi<sup>222</sup>.

Figure 8.8 – *Spartina* grass on mudflat shoals of the Taruheru



### The Watties reclamation at the mouth of Waikanae Creek

J. Watties Cannery Ltd. established its factory at the confluence of the Waikanae and the Turanganui in the early 1950s. As is shown in Chapter 10, this maritime environment was a particularly unsatisfactory choice as a site to locate a factory

<sup>219</sup> "Council ponders options for improving flow of flood-prone Taruheru." – Gisborne Herald, 17.10.1997 (GisMUS VF-Environment).

<sup>220</sup> Bull 1983.

<sup>221</sup> Refer to Section 10.2.

<sup>222</sup> "Cook County District Scheme review. Inclusion into District Scheme." – Department of Internal Affairs, Gisborne, to Conservator of Wildlife, Rotorua 4.12.1979 (WS 11/21/10).

process which is associated with a considerable output of waste. Not only did the Watties cannery pollute the Waikanae Creek, the Turanganui River and the surrounding coastline, it was sited on reclamations of mudflats and swamp areas of the two waterways. The development of the Watties site progressed in two stages, both of which included reclamation. The Customhouse Street site included a 1.2 ha reclamation into the Turanganui River<sup>223</sup>. Watties leased the reclaimed land from the GHB and located a railway siding, a warehouse and a freezing room on the new land in the 1950s<sup>224</sup>.

The reclamation work continued for many years thereafter. The GHB charged Watties only a peppercorn rental for the first 10 years of each reclamation to encourage the work to be carried out<sup>225</sup>. Because the reclamation progressed incrementally, the original authorisations were eventually forgotten and the company reclaimed more land than had been permitted. The manager of the company argued that this was not illegal because "the work being carried out by the Company was not actually reclamation. It was in fact filling of a low level portion of the Board's land<sup>226</sup>." The GHB not only accepted this spurious statement for which it should have requested the Marine Department's powers of enforcement to be employed, it praised Watties for its good work. Moreover, in the Board's discussion of the admission of the company, it suggested that:

The Chairman reported that the Engineer had discussed with City Engineer and the Catchment Board Engineer the possibility of piping the Waikanae Creek to enable reclamation of the creek bed. The proposal was still under investigation and a report would be available in due course<sup>227</sup>.

The thought of piping the Waikanae Creek and reclaiming its bed resembled the fate of the Kopuawahakapata on the other side of the Turanganui<sup>228</sup>. Although this proposal for the Waikanae was eventually discarded, the Board satisfied Watties' needs by recommending a second reclamation alongside and into, rather than over, swamp margins at the edge of the creek<sup>229</sup>. It should be recalled from the discussion in Section 8.1 that this area had been designated as a fishing reserve for Te Aitanga-a-Mahaki in 1875. The disrespect which Crown agents and local authorities showed for the historical significance of this site represents a failure to legislatively protect the Treaty rights of local Maori.

The site of the second reclamation was between Lowe and Customhouse Streets. The proposal was approved by the Railways Department which already owned

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<sup>223</sup> Nolan and Skeet, Barristers and Solicitors, Gisborne, per J. Watties Canneries Ltd., to GHB, 20.9.1951 (GHB LB).

<sup>224</sup> "Walkways plan in creek reclamation." – Gisborne Herald, 18.6.1971 (GHB CB).

<sup>225</sup> "Land at Waikanae Creek." – no date, p84 (GHB MB).

<sup>226</sup> J. Watties Canneries Ltd., to GHB, 21.2.1967 (GHB LB).

<sup>227</sup> "Waikanae Creek. Reclamation." – p53, 20.3.1967 (GHB MB).

<sup>228</sup> Refer to Section 6.2.

<sup>229</sup> 7.7.1967, p203 (GHB MB).

reclaimed land in the vicinity and by the PBCB and the GCC. After a survey of the creek was completed in February of 1969, the GHB considered the proposal later in that month and recommended an application to the Marine Department for authorisation<sup>230</sup>. The Marine Department authorised the reclamation in August of that year<sup>231</sup>. While the reclamation was only a little over 1ha, it represents an affront to the importance of the Waikanae for local Maori.

Loss of access to areas of traditional importance to local iwi was a principal outcome of these developments. From the mid-1960s, the Borough's Town Plan stipulated the taking of esplanade reserve contributions from reclamations<sup>232</sup>. This should have secured public access along the Waikanae Creek. The Turbott plan for landscaping the area between the mouth of the Turanganui River and Paokahu had also included provisions for walkways around the mouth of the Waikanae Creek and along its riparian margin. Members of the public were concerned that the walkway proposals would be abandoned and that the Watties reclamation would lead to further loss of public access. These fears were allayed in local newspaper reports by GCC and GHB staff:

Provision for walkways, as recommended in the Turbott Plan, is included in a reclamation scheme at present being carried out in the Waikanae Creek by J. Wattie Canneries Ltd<sup>233</sup>.

Although public access was provided around the Turanganui side of the reclamation, accessways along the Creek itself were permanently blocked. The impact of these small industrial reclamations extends beyond their location. The way in which these transformations could be implemented without reference to cultural values and without consultation with tangata whenua highlights the lack of Crown protection of Maori resource spaces. The Harbours Act 1950, in particular, was used indiscriminately by the GHB in conjunction with Marine Department approval to destroy the tidal portions of Waikanae Creek.

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<sup>230</sup> "Starch Mill may be sited on reclaimed land." – Gisborne Herald, 18.2.1969 (GHB CB).

<sup>231</sup> "GHB reclamation on endowment land." – Minister of Marine, 14.8.1969 (M 43/2/6/3).

<sup>232</sup> 25.10.1967, p394 (GHB MB).

<sup>233</sup> "Walkways plan in creek reclamation." – Gisborne Herald, 18.6.1971 (GHB CB).

*Figure 8.9 – Waikanae Creek from Kaiti Hill, 1885<sup>234</sup>*



*Figure 8.10 – Waikanae Creek looking towards the Borough, 1907<sup>235</sup>*



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<sup>234</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>235</sup> **Source:** Gisborne Museum and Arts Centre.

### 8.3 Landfill reclamations along Waikanae Creek

Figures 8.9 and 8.10 indicate that the Waikanae Creek was once significantly wider than its present form, and was edged by substantial raupo swamps for much of its length. These natural characteristics contained an ideal habitat for many types of kai of importance to local iwi – pipi were collected from the broad mudflats at the mouth of the creek; eels were trapped by the falling tide in conjunction with the use of numerous pa tuna<sup>236</sup>; mullet and flat fish were netted in the tidal portions; black pipi were gathered further up the creek; and weka were harvested in significant numbers from the grass and shrub lands to the side of the swampy margin<sup>237</sup>. Today, the Waikanae Creek is a highly polluted with much a narrower channel. While mullet and other fish continue to come in on the tide, it would be foolhardy to harvest kai from the creek. Sections 10.2 and 10.4 summarises the history of pollution discharges to this once important resource space, while this Section highlights its use as a ‘convenient’ space to dispose Gisborne’s refuse. Not only is the creek polluted through this dumping of waste, it is substantially narrower because raupo swamps and marshy banks were considered ideal ‘wastelands’ for reclamation through landfilling.

The transformation of the Waikanae Creek on the basis that it was little more than a series of ‘wastelands’ represents extreme forms of ecological imperialism and cultural prejudice. Indeed, there is a long history of Gisborne people stating their disapproval of the creek and its appearance. At the turn of the 20<sup>th</sup> Century, the GHB commissioned a plan to erect a flood gate at the mouth of the Waikanae to raise its level and, effectively, turn it into a lake. A member of the Board commented that the creek was “a filthy sink past Grey St, and if covered with water would be a great advantage<sup>238</sup>.” Other members of the Board wanted to raise a flood-gate and then reclaim the creek bed entirely by culverting its water in order to profit from subsequent leasing of the land<sup>239</sup>. The Creek margin was even used as an illegal receptacle for Gisborne’s night soil<sup>240</sup>. Mudflats and raupo swamps were seen as ‘untidy’ landscapes and unproductive spaces. Few from the Borough appreciated the kai Maori resources which could be collected from the creek and there was little concern for the ecological value of wetlands and saltwater/freshwater interfaces. Even before formalised tipping began here, the people of Gisborne used the banks of the waterway as a refuse disposal area. A resident in the 1930s drew the Harbour Board’s attention to the condition of the “creek bed which had been made a dump for old motor car bodies and other abandoned material... The unsightly area was in view of visitors to the Waikanae Beach<sup>241</sup>.” Culturally biased depictions of wetlands as

<sup>236</sup> Several were named before the Native Land Court in an 1875 case e.g., Te Kuri a Tuatai in “Waiohiharore Block.” – 2 Gisborne MB 198-217, 26.6.1875.

<sup>237</sup> Pers. comm. Stanley Pardoe, Charlie Pera and Peter Tupara.

<sup>238</sup> “Proposed Waikanae flood-gate.” – Poverty Bay Herald, 31.1.1901 (GHB CB).

<sup>239</sup> “Harbour Board. Waiohiharore Block.” – Poverty Bay Herald, 27.7.1900 (GHB CB).

<sup>240</sup> Complaints relating to reticulation, 14.2.1883 (GisMUS 88-37).

<sup>241</sup> “Harbour progress.” – Poverty Bay Herald, 31.10.1932 (GHB CB).

'wastelands' became self-fulfilling – these areas were the first to be used for both informal and formal refuse disposal.

### The migration of landfills along Waikanae Creek

Although the refuse disposal site near the intersection of Awapuni Road and Pacific Street was not located along Waikanae Creek, it is discussed here because it was closely connected to those facilities. In 1908, parts of Awapuni and Waiohiharore blocks were taken under the Public Works Act to become a public cemetery for the Gisborne Borough<sup>242</sup>. The land was important to local iwi as it was the location of a clear water spring and summer fishing huts. There were no internments at the site because the Borough Council subsequently decided that it was "not a proper place for a public cemetery<sup>243</sup>." The Reserves and Other Lands Disposal and Public Bodies Empowering Act 1913 transformed the public cemetery into a "reserve for general utility purposes." From the early 1920s, however, parts of this reserve were used as both a tip and a night storage facility for collected sewage<sup>244</sup>. Much of the refuse was burnt and "public health standards [were] very poor<sup>245</sup>." Refuse which could not be burnt was roughly compacted in random locations throughout the site and the general management of this facility was not in keeping with its historical value to local Maori.

The taking of land under the Public Works Act for one purpose only for it to be used for tipping at a later date is a common component of the history of refuse disposal in Gisborne. This history was repeated at Gisborne's second formal tip site which was located at the mouth of Waikanae Creek. Open-air burning at the Awapuni Road site was controversial and, by the late 1930s, the Borough Council was forced to search for a method of disposal which did not include incineration. As a result, it initiated a long-term strategy of reclaiming portions of the Waikanae Creek through landfills. The first was located on part of Waiohiharore Block No. 2, which had been retitled as a general reserve when it became surplus to the requirements of the Rail Department<sup>246</sup>. As shown earlier in this Chapter, Waiohiharore No. 2 had previously been vested in Te Aitanga-a-Mahaki as a fishing reserve and had been taken by the Rail Department to become a storage area. Subsequently, the *Gisborne 30,000 club* had requested Marine Department approval to reclaim the Creek around the railway land for "beautification purposes<sup>247</sup>." The Town Planning

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<sup>242</sup> "Nightsoil depot at Awapuni." – Gisborne Municipal Council, to Minister of Public Health, 14.3.1922 (HD 33/20).

<sup>243</sup> Reserves and Other Lands Disposal and Public Bodies Empowering Act 1913.

<sup>244</sup> Refer to Section 10.1.

<sup>245</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 6.5.1970 (GCC 33/1).

<sup>246</sup> Evidence of A.D. Denham, City Health Inspector, GCC, at a Planning Appeal Board hearing on tipping – 15.12.1967 (GCC 33/1).

<sup>247</sup> "Railway land for beautification." – Gisborne Herald, 26.7.1937 (GHB CB).

Officer of the Borough Council requested the advice of the Department of Internal Affairs on this reclamation proposal as well as on the possibility of more extensive reclamations along Waikanae Creek. In support of reclamations along the Creek it was contented that:

The Waikanae creek is a long tidal arm of the river which at low tide is a waste of unsightly and evil-smelling mud-flats. So far as I can gather, it has very little, if any, drainage value, other than to take away surplus waters after heavy rains. Two suggestions were put up to me for dealing with this creek: One, that it should be reclaimed by filling, either by pumping or silting; two, construction of a wire or retaining wall at the mouth of the creek to retain the sea water at a uniform level after the tide has ebbed... The main difficulty would be to extinguish the riparian rights, if any. This I think, is a matter in which the Borough Council should negotiate with the owners of these rights before taking the matter up with the Marine Department<sup>248</sup>.

The Borough Council's staff practised a radical form of ecological imperialism: wetlands were dismissed according to their smell, leading to their reclamation as unproductive and vile landscapes. The relatively minor attention to riparian rights – which were a consequence of the privilege of *property* – was concomitant with an almost total disregard to historical significance and Treaty rights. While the beautification proposal was subsequently approved, rather than the alternatives presented by the Town Planner, the project was rapidly transformed into a reclamation by landfill<sup>249</sup>. From 1941, it was used as the Borough's main refuse disposal site<sup>250</sup>. The tip began on land, but gradually spread into the creek itself in an effort to reclaim land, hide the mudflats and narrow the channel of the creek.

Because there was limited room for expansion at the Railway site, and because the reclamation of that site through landfilling had provided an objection-free 'solution' to Gisborne's tipping needs, the Council investigated the possibility of additional tips along the creek. The first in a series of larger landfills was at site which would later become Alfred Cox Park and was located beside the Grey Street overbridge. This 2.2ha landfill was first used in 1956 and was sited on a substantial raupo swamp. Refuse disposal reduced the width of the creek to 10m at this site and the Gisborne City Council (GCC) was confident that this width "can apparently be continued downstream<sup>251</sup>." The GCC engineer also stated that "Council ultimately aspires to having the Waikanae Creek treated this way throughout its full length<sup>252</sup>." This confidence was an outcome of the Waipaoa River flood control scheme

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<sup>248</sup> Mason, Town Planning Officer, GBC, to Internal Affairs, 24.11.1937 (IA 103/100).

<sup>249</sup> "Waikanae Creek." – p170, 29.7.1940 (GHB MB).

<sup>250</sup> "Report to the City Council about scheme for refuse disposal area at Centennial Marine Drive – H.C Williams, Engineer, GCC, to Town Clerk, GCC, 6.5.1970. (PBCB 2/38/10).

<sup>251</sup> "Gisborne 30,000 Club letter 7.4.59." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 14.5.1959 (GCC 33/1).

<sup>252</sup> "Waikanae Creek reclamation proposal." – H.C. Williams, Engineer, GCC, to Owners neighbouring site of landfill, 18.11.1960 (GCC 33/1).

(Chapter 4). Prior to the establishment of that scheme, the Waikanae periodically carried floodwaters from the Waipaoa River. Because this was less likely to happen after the construction of the scheme's stopbanks, the GCC engineer believed that the Waikanae's capacity exceeded the creek's maximum flow. Thus...

The Catchment Board...states that when the river control scheme is completed the Waikanae Stream width could be regulated to [13m] at the mouth and [9m] at Stanley Road, inferring that the creek could then be considered as serving its own catchment only without being a floodpath for other rivers. I have suggested [7m] at Aerodrome Rd to the Catchment Board Engineer and he agrees<sup>253</sup>.

From the late 1950s, therefore, the GCC had committed itself to a long-term plan of landfill reclamations throughout the length of the creek – a systematic process of destruction of Maori resource spaces. The impact of this plan can be seen in Figure 8.12, which depicts the locations of the nine tips which were established along the creek from its mouth to its source near the aerodrome.

Tipping recommenced at Awapuni Road when the swamp at Cox Park became exhausted (1958), but complaints from the Awapuni Golf Club again forced the GCC to return its attention to Waikanae Creek<sup>254</sup>. For GCC staff, at least, it was fortunate that New Zealand Railways (NZR) owned other areas of land along the creek. In 1959, the City Engineer requested the permission of NZR to "dump city refuse out from N.Z.R. land to the east of Stanley Road and out into the Waikanae Creek<sup>255</sup>." Permission was granted by NZR, evidently because it would receive the reclamation as 1ha of usable land after it was exhausted as a landfill. This was a common strategy in the Council's negotiations for new sites: landowners were convinced of the need to tolerate the inconvenience of a landfill because they, as the riparian owners, would receive the land once reclaimed. NZR appeared to be particularly allured with this logic and, in 1960, it allowed the GCC to establish another landfill in a raupo swamp directly opposite the first Stanley Road site.

In November 1960, the Chief Engineer of the GCC wrote to the future neighbours of this second Stanley Road tip:

Being permeable refuse it will not impound surface rain water and should effectively cover the mud and raupo flats and improve the appearance of the Waikanae Creek downstream of the new bridge there<sup>256</sup>.

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<sup>253</sup> "Refuse disposal." – H.C. Williams, Engineer, GCC, to Mayor and Councillors, GCC, 23.10.1962 (GCC 33/1).

<sup>254</sup> *Ibid*.

<sup>255</sup> "Refuse disposal. NZR reserve, Stanley Road." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 9.2.1959 (GCC 33/1).

<sup>256</sup> "Waikanae Creek reclamation proposal." – H.C. Williams, Engineer, GCC, to Owners neighbouring site of landfill, 18.11.1960 (GCC 33/1).

The statement that the refuse was permeable and would not, therefore, prevent the seepage of surface water was designed to allay neighbours' fears of offensive ponding. While this may have convinced the residents of the area, it also represents a frank admission that these landfills leached water, with this toxic leachate inevitably entering the creek. This appeal to the residents was followed by an appeal which the GCC had earlier used to convince government departments of the beneficial returns from refuse disposal: "The refuse would be properly compacted and covered with earth cover and left level and grassed to be handed over to the adjoining owner as though it were natural accretion<sup>257</sup>." This promise to, in effect, extend residential and industrial backyards free of charge was readily accepted by the neighbouring households and industries.

*Figure 8.11 – Stanley Rd. No. 1, just prior to refuse disposal in 1961<sup>258</sup>*



The appeals of the Chief Engineer were also indicative of public unrest at the GCC's tipping strategy, which began to emerge in the last months of the development of the Cox Park site (Grey Street). There were only two criteria which concerned the GCC in its location of landfill facilities: operational costs; and, the potential for a public nuisance to result from smell,

wind-blown material or noise<sup>259</sup>. With respect to the latter criterion, the GCC was particularly aware of the potential for sensory nuisances to lead to public opposition to its tipping strategy, but it remained entirely unsympathetic to cultural values and ecology. Residential neighbours were typically plied with Council promises of free extensions to private property, the public good value of land which could be used for parks and reserves, or the opportunities afforded by tipping to recover 'unsightly mudflats.' On the other hand, Maori or interest groups as non-neighbours were never consulted. The effects zone of the Waikanae tips were, in the view of GCC staff, limited to near-site inconvenience of property owners and, in this way, wider environmental and cultural values were ignored. The Council could adopt this approach because neither the Town and Country Planning Act 1953 nor the Water and Soil Conservation Act 1967 allowed for the standing of non-neighbouring interests in resource decisions. Rather, these acts restricted objections to immediately affected property owners.

<sup>257</sup> "Waikanae Creek reclamation proposal." – H.C. Williams, Engineer, GCC, to Owners neighbouring site of landfill, 18.11.1960 (GCC 33/1).

<sup>258</sup> **Source:** Gisborne Museum and Arts Centre. The extensive raupo swamps on either side of the creek were soon to be destroyed by refuse disposal.

<sup>259</sup> A.D. Denham, City Health Inspector, GCC, to Town Clerk, GCC, 22.3.1968 (GCC 33/1); Evidence of H.C. Williams, Chief Engineer, GCC, at a Planning Appeal Board hearing on tipping – no date (GCC 33/1).

Figure 8.12 – Landfill reclamations along Waikanae Creek<sup>260</sup>

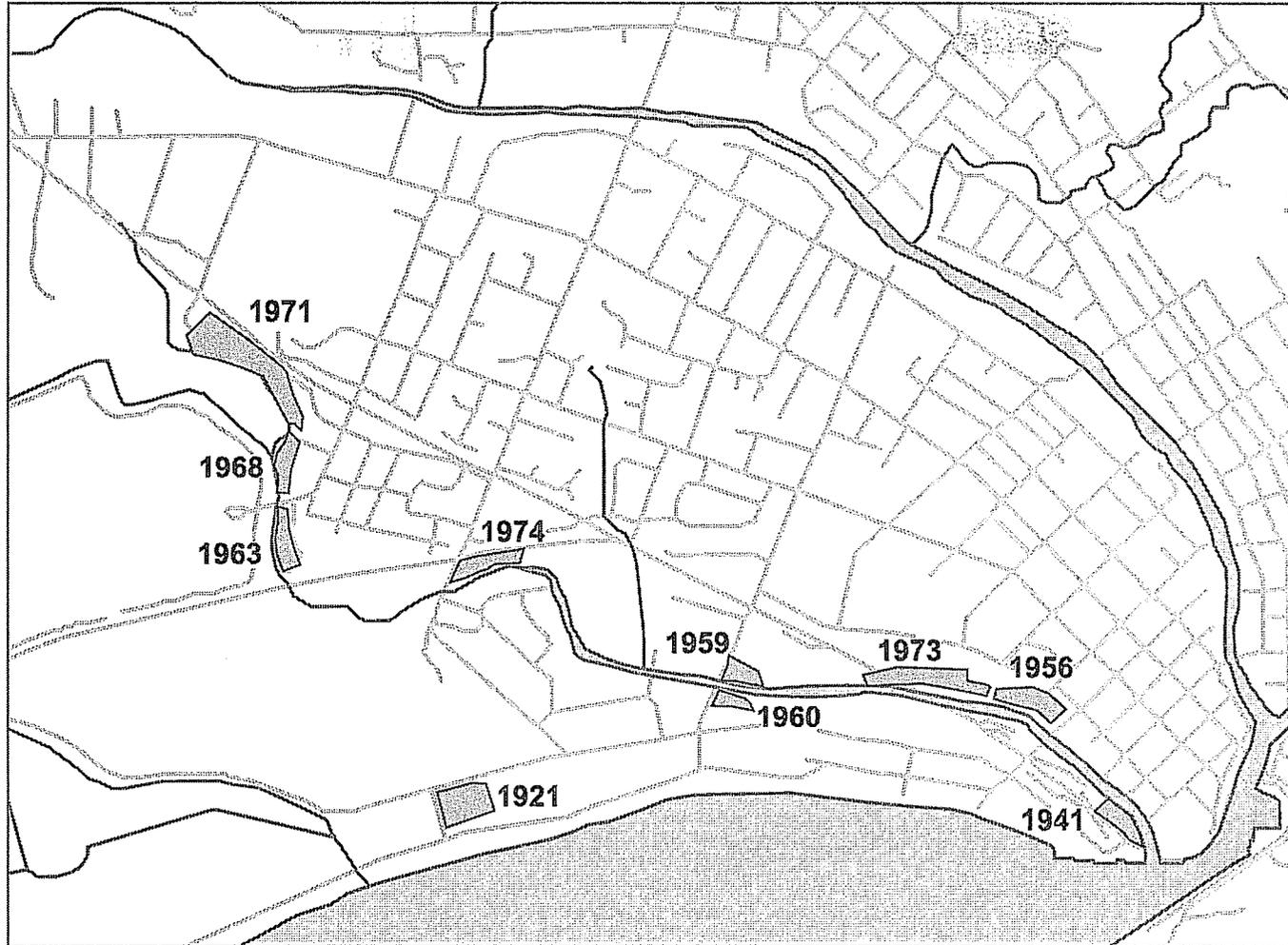


Figure 8.13 – ‘Controlled tip’ encroachment on raupo Stanley Rd., late 1961<sup>261</sup>

Within three years, both NZR reserves were exhausted<sup>262</sup>, and two abundant raupo swamps had been destroyed. The exhaustion of the Stanley Road swamps led to a new phase in the GCC's plans for the creek. By this stage it was becoming more difficult to dump in the lower reaches of the Waikanae without meeting opposition from neighbouring residents<sup>263</sup>. For brief periods in 1962 and 1968, the GCC again returned to the Awapuni site while it waited for new raupo swamps to become available for refuse disposal along Waikanae Creek<sup>264</sup>. The large raupo swamps near the aerodrome represented ideal sites in the view of GCC staff: the aerodrome's management was agreeable to the 'improvement' of the area; and there were at that time few residential houses in close proximity. The first aerodrome tip (3.5ha) was implemented from 1963, alongside land which had been taken for housing for the airfield in 1949. On a plan for the landfill, the creek was designated for a reduction in width from 17m to 7m wide<sup>265</sup>. The paucity of authorisation required for these landfills is indicated by events in January of 1963. Within a week of discovering that land alongside the future site was Crown owned and presently unused for other purposes, the GCC had constructed a service shed and access road to initiate use of the site<sup>266</sup>. The development of these landfills was rapid and under-researched, leaving no time for public objection.

<sup>260</sup> **Source:** Compiled from "Exhibit W1: Map of Gisborne City refuse sites" and associated correspondence in GCC 01-212-03HI.

<sup>261</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>262</sup> "Refuse disposal." – H.C. Williams, Engineer, GCC, to Mayor and Councillors, GCC, 23.10.1962 (GCC 33/1).

<sup>263</sup> "Airport refuse tip." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 26.6.1967 (GCC 33/1).

<sup>264</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 6.5.1970 (GCC 33/1).

<sup>265</sup> "Waikanae Creek reclamation." – H.C. Williams, Engineer, GCC, to District Engineer, NZR, 19.12.1962 (GCC 33/1).

<sup>266</sup> "Aerodrome Rd. refuse tip." – H.C. Williams, Engineer, GCC, to Mr Lynch, 9.1.1963 (GCC 33/1).

In June 1968, the GCC established another disposal facility on raupo swamp near the aerodrome. This 3.5ha landfill was located between Oates Street and the aerodrome, just upstream from the first aerodrome tip. The justification for this site was, once again, based on cultural preconceptions of wasteland:

The area is rank willow infested and becomes very damp and swampy in the winter breeding rats and mosquitoes...In addition the large number of trees provide nesting places for thousands of small birds. The Gisborne Airport Committee has been spending approximately \$1000 per year for the last two to three years in trying to eradicate this willow growth.

In this case, the tipping operation was recast as a courtesy to the aerodrome which would benefit from the removal of habitat for birds. The removal of this habitat was also the removal of ecological niches for tuna and pukeko. The tip was exhausted quickly because a Planning Appeal Board decision in February of 1968 imposed "extraordinary conditions...upon Council to tip there<sup>267</sup>." This case is evaluated later in this Section. Subsequently, in 1971, the GCC established its largest Waikanae landfill – 5.2ha and immediately upstream of the previous facility.

By this time, the disposal activities of the Council were coming under increasing pressure from the public of Gisborne, but it successfully established two more landfills on the Waikanae Creek. These were created in an atmosphere of emergency. From 1972, the GCC had committed itself to a new policy for rubbish disposal: the Paokahu landfill (Chapter 9). Delays in establishing that facility, however, forced the GCC to develop an interim solution. In a desperate effort to find a new tip site, the Council began tipping on another raupo swamp in the lower portions of Waikanae Creek – 3ha at Kahutia Street, immediately upstream of Cox Park<sup>268</sup>. While this site was larger than many which the Council had previously used, it was exhausted within only a year because of the rapidly increasing amount of industrial waste from Watties and other primary processes for which the GCC became responsible.

The final destruction of raupo swamps along the creek transpired when the GCC discovered a factory manager who owned land abutting the Creek at Lytton Road which he believed to be "worthless<sup>269</sup>." With the prospect of obtaining flat land in the future, "the company had magnanimously agreed to offer the 3600 square metres ...free of charge<sup>270</sup>." The time period between discovery and establishment of this site was only three weeks, again suggesting that such facilities were

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<sup>267</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 6.5.1970 (GCC 33/1).

<sup>268</sup> "Refuse disposal after Aerodrome site? Kahutia Street/Anzac Street?" – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 12.3.1973 (GCC 33/1).

<sup>269</sup> "Lytton Rd. tip and Nelsons (N.Z) Ltd." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, no date (GCC 33/2).

<sup>270</sup> "Re. Nelsons land." – B.F. Miles, Town Clerk, GCC, to Engineer, GCC, 5.12.1977 (GCC 33/2).

unplanned and that there were few opportunities for the public to participate in the decision to destroy wetlands through tipping. There is no doubt that this wetland was not 'worthless.' It is ironic that several years earlier, the GCC had forced the company to keep some of the wetland in its natural state in a resource consent decision. The development of a landfill on this very area was "somewhat contrary to [the GCC's] earlier instruction that a part of that raupo swamp wetland be left in its natural state as a supposed bird sanctuary<sup>271</sup>." The destruction of habitat for indigenous fauna was not, therefore, carried out unconsciously by the GCC – it knew of the ecological value of these wetlands, but chose to ignore it.

### Authorisation of landfill reclamations

Crown agencies not only knew about the lining of Waikanae Creek with landfills, they actively supported the process. It has already been suggested that NZR was an active participant in the authorisation of Waikanae Creek landfills. The Crown rail agency allowed the GCC to tip on two areas of land which it owned at Stanley Road, and former NZR land at the mouth of the Waikanae was also used in this manner. Likewise, the State Advances Corporation and the Ministry of Works agreed to the use of other areas of Crown land as the starting places for tips which would fan out into the creek. Not only did the Corporation tolerate the dumping of refuse in the creek at the back of state houses on Kahutia and Anzac streets, it welcomed it and wanted "to record the desirability of filling the swamp area behind the sections<sup>272</sup>." The desirability of this practice evidently related to an attempt by the Corporation to avoid liability for addressing the "raupo infested mudflats<sup>273</sup>." Similarly, it appears that the Corporation used the GCC's dumping of waste both to level existing land and to reclaim new land for cheap state housing subdivisions in Scott Street, near the aerodrome<sup>274</sup>.

The Civil Aviation Authority also welcomed the GCC's landfills in the upper reaches of the Waikanae as a means to avoid 'improving' the land itself<sup>275</sup>. The motivation of these government agencies was to obtain more land for their activities and the result satisfactorily fulfilled this motivation:

I suggest that the Director of Civil Aviation be advised accordingly and that the Airport Committee resume possession of the property. I recall it had hitherto been grazed although most of it was rough weed and raupo. It

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<sup>271</sup> "Lytton Rd. tip and Nelsons (N.Z) Ltd." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, no date (GCC 33/2).

<sup>272</sup> State Advances Corp. and MoW, to Chief Engineer, GCC, 11.5.1973 (GCC 33/1).

<sup>273</sup> "State Advances Corporation letter 11/5/73. Anzac Street and rubbish tip specified departure." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 15.5.1973 (GCC 33/1).

<sup>274</sup> "State housing property. CAA Block, Scott Street. Gisborne" – H.B. Goodman, Hawkes Bay Board of Education, to City Engineer, GCC, 16.11.1966 (GCC 33/1).

<sup>275</sup> "Airport refuse tip" – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 26.6.1967 (GCC 33/1).

should now be good pasture, fit for grass or tree growing or the like but of course has limitations for establishing buildings or pavement<sup>276</sup>.

Such approving statements as these were based on monocultural understandings of raupo swamp as wasted and objectionable landscapes. The possibility of having land returned in pasture or suitable for buildings was welcomed by the aviation authority and other government agents.

While several Crown agencies and departments were involved as land owners in the establishment of Waikanae landfills, other Crown authorities failed to involve themselves in an environmental management capacity. Local representatives of the Health Department adopted a passive stance to the GCC's use of the creek:

It is again expected that there may be some objection and complaint about using the area...but with the experience gained at the recent similar areas and by operating under the conditions shown in your letter, this Department would have no objection to the establishment of this refuse disposal area<sup>277</sup>.

Although the Health Department noted a number of public objections to the use of the creek as a place for landfills, it failed to act on these objections. Its advice to the GCC was limited to procedural matters and, while it was responsible for maintaining the water quality of Waikanae Creek, it typically gave a perfunctory blessing to these landfills. On the basis that the GHB had a grant to tidal reaches of the creek, the Health Department typically sought advice from the GHB on the matter of Waikanae landfills. The Board's opinion suggests that reclamation was to be revered as progress:

That the Gisborne City Council be advised that the Board has no objection. The Council to be congratulated on the reclamation that it has carried out in the district over recent years<sup>278</sup>.

On the basis of advice from the GHB – an authority which may have had influence on the tidal portions of the Creek but which had no understanding of public health matters – the Health Department provided its blessing to Waikanae landfills.

The Ministry of Transport (and, prior to 1968, the Department of Marine) was required to authorise several of the landfill reclamations because the tidal reaches of the Waikanae came under the influence of the Harbours Act 1950. Its recommendations to the Minister of Transport were entirely automated and indifferent<sup>279</sup>, and it gave even less attention to the *environmental* impacts of these particular reclama-

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<sup>276</sup> "Gisborne Airport: rubbish tip reclamation." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 1.8.1968 (GCC 33/1).

<sup>277</sup> "Establishment of offensive trade." – P. Hinds, Medical Officer of Health, District Office, Department of Health, to Town Clerk, GCC, 12.5.1973 (GCC 33/1).

<sup>278</sup> "Rubbish tip. Waikanae Creek." – 16.4.1973, p10 (GHB MB).

<sup>279</sup> "Reclamation. Waikanae Creek." – T.E. Law, Marine Division, Ministry of Transport, to Town Clerk, GCC, 24.4.1974 (GCC 33/2); New Zealand Gazette No. 3, p611, 4.4.1974 (GCC 33/2).

tions than to those at Kaiti Beach<sup>280</sup>. The lack of action by the Department of Health and the Ministry of Transport represent significant omissions by Crown agents – these arms of government had the capacity to halt the GCC's refuse disposal strategy along the creek, but both practised an indifference to the local environment and to Maori values.

While the passivity of Crown authorities to control the practices of the GCC was unfortunate, local environmental managers were possibly more negligent in their duties. The City health inspector could have been expected to reject the disposal of refuse so close to residential areas and within a creek which he had responsibilities to protect. However, he was the most vocal supporter of Waikanae landfills, most likely because refuse disposal was part of his portfolio – in contradiction to his other responsibilities as the vanguard of public health. Like many of his contemporaries, the health inspector contended that the GCC's disposal strategy was beneficial to the environment. In respect of the Stanley Road landfills he suggested that "the ultimate reclamation of the swamp area will improve the locality<sup>281</sup>." Likewise, in advocating for the aerodrome sites he commented favourably on the end uses for which reclaimed swamps could be employed, such as recreation. The comments of the City health inspector and, indeed, many other representatives of local and central government suggest that their failure to manage this environment was a result of the creek being culturally predetermined as a wasteland.

Another aspect of the mismanagement of this area as a site for tipping was the inadequate level of regulation of informal dumping. With the establishment of so many formal tips along the Waikanae Creek, members of the public escalated clandestine use of the creek as an unofficial tip: the Council led its people by example. A rugby club alongside the tip dumped 20 car bodies, tons of household rubbish and tree stumps in a raupo swamp in an attempt to claim additional recreational space<sup>282</sup>. Apparently, the GCC could find no grounds for prosecution under the Town and Country Planning Act 1977. Curiously, the GCC wrote to the rugby club in question and suggested that the activity of reclaiming land was to be encouraged and that the Council would support them in this endeavour if the club could find a source of 'clean' fill<sup>283</sup>.

Despite the capacity of landfills to pollute the creek, the PBCB almost never commented on the disposal practices of the GCC. As long as rudimentary barrier walls were constructed at the front of the landfills, the catchment board would always provide an authorisation for the practice<sup>284</sup>. It occasionally brought to the GCC's

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<sup>280</sup> Refer to Section 6.3.

<sup>281</sup> "Re. refuse disposal." – A.D. Denham, City Health Inspector, GCC, to Town Clerk, GCC, 4.3.1963 (GCC 33/1).

<sup>282</sup> "Re. Lytton Rd private refuse tip." – W.S. Ballantyne, GCC, 13.10.1981 (GCC 01-212-03 HI).

<sup>283</sup> "Private Refuse tip." – R. Hall, Health Inspector, GCC, to GMC Rugby Club, 21.10.1981 (GCC 01-212-03 HI).

<sup>284</sup> "Application for consent to establish offensive trade." – E.K. Wilson, Secretary, PBCB to Town Clerk, GCC, 13.5.1973 (GCC 33/1).

attention the existence of leachate which seeped from landfills, but it appeared to be helpless to force the GCC to change its practices<sup>285</sup>. The Water and Soil Conservation Act 1967 (WASCA) gave catchment boards much greater responsibility for water quality issues and the PBCB both could and should have used this responsibility to halt the five Waikanae landfills which were implemented after 1967. As suggested in Part III, however, local political circumstances prevented the PBCB from carrying out its duty within city boundaries.

Because they were located outside of the city's jurisdiction, the GCC had to receive permission from the Cook County Council (CCC) for the three aerodrome landfills. However, while this was given freely for the first of these facilities (1963)<sup>286</sup>, the CCC staunchly resisted the landfills which were ultimately established in 1968 and 1973. It appears that the GCC expected no contest from the Cook County Council (CCC), even though the Oates Street site would be within the spatial mandate of the latter council. By 1968, tipping activities also conflicted with the operative CCC District Scheme, so the GCC was forced to apply for a specified departure from that scheme. For a variety of reasons, the CCC decided to refuse the specified departure<sup>287</sup>. It was suggested that wind-blown material and smoke from the landfill would impact on the safe operation of the aerodrome. The County also suggested that the facility would be "detrimental to the amenities of an extensive residential area" and that its effects would "have real significance beyond the immediate vicinity of the property<sup>288</sup>." While these reasons were undoubtedly justifiable, there was no consideration in the case of the historical, cultural and environmental significance of Waikanae Creek to local iwi.

Less than one month after the CCC decision, the GCC appealed to the Town and Country Planning Appeal Board. The evidence of the GCC at this appeal was particularly weak and was oriented towards two concerns which had little to do with the environmental impact of tipping: first, that refuse disposal improved the Waikanae Creek because it provided additional recreational space; and, second, that there were no other suitable locations. The City health inspector took up the first of these concerns, arguing that previous landfills became recreational assets:

Alfred Cox Park...is well known and much admired [having been] reclaimed out of raupo covered swamp in the late 1950s...I have a humble sense of personal satisfaction for having supervised that project. [It was] subject to some criticism during operation but [I am] yet to hear a complaint regarding the Alfred Cox Park as it is today...I see no other practical way of ridding this area of unsightly swamp land which must be a breeding ground for mos-

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<sup>285</sup> "Known sources of pollution in the Poverty Bay Catchment Board area." – 17.10.1969 (PBCB 2/91).

<sup>286</sup> "Airport refuse tip." – H.C. Williams, Engineer, GCC, to Town Clerk, GCC, 26.6.1967 (GCC 33/1).

<sup>287</sup> Decision of the CCC on a hearing to decide a specified departure from the district scheme for a landfill at Oates Street, Gisborne, under the Town and Country Planning Act 1953, 3.1.1968 (GCC 33/1).

<sup>288</sup> *Ibid*.

quitoes, a harbourage for rats and other vermin and be a fire hazard under summer conditions<sup>289</sup>.

Most landfills, of course, are a 'harboured for rats' and often include 'fire hazards,' while raupo swamp is now well-regarded as a biologically diverse habitat for a range of important native species. While there are "many examples of parks and recreation grounds constructed through the medium of household refuse<sup>290</sup>," the surface appearance of such sites disguises the lasting environmental outcomes below.

At the hearing, the City Engineer commented that Gisborne suffered from an "absence of land which could be classified as 'waste land' within the usual sense other than river banks<sup>291</sup>." Again, this represents a culturally biased view of water-course margins and swamps as unproductive spaces which entirely ignores the value of such places to Maori. Nevertheless, the logic of the City Engineer convinced the Appeal Board of the "urgent need for the tip" and that "the site proposed is an eminently suitable one. It is a low-lying marshy area, infested with willows, which could ultimately be very greatly improved<sup>292</sup>." The Appeal Board revoked the decision of the CCC but allowed the landfill only on the basis of a number of relatively strict conditions. These conditions restricted the longevity of the site both through time restrictions and through restrictions on the depth of tipping<sup>293</sup>. Overall, however, this case highlights the disregard for Maori resource spaces under planning legislation of the time. Local iwi were not called upon in these proceedings to argue their case because cultural attachments to the environment were not considered legitimate evidence. Moreover, only parties who were immediately affected by sensory nuisances were to be considered legitimate witnesses.

## Environmental impacts of landfill reclamations

The mismanagement of the Waikanae was not restricted to ignorance of Maori environmental preferences – it also represented a failure to preserve the environment *tout court*. Several of the landfills were built over the top of small side creeks or open stormwater channels which drained into Waikanae Creek<sup>294</sup>. To site a landfill on the confluence of a tributary is to invite the problems of leaching and ponding

<sup>289</sup> Evidence of A.D. Denham, City Health Inspector, GCC, at a Planning Appeal Board hearing on tipping – February 1968 (GCC 33/1).

<sup>290</sup> "Re. refuse disposal" – A.D. Denham, City Health Inspector, GCC, to Town Clerk, GCC, 4.3.1963 (GCC 33/1).

<sup>291</sup> Evidence of H.C. Williams, Chief Engineer, GCC, at a Planning Appeal Board hearing on tipping – February 1968 (GCC 33/1).

<sup>292</sup> Appeal under Section 35 (6) of the Town and Country Planning Act between the GCC, appellant, and the CCC, respondent, before the Town and Country Planning Appeal Board, J.W. Kealy, S.M. (Chair) W.F. Arthur and C. M. Turner. Decision No. 7/68, 19.2.1968 (GCC 33/1).

<sup>293</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, GCC, 6.5.1970 (GCC 33/1).

<sup>294</sup> "Refuse disposal." – H.C. Williams, Chief Engineer, GCC, to Mayor and Councillors, GCC, 23.10.1962 (GCC 33/1).

of polluted stormwater. Because it was beyond the Council's budget to culvert these side streams and stormwater courses, they were often left to drain through the refuse. As a result, the seepage of toxic liquids into the creek was readily visible and led to many complaints from members of the public<sup>295</sup>. After the 1968 Appeal Board hearing, the council was forced to culvert the stormwater drains, but the material used for this task was inadequate and within a few years the culverts cracked and effectively became worthless<sup>296</sup>. Some of these tips remain on a select list of hazardous sites in the Gisborne District to the present day<sup>297</sup>.

Figure 8.14 – Alfred Cox Park<sup>298</sup>



Culverting was only one form of preparation work which was not carried out adequately before tipping began at these facilities. Correspondence between the City Health Inspector and the City Engineer suggests that the Kahutia Street landfill (1973) was the first at which the Council prepared the banks extensively before tipping began. Although an earth bund had been added to the Cox Park facility, this was a highly permeable material through which leachate seeped continuously, especially because it was located below the level of high tide<sup>299</sup>. The Cox Park site oozed a “black liquor<sup>300</sup>,” which would have been a significant source of pollution in a relatively small and poorly flushed creek. At the Kahutia Street tip a relatively thick

<sup>295</sup> See, for example, “Discharge of black liquor. Kahutia St.” – Medical Officer of Health, Gisborne, to Town Clerk, GCC, 16.2.1977 (GCC 01-212-03 HI).

<sup>296</sup> Evidence of Peter Hinds, Medical Officer of Health, Gisborne, Town and Country Planning Appeal Board hearing 644/72, 1973 (GCC 33/1).

<sup>297</sup> Ferris 1997.

<sup>298</sup> **Source:** Gisborne Museum and Arts Centre.

<sup>299</sup> Decision of J.W. Kealy, S.M. (Chair) W.F. Arthur and C. M. Turner: GCC vs CCC, Town and Country Planning Appeal Board. Decision No. 7/68, 19.2.1968 (GCC 33/1).

<sup>300</sup> “Disposal of refuse.” – J.W. Parker, for Medical Officer of Health, Gisborne, to Town Clerk, GCC, 16.2.1959 (GCC 33/1).

layer of impermeable clay was used to provide a “barrier...between the tipping site and the creek bed to reduce as far as is practicable the flow of leachate to the water-course<sup>301</sup>.” While this would have protected against leaching to some degree, it was impossible to prevent water which permeated through the refuse layer from seeping into a creek which was located in such close proximity.

The problem of leachate was made many times worse by the increasing range of wastes which were sent to the tips from the mid-1960s. This was a time of significant increase in primary processing in the district which led to an increase in the disposal of vegetable waste at the tips. Tomato and corn wastes from Watties cannery, for example, had a significant liquid content and were not easily compacted. These forms of waste also had a high organic content and were rich in nutrients which, once leached into the creek, affected the species composition which could exist in the water<sup>302</sup>. The high organic content has also left a legacy of toxic materials in the Waikanae tips. Core samples of the landfills which were taken years after their decommissioning found that “decomposition and heat [were] still being evolved within<sup>303</sup>.” The slow rot of organic material has left pockets of methane and other gasses within the refuse layer.

The Council was often negligent in its duty to cap and landscape these landfills after they become exhausted. NZR, for example, was particularly dismayed at the state of the Stanley Road reclamation when it was returned in 1962<sup>304</sup>. The principal concern in this regard was the difficulty of building on landfill reclamations after the tips had been decommissioned. In hearings for the Paokahu landfill, the City Engineer admitted that it “may have been a mistake to reclaim so much land from the Waikanae in this way as it cannot be built on<sup>305</sup>.” In part, this was because the council did not possess the right type of equipment to adequately compact the refuse as it was deposited<sup>306</sup>. Neighbouring property owners had been promised the return of valuable land but the Council knew prior to these promises that:

The swamp, creek and river bank sites previously filled or able to be filled are a very doubtful asset once the work is done. In fact no so-called reclamation in Gisborne has yet been put to any use<sup>307</sup>.

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<sup>301</sup> “Kahutia Street refuse tip.” – H.C. Williams, Chief Engineer, GCC, to P. Coker, GCC, Report E.2920, 6.7.1973 (GCC 33/1).

<sup>302</sup> “Refuse disposal.” – H.C. Williams, Chief Engineer, GCC, to Manager, J Wattie Canneries Ltd., 26.2.1959 (GCC 33/1).

<sup>303</sup> Evidence of Peter Hinds, Medical Officer of Health, Gisborne, Town and Country Planning Appeal Board hearing 644/72, 1973 (GCC 33/1).

<sup>304</sup> “Waikanae Creek reclamation.” – H.C. Williams, Chief Engineer, GCC, to District Engineer, NZR, 19.12.1962 (GCC 33/1).

<sup>305</sup> Evidence of H.C. Williams, Chief Engineer, GCC, at a hearing to decide a specified departure for the Paokahu landfill, 19.6.1972 (GCC 01-212-03 HI).

<sup>306</sup> “Refuse disposal.” – H.C. Williams, Chief Engineer, GCC, to Mayor and Councillors, GCC, 23.10.1962 (GCC 33/1).

<sup>307</sup> *Ibid.*

All of these effects suggest that the GCC's strategy for the Waikanae Creek was particularly detrimental to the water and swamp environment. However, while the people of Gisborne have shown concern for the lasting impact of such activities on the City's waterways, they sometimes disregard the eco-cultural damage which was wrought on this landscape. Raupo swamps were not wastelands but were important habitats for kai Maori. Today, the only examples of such raupo swamps along the Waikanae Creek are the result of restoration projects by Maori in conjunction with the Department of Conservation<sup>308</sup>. Apart from these restoration projects, an entirely distinct category of ecological habitat has been lost to local iwi.

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<sup>308</sup> "Support for the wetland park plan." – Gisborne Herald, 30.4.1987 (GisMUS VF-Natural History: Botany).

Stormwater drain into Williams Creek, with signs of heavy industry beyond



**Part Three**  
**Pollution of**  
**Resource spaces**

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## Paokahu – the evolution of a ‘landfill’

In 1975, the Gisborne City Council (GCC) opened a waste disposal facility 7km from Gisborne along Centennial Marine Drive. Paokahu is not the only landfill facility for the Gisborne District. There are other disposal and transfer sites within the present casebook area which might also evoke a level of concern for local iwi. The Whatatutu transfer station, for example, is located close to a flood-prone terrace of the Waipaoa river and there has been concern in the past that repeated flood events have led to toxic and organic leaching<sup>1</sup>. In 1989, the Whatatutu site did “not comply with any aspect of the Board of Health Manual on solid waste disposal<sup>2</sup>,” but there have been only cosmetic attempts to address these deficiencies thereafter. However, the scale of the Paokahu facility, as well as the fact that it both directly and indirectly impinges on iwi values, demands specific attention in this

<sup>1</sup> “Gisborne District waste disposal site.” – P.D. Burrows, Chief Environmental Officer, GDC, to B. Apperley, GDC, 13.12.1989 (GCC 01-212-01).

<sup>2</sup> *Ibid.*

report. In the first instance, iwi own the land under which the tip is located. In the second, the environmental effects of the tip have been shown to impact upon sites of significance to tangata whenua. The Paokahu landfill also receives extended commentary here because it provides a revealing case study of the engagement of local iwi with the western planning system which confronted them.

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## 9.1 Decisions at the last

From the discussion in Section 8.3, it is evident that the local authority had, by the early 1970s, engaged in a process of incremental policy-making for waste disposal in the district. Long-term policies had been curtailed on the basis of the apparent surplus of 'wasted space' – especially raupo swamps – in and around Gisborne City. Landfill operations migrated in a haphazard and un-planned manner from one raupo swamp to the next, with little attention to the longer-term needs of an expanding population nor, moreover, a growing economy. At the beginning of the 1970s, however, the potential for incrementalism had been exhausted: there were no more suitable raupo swamps to reclaim. It was in this context that the plan to centralise Gisborne's tipping operations at Paokahu was reborn, having first been mooted in 1956 when the GCC published a notice of intention to take the land<sup>3</sup>. Thus, "Gisborne needs a tip urgently and the GCC constantly strives for a solution, which the Board in [19]68 stressed the need for<sup>4</sup>." 1968 was too late in the evolution of Gisborne's waste history to re-start the process of finding a long-term solution; the Paokahu landfill was a belated and hastily planned development.

The initial allusions to Paokahu as a landfill in 1956 foreshadowed problems which were to arise in the 1970s:

In 1956 the Gisborne City Council wanted to create a refuse dump on this land and notified the Cook County Council of its intention to take 99 acres of Paokahu. The County decided to lodge a formal objection on the grounds that 99 acres was too large an area. The City Council proceeded no further<sup>5</sup>.

At the time, it was also thought that the landfill would be too close to the beach. The Council's interest in the land probably had more to do with the potential to acquire ownership of, and development rights over, the site with relative ease, rather than its suitability. Indeed, a city councillor had been quoted in the local newspaper as saying: "The area was Maori land, useless for production, and an objection would therefore be unreasonable. The land had probably been selected with the idea of interfering with as few people as possible<sup>6</sup>." Whatever the case, there had been little research conducted to justify the required extent of the landfill in 1956, just as there was to be no justification for the 362 acres that the Council was to demand in 1970.

### The site selection process

The controversial status of the Paokahu landfill today reflects, in part, a flawed site selection process at the start which, in turn, emanates from its hurried initial devel-

<sup>3</sup> Paokahu 5 & 6: Memorandum of title files: Gisborne MB folios for 16.1.1956.

<sup>4</sup> "Paokahu block rubbish tip appeal." – H.C. Williams, City Engineer to Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 11.4.1973 (GCC 01-212-03 HI).

<sup>5</sup> "Submissions made on behalf of The Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Block." – Gisborne Town Planning Appeal, 1973 (MA 38/2/1).

<sup>6</sup> "Disposal of refuse is problem." – Gisborne Herald, 23.2.1956 (GCC 33/1).

opment. It was only years later that the true significance of this selection became apparent. For example, the GDC was asked to return a pro forma questionnaire in 1990 and included the following responses therein<sup>7</sup>:

Did you prepare an [Environmental impact assessment] prior to seeking approval [No]...  
Does the site have a liner [No]...  
Do you collect leachate [No]...

These responses can be linked to planning legislation for land (Town and Country Planning Act 1953) and water (Water and Soil Conservation Act 1967) which did not require compulsory impact assessments, nor rigorous analysis of environmental conditions prior to landfill development. The lasting environmental significance of the responses, above, requires in-depth analysis of the initial selection of Paokahu as a waste management site.

There were several reasons why the City Council favoured the Paokahu site. With the beach nearby, it was in close proximity to minable sand and silt for top cover<sup>8</sup>. Moreover, it was outside of the city boundaries, yet within close proximity to the city itself – a need which became apparent in the aftermath of the Waikanae Creek reclamations<sup>9</sup>. The area also complied with the aforementioned understandings of land 'needing improvement' in that "as long as there is low lying land which can be improved by filling, refuse is a valuable material<sup>10</sup>." However, the key appeal of the site was the potential size of the landfill that could be established at Paokahu. Although suitable refuse compaction mathematics and demand forecasting<sup>11</sup> appears to have been completed only after the issuing of permits for the landfill, it was thought that a site of 300 or more acres would last for 50 years. The Waikanae strategy of changing tip sites every 2-3 years had meant that it was "difficult and costly to maintain high standards of tipping<sup>12</sup>." From the very start of the Paokahu debate it was the site's potential longevity that was seen to produce the "need to have control of all the land for sensible long-term planning<sup>13</sup>." Indeed, it may well have been sensible to take a long-term perspective, but the resolve of the Council to

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<sup>7</sup> Questionnaire compiled by Murray North Ltd., 23.5.90 (GCC 01-212-03).

<sup>8</sup> "Burnard, Bull, McHugh and Kinder Letter 6.4.72. Paokahu Block refuse tip scheme." – H.C. Williams, Chief Engineer, GCC to Town Clerk, 7.4.72 (GCC 01-212-03 HI).

<sup>9</sup> "Airport refuse tip." – H.C. Williams, Chief Engineer, GCC to Town Clerk, 26.6.67 (GCC 01-212-03 HI). See Section 8.3.

<sup>10</sup> Evidence of Robert Hall, City Health Inspector – 21.6.1972 (GCC 01-212-03 HI).

<sup>11</sup> The estimation of 50 years, for example, was based on a predicted Gisborne population in 2025 of 80,000 people – an extraordinary over-exaggeration. "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, City Engineer to Town Clerk, 6.5.1970 (GCC 01-212-03 HI, PBCB 2/38/10).

<sup>12</sup> "Robert Hall, City Health Inspector." – 3 page typewritten statement, 1972 (PBCB 2/38/10).

<sup>13</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, City Engineer to Town Clerk, 6.5.1970 (GCC 01-212-03 HI, PBCB 2/38/10).

find a long-term and uncomplicated solution to its waste disposal needs meant that it became a truly determined bargaining partner.

In fact, the Council became so determined that it was disposed to ignore good advice, known scientific knowledge and verifiable facts about the locality under investigation. The Chief Engineer of the Poverty Bay Catchment Board (PBCB) proffered several reservations about the site<sup>14</sup>. Yet, GCC staff chose to criticise that engineer – who was considerably more experienced in groundwater modelling than any other advisor in the district – on the basis that he was “not able to state any of the critical facts related to the presence, movement, quality or variations in the ground water” at Paokahu<sup>15</sup>. At a later date, the fears of the PBCB engineer that groundwater would come into frequent contact with refuse were to be proven correct, while the views of the City engineer and health inspector that groundwater would “innocuously leach out to sea” were disproved<sup>16</sup>. In reality, GCC staff had almost no reason to be confident about the likely extent or direction of leaching. The Council had completed no groundwater studies or monitoring in the area until well after the finalising of the site in its plans. It was as late as December 1971 that it decided to commission the PBCB to undertake groundwater investigations and, by that time, the strategic momentum towards a Paokahu landfill was irreversible. The data had not even been supplied to the Council at an early enough date for incorporation into a major resource management hearing on the site in 1972<sup>17</sup>.

Later, the GCC would become confident that a natural clay layer provided adequate protection of groundwater from possible leaching. However, at the time, it had never studied fully the extent or depth of this layer and the Council’s scientific investigation of the requirements for tip liners appears to have been scant. Indeed, the City Health Inspector believed a natural or manufactured liner to be a potential nuisance in that it would lead to ponding of leachate rather than natural escape<sup>18</sup>. To the Chief Engineer, the extant clay layer was considered a disadvantage in that leachate would supposedly “spill over it rather than soak into the ‘filter’ of sand” below<sup>19</sup>. From a modern perspective, and on the basis of present scientific and local knowledge, these conclusions seem inexcusable. Likewise, the use of sand as a

<sup>14</sup>I.E. Jones, Chief Engineer, PBCB, to H.C. Williams, Chief Engineer, GCC, 22.6.1972 (GCC 33/1).

<sup>15</sup>Evidence of Harold Clifton Williams, Chief Engineer, GCC – 19.6.1972 (GCC 01-212-03 HI).

<sup>16</sup>Evidence of Robert Hall, City Health Inspector – 21.6.1972 (GCC 01-212-03 HI); Evidence of Harold Clifton Williams – 19.6.1972 (GCC 01-212-03 HI). From a tangata whenua point of view, of course, there was nothing harmless about leachate draining into the sea, nor into any other body of water. This culturally embedded notion of satisfactory disposal being equated with transport out of the immediate effects zone is a significant focus of Chapters 10 and 11.

<sup>17</sup>“Paokahu rubbish tip scheme.” – I.E. Jones, Chief Engineer, PBCB, to City Engineer, GCC, 14.6.1972 (PBCB 2/38/10). The data were generally inconclusive about the possibility of leaching and were focused on the existing quality of groundwater.

<sup>18</sup>Evidence of Robert Hall, City Health Inspector – 21.6.1972 (GCC 01-212-03 HI).

<sup>19</sup>“Paokahu Block rubbish tip appeal.” – H.C. Williams, City Engineer, to Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 11.4.1973 (GCC 01-212-03 HI).

cover for the landfill has been, in retrospect, unwise. This, too, was condemned by several commentators in the initial deliberations about the site, but this advice was ignored by the GCC from the start<sup>20</sup>. Both above and below the future tip, the GCC made many errors of judgement in its initial evaluation of the suitability of the site. Years later, facts about the site which should have been made obvious in an initial site study were unveiled. For example, there was considerable confusion as to the location of farm drains that channelled water away from the site<sup>21</sup>. Had these concerns proven correct, the impacts of toxic leachate could have been even more serious than they were to become.

The confidence of the City Engineer to state that "there is little risk of pollution compared with other sites<sup>22</sup>" was only based on the fact that other sites which were investigated were poor indeed. Alternative sites received little attention. It appears that the Chief Engineer favoured the Matawhero Oxbow as a potential site in the 1960s, but he was moved to dismiss the area in 1973<sup>23</sup>. These reversals of opinion over time suggest that 'alternatives' were seldom considered at depth, and that the Council's published opinions of particular alternatives were sometimes insincerely constructed. This view is supported by the fact that alternatives were usually researched only shortly before resource management hearings, and well after a preferred site had been established in Council plans. With inadequate drainage, close proximity to the Waipaoa River and other unsuitable characteristics relating to its geomorphology, there is no doubt that the Matawhero Oxbow would have been a poor selection<sup>24</sup>. However, the principal reason for the Matawhero Oxbow being eliminated from the selection process was that it would not provide the expansion potential of the Paokahu site<sup>25</sup>. Size mattered, and the GCC gave only scant regard to the search for alternative sites.

Subsequently, there have been attempts to identify less controversial sites for landfill development – abandoned quarries, isolated gullies and other areas which were generally out of direct public view<sup>26</sup>. Ultimately, however, these attempts were also inspired by Eurocentric interpretations of 'wasted space'. The proposed use of the Patutahi quarry for a landfill, for example, has met with stern opposition from Rongowhakaata iwi, both in times past and in the present.

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<sup>20</sup>"Paokahu Block rubbish tip appeal." – H.C. Williams, City Engineer, to Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 11.4.1973 (GCC 01-212-03 HI).

<sup>21</sup>"Paokahu landfill investigation." – J. Warren, City Engineer, to C. Willmot, GCNZ Consultants, Lower Hutt, 4.10.1988 (GCC 01-212-03 HI).

<sup>22</sup>Evidence of Harold Clifton Williams – 19.6.1972 (GCC 01-212-03 HI).

<sup>23</sup>"Refuse disposal after Aerodrome site? Kahutia Street/Anzac Street?" – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 12.3.1973 (GCC 33/1).

<sup>24</sup>Gisborne Town Planning Appeal: evidence of Ionoval Ellice Jones, Chief Engineer, PBCB – 644/72, 1973 (GCC 33/1). "Awapuni Lagoon rubbish dump site." – n.d., no author (PBCB 2/38/10).

<sup>25</sup>"Proposed refuse disposal area at Centennial Marine Drive." – I. E. Jones, Chief Engineer, PBCB, to Chairman, Executive Committee, PBCB, 28.9.1970 (PBCB 2/38/10).

<sup>26</sup>Gisborne Town Planning Appeal: Evidence of Hubert Reynolds Bach – 644/72, 1973 (GCC 33/1).

## The impact of the Turbott plan (1965)

The suitability of the Paokahu site was also associated with a recreational and landscape plan developed in 1965 by Harry Turbott for the area south-west of Gisborne City. In the early stage of its evolution, the Paokahu landfill was almost always cloaked in a justification alluding to the Turbott plan<sup>27</sup>. The most common manifestation of this justification related to Turbott's advocacy for a holiday park in the area. At little more than 2-3m above sea-level, the suggested site was too low-lying for this to be a reality. Tipping was recast as the activity which would make this holiday park a realistic possibility, through both elevating and levelling the land<sup>28</sup>. The Turbott plan in effect extended the City's planning interests beyond the City boundaries and into the territory of the Cook County Council (CCC). It was, in effect, the thin end of a wedge which aided the City in advancing its case for a landfill at Paokahu.

A circuitous and deceptive logic emerged. Put simply, this logic began with the understanding that because the area *could* be zoned for recreation, then it should be so used for that purpose. Yet, it was admitted that the recreational potential of the area was limited. As a result, the view was advanced that this potential could only be elevated with the implementation of two criteria: first, public ownership; and, second, 'improvement' through reclamation. The convenience of this argument was that control over Paokahu for refuse disposal could be achieved while arguing for purchase in terms of recreation – a more universally accepted public good. This logic was presented in explicit terms, forming the significant part of the City Engineer's evidence against the objection of the Commissioner of Crown Lands at hearings to decide a planning controversy in 1972<sup>29</sup>. It is all too apparent that the GCC knew of the capacity to manipulate public opinion through use of a Turbott plan justification. In internal memoranda exchanged amongst Council staff and advisors, the directive that commentaries about Paokahu were to be framed in terms of the Turbott plan was clearly made:

[The land's] purchase, using whatever means [and] resort it has to engineer to obtain the land in the public interest, should clearly reiterate that the ultimate objective is to provide for development as foreseen by the 1965 Turbott 'Beach Development' plan<sup>30</sup>.

<sup>27</sup> See, for example: Evidence of Harold Clifton Williams – 19.6.1972; "Paokahu Block rubbish tip appeal." – H.C. Williams, City Engineer, to Messrs Crisp and Crisp, Barristers and Solicitors, Gisborne, 11.4.1973; "In the matter of the Town and Country Planning Act 1953 and an appeal by the Gisborne City Council against the Cook County Council." – Evidence of Ian McIntyre of Murray-North Partners, 17.5.1973 (all GCC 01-212-03 HI).

<sup>28</sup> "In the matter of the Town and Country Planning Act 1953 and an appeal by the Gisborne City Council against the Cook County Council" – Evidence of Ian McIntyre, Murray-North Partners Ltd., 17.5.1973 (GCC 01-212-03 HI).

<sup>29</sup> Evidence of Harold Clifton Williams – 19.6.1972 (GCC 01-212-03 HI).

<sup>30</sup> "Report to Gisborne City Council about scheme for refuse disposal area at Centennial Marine Drive." – H.C. Williams, City Engineer, to Town Clerk, 6.5.1970 (GCC 33/1).

Marr presents another possibility – that the landfill might also have been employed to legitimise the creation of recreational reserves:

[The GCC] also announced that the ultimate intention was to use the land as a recreation area for a boating and rowing lagoon, golf courses and camping sites. It is not clear from file documents, but there is some indication that it was thought that because the land was swampy in parts and partly sand-dunes, it did not comply with requirements for takings under scenic or recreation purposes, and hence the tip zoning<sup>31</sup>.

This establishes the intriguing possibility that the combination of landfill and recreational reserve was designed to be a self-reinforcing prophecy. It was probable that a tipping site would depress the land values of the owners, providing the Council with the ability to purchase the land at a later date for a reserve or other purposes<sup>32</sup>. In terms of outcome, however, the weight of evidence shows that the GCC was never committed to the Turbott plan, but rather used the plan to legitimise opportunistically its desires for a landfill at Paokahu. At a planning hearing later in the 1970s, the lawyer for the landowners was justifiably sceptical about the relationship between the Turbott plan and the landfill<sup>33</sup>:

All the statements concerning the association of the Turbott Report and the development to take place after the rubbish disposal sound very well in general terms but do they stand up to simple test. i.e. Has Harry Turbott been consulted by the City Council to ascertain his views? Has Harry Turbott been consulted by the City Council on any matters since he published his report in 1965? Does Harry Turbott agree that a rubbish dump should go on these lands?

I ask this Committee to consider what possibility there would be of implementing the Turbott Report for camping, golfing, stillwater lake, etc., whilst a rubbish dump is there alongside it for the next fifty years. And what effect could there be on a still water lake from pollutants leaching from the dump. And what landscaping would be done with the cover proposed by the City Council. The very plan itself calls for a plateau of 361 acres – flat as a pancake after rubbish is dumped.

It is ironic that the GCC would eventually criticise the CCC for withdrawing from the Turbott plan, but even that criticism was part of an attempt to re-legitimise its request for the largest of landfill options<sup>34</sup>.

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<sup>31</sup>Marr 1997, p228.

<sup>32</sup>"Paokahu 5 and 6 Block" – minutes of a meeting at the Maori Battalion Hall, Manutuke, 24.1.1971 (MA 38/2/1). It appears that the owners were not only concerned about the potential for the landfill to mutate into a publicly owned reserve. They were also worried that the Council wanted to acquire the land surreptitiously at a later date for the purposes of a coastal subdivision.

<sup>33</sup>Submissions made on behalf of the Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Block (MA 38/2/1).

<sup>34</sup>"Paokahu refuse tip scheme and Cook County Council letter 18.10.74. re: Proposed change no. 6 to the Cook County District scheme." – H.C. Williams, City Engineer, to Town Clerk, GCC, 23.10.1974 (GCC 33/2).

## Engaging iwi

On the 30th of July, 1970, the Gisborne City Corporation filed an application under Section 307 of the Maori Affairs Act 1953 for the calling of a meeting of the owners of Paokahu Blocks<sup>35</sup>. The objective of this meeting was to have owners consider a proposal that 362 acres of Paokahu Blocks be sold to the City for purposes of a landfill. The meeting was adjourned by the Council, probably because it had encountered unfavourable sentiments towards its plans. However, there had been sufficient discourse in the Court's chambers, for the Land Court judge to recognise that tangata whenua were "strongly opposed to the taking of any of the land under the Public Works Act 1928 and likewise are opposed to the re-designation of part of the land as 'proposed refuse tip'<sup>36</sup>." These strongly held views motivated the judge to write to his superior in Wellington, requesting that the Chief Judge ask the Ministry of Works to take no action that might have led to a proclamation under the Public Works Act. The letter concluded that:

It was apparent to those concerned in today's proceedings that the Gisborne City Corporation is determined to acquire part of Paokahu 5 & 6 no matter the means and irrespective of whether or not the proceedings relative thereto are extant the Court. It is clear to me that I could take steps now in the current proceedings to bring the City Corporation to a heel but I would not dream of taking those steps unless and until I was completely satisfied that the desired result could not be achieved by any other means<sup>37</sup>.

One of the other means referred to here is the planning process itself. It is doubtful, however, that a planning contest overshadowed by the threat of Public Works takings is ultimately fair and just. The more important point from the letter is the judge's recognition of the 'determination' of the Council: If a judge of the Land Court was able to perceive the threat of Public Works takings, then this threat must have been all the more conspicuous to local iwi and, certainly, it was obvious to external agencies as well:

Maori Affairs officials held a meeting with council and reported that they had informed them it 'was extremely bad tactics' for the council to publicise the fact that they intended to take the land so early before having a meeting with owners<sup>38</sup>.

Regardless of the details of the initial announcement and the way it had been made, it is evident that tangata whenua perceived these advances as hostile actions. In a meeting called in October 1970 to discuss the prospect of a landfill at Paokahu, the

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<sup>35</sup>"Paokahu 5 & 6 Maori Freehold land. Area: 522a 1r 16ps: Constituted by Vesting Order on Consolidation dated 18 February 1970." – Judges Chambers, Gisborne MLC, to A.G. Todd, Chief Judge, MLC, Wellington. 23.11.1970 (MA 38/2/1).

<sup>36</sup> *Ibid.*

<sup>37</sup> *Ibid.*

<sup>38</sup> Marr 1997, p228.

lawyer for Mangatu Blocks, which was later to lead the cause for the Paokahu owners, indicated that:

...the Council had taken steps to initiate action to take the land. This I... suggest is one of the principal reasons for calling the meeting. Obviously they intend to take any action to get the land required for a tip. [It is desirable to get someone to speak for the owners and prevent them from riding rough shod over the owners. I suggest that it is essential that a trustee should be appointed for the owners...giving power to negotiate and no power to sell...The matter came to a head when it was read in the paper [in a] comment by the Mayor that [the Council] intended to take the major part for a refuse tip and also revealed that the Turbott Plan was also being considered. [It was felt that values could be depressed for the owners. It seems that the dumping of rubbish and soil could improve Paokahu but we cannot see why the owners should have to sell the land<sup>39</sup>.

At this meeting, it was decided that Mangatu Blocks should be appointed trustees for the beneficial owners through the Maori Land Court. This was duly constituted in January 1971, with the stated purpose of the trusteeship being to "take all steps necessary to oppose the taking of the land or any part thereof under the provisions of the Public Works Act 1928 or any other enactment enabling the land to be taken<sup>40</sup>." The wording of this deed highlights the perception of a need to defend the land from the aspirations of the Council. The minutes also report a significant fear that the Council "still have power to go over the owners heads and take the land so [it is] therefore desirable that negotiations be entered into with Council to lease and use portions at a time<sup>41</sup>." The offer of a (rent-free) lease reflected the desire of Paokahu owners to control the spatial extent and operational requirements of the landfill on *their* terms. Later conclusions that tangata whenua volunteered the land for the tip are easily misread: the threat of coercion in the negotiation process should not be underestimated.

That Mangatu Blocks should have been required to defend the predominantly Rongowhakaata owners also indicates something of the nature of resource management proceedings at that time. A process of environmental partnership which meets the requirements of Treaty jurisprudence necessitates the resourcing of the participation of affected tangata whenua, so that they can contribute to the decision-making process irrespective of their financial or human resources. Public engagement in resource management requires both time and money, neither of which are bountifully supplied to minority peoples. The Town and Country Planning Act 1953, under which the Paokahu landfill was first developed, required no active measures from planning authorities to ensure the meaningful participation of tangata whenua in the resource management process. While Mangatu Blocks

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<sup>39</sup>"Paokahu 5 and 6 Block." – Minutes of a meeting at the Maori Battalion Hall, Manutuke, 24.1.1971 (MA 38/2/1).

<sup>40</sup>"Resolution of owners. Maori Land Court, Tairāwhiti District. In the matter of: the Paokahu 5 & 6 Block and of a meeting of owners held at Manutuke on the 24th day of January 1971." (MA 38/2/1).

<sup>41</sup>"Paokahu 5 and 6 Block." – Minutes of a meeting at the Maori Battalion Hall, Manutuke, 24.1.1971 (MA 38/2/1).

appears to have adequately represented the interests of Paokahu owners, there was considerable potential for the distortion of Rongowhakaata values. The Paokahu owners were themselves divided over whether the Council should even have been offered a lease<sup>42</sup>, and the third-party role of Mangatu Blocks could have potentially subverted internal processes of natural justice within Rongowhakaata itself. Given these possibilities, and notwithstanding the fact that many members of Mangatu Blocks were also owners in Paokahu 5 and 6, it would have been advantageous if the Paokahu owners were resourced sufficiently to contest their own cause.

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<sup>42</sup>"Paokahu 5 and 6 Block." – Minutes of a meeting at the Maori Battalion Hall, Manutuke, 24.1.1971 (MA 38/2/1).

## 9.2 (Not so) Specified departure(s)

Regardless of whether the GCC was going to lease or buy the land in question, it first had to obtain from the CCC either a change of zoning or a conditional use right within the existing zone. The zoning had already been changed in 1967 from *Rural* to *Proposed recreation reserve* in anticipation of the Turbott plan, but the GCC applied to the CCC in 1971 to rezone the area *Proposed refuse tip*<sup>43</sup>. The County replied soon after, requesting that the City vary its requirement to *Limited rural*<sup>44</sup>. While the City hesitated, deciding whether or not it should force the issue in judicial proceedings, the County changed the zoning to *Limited rural* anyway. While this variation made provision for a refuse facility, it would still have required a conditional use application, subjecting the GCC's plans to a public objection process and leaving the fate of those plans at the discretion of the County. It is notable that the GCC made all possible effort to avoid a public participation process. Moreover, that such a loophole should have existed under the Act indicates that public participation was not one of its strong points. If the public is alienated from the resource management process in a general sense, so much more so will have been Maori interests – the only remaining option for redress being costly legal proceedings: the reserve of the wealthy. The Town planning officer advised his Council not to accept the variation and to appeal under s 26(2)(a) of the Act<sup>45</sup>.

### CCC vs GCC vs the public

In the interim, however, the GCC recognised that its long-term needs might be better served by another strategy and, in March 1972, it decided to make an application for a specified departure. In effect, this constituted a waiver which would have allowed its landfill facility within the *Limited rural* zone, but with conditions attached<sup>46</sup>. The departure related to 361 acres of land and required a more rigorous public objection phase<sup>47</sup>. The supporting evidence which accompanied the application was based on unsubstantiated and ultimately incorrect statements about the improbability of groundwater leaching<sup>48</sup>. A consultant hired by the City to support its case spent less than a day in the district, yet he "left here believing that he had obtained all the information he needed to be able to act as the 'outside expert' giving an 'independent report' such as recommended" by a city legal advisor<sup>49</sup>. The wording of this statement indicates that the witness was anything but independent,

<sup>43</sup>"Proposed refuse tip." – W.S. Ballantyne, Town Planning Officer, to Town Clerk, n.d. (GCC 33/1).

<sup>44</sup>"Proposed refuse tip. Centennial Marine Drive. Requirement made under Section 21(7) of the Town and Country Planning Act 1953." – County Clerk to Town Clerk, 12.2.1971 (GCC 33/1).

<sup>45</sup>"Proposed refuse tip: Variation of requirement. Cook County Council" – W.S. Ballantyne, Town Planning Officer, to Town Clerk, 16.2.71 (GCC 33/1).

<sup>46</sup>"Specified departure application 72/5. Gisborne City Council report by County Planning Officer." – R.B. Hudson, County Planning Officer, to County Clerk, CCC, 31.10.1972 (GCC R5A)

<sup>47</sup>"Between the Gisborne City Council (appellant) and the Cook County Council (respondent) before the Town and Country Planning Appeal Board: decision." – 28.5.1973 (GCC 01-212-03 HI).

<sup>48</sup>"Robert Hall, City Health Inspector." – 3 page typewritten statement, 1972 (PBCB 2/38/10).

but had been carefully groomed for the role. The City Engineer edited the resulting report himself to make it “more acceptable to the people of the area<sup>50</sup>.” The preparation of these documents reflected less the research that the GCC had incorporated into its application and more the belief that it was “[i]mperative that the next tip be available by June 1973<sup>51</sup>.” The time-frame within which the GCC hoped to complete consent hearings and lease negotiations was impossibly short, meaning that a suitable research programme into possible effects of a landfill and pre-mitigation earthworks to manage those effects were ruled out.

The objections to the application for specified departure emphasised two factors: the possibility of leachate pollution; and environmental disamenity. Marr contended that the focus of the hearing was environmental aspects and public reserves needs rather than Maori concerns<sup>52</sup>. This appears to be a fair summary, but it might mislead the reader into believing that environmental factors were adequately covered in the hearing. Rather, the hearing – and especially the evidence of the PBCB presented therein – highlighted the gross deficiency of the GCC’s application in environmental terms.

The PBCB intended to object to the specified departure but, on balance, played a passive role in the proceedings. Its engineer was concerned with the potential for leachate to pollute the Beach Sands Aquifer, which extended into the City and was used by industrial premises for water takings<sup>53</sup>. The concern related directly to the lack of ground-water modelling the City had commissioned for its application<sup>54</sup>. One PBCB report mentions a “danger of pollution from the tip into the sea water [and...] likely pollution materials – unused pesticides, oil, heavy metal contamination, copper, zinc, lead, etc, and ammonia<sup>55</sup>.” That report also stated the necessity of an impermeable layer to be added to the bed material if tipping was to proceed, especially given the inadequacies of the natural layer of clay as a leachate barrier. It is particularly worrying that the Board doubted anyone’s ability to answer the question – “How sure are we of the flow pattern of the aquifer...Into the sea?; toward the city?; toward the Awapuni cut-off drain<sup>56</sup>?” – something it also attributed to the lack of informed study of the site.

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<sup>49</sup>“J.M. Ridley and Paokahu Block scheme.” – H.C. Williams, Chief Engineer, GCC to Town Clerk, 7.12.71 (GCC 33/1).

<sup>50</sup>“Paokahu Block refuse tip scheme.” – H.C. Williams, Chief Engineer, GCC, to Messrs Murray-North and Ridley, Consulting Engineers, Auckland, 21.1.1972 (GCC 33/1).

<sup>51</sup>“Robert Hall, City Health Inspector.” – 3 page typewritten statement, 1972 (PBCB 2/38/10).

<sup>52</sup>Marr 1997, p230.

<sup>53</sup>“Application for a specified departure. Gisborne City Council proposed rubbish tip.” – I.E. Jones Chief Engineer, PBCB, to Director, Water and Soil Division, Ministry of Works, Wellington, 17.4.1972 (GCC 33/1).

<sup>54</sup>“Application for specified departure – Gisborne City Council proposed rubbish tip.” – E.K. Wilson, Secretary, PBCB, to Town Clerk, GCC, 26.4.1972 (PBCB 2/38/10).

<sup>55</sup>“Awapuni Lagoon.” – n.d. (PBCB 2/38/10).

<sup>56</sup>*Ibid.*

The Board made a number of comments about loss of amenity values as well, but the strength of its statements was relatively modest, perhaps suggesting that it did not consider this to be part of its mandate. Given that the Water and Soil Conservation Act 1967 and the Town and Country Planning Act 1953 were both ambiguous as to the precise relationship between catchment boards and city councils, this passivity is not surprising. For the purposes of this hearing, the Board considered its role under the Water and Soil Conservation Act to be limited to “promot[ing] better usage, utilisation and allocation of water<sup>57</sup>,” not to protect the cultural dimensions of the water regime. This is not to say, however, that it utilised all of its power to intervene on behalf of the water regime. Years later, GDC planning staff bemoaned the fact that “although the Water and Soil Conservation Act 1967 was in existence at the time, no water rights were obtained...Although there were planning consent conditions on the water quality, no provisions to prevent leachate from entering the surface water system appear to have been taken<sup>58</sup>.” Under the Water and Soil Conservation Act, the PBCB had the authority to make the GCC apply for a water right, which would have inevitably placed more stringent environmental conditions on the operation of the landfill. Ultimately, the PBCB decided not to utilize this authority, nor to formally object at the hearing, which seems peculiar given the gravity of its concerns.

Mangatu Blocks, representing the beneficial owners, also brought up a number of environmental concerns. However, these formed just some of their objections. Although the owners had earlier attempted to compromise by offering a small portion of lease land for the landfill, by the time of the hearing for a specified departure their resolve against any tip had been strengthened. This reversal came about when the owners learned that recent planning rulings had set a precedent wherein even a small lease and re-zoning could open the way for larger areas to be zoned for landfill purposes<sup>59</sup>. The main objections were that<sup>60</sup>:

1. [The departure] will disturb ‘the full exclusive and undisturbed possession of Maori land by Maori owners’.
2. Council has no jurisdiction to deal with the specified departure, as the effects will be significant beyond the vicinity of the property.
3. Council has not properly resolved to bring down a change or variation to the scheme as is required under Section 35(2)(b) of the Town and Country

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<sup>57</sup>“Cook County Council specified departure application 72/5. Gisborne City Council. Summary of matters discussed by the objections committee with the Chief Engineer, PBCB.” – 15.9.1972 (GCC R5A).

<sup>58</sup>“Paokahu landfill water and discharge permits. Water resources section introductory report.” – I. Petty and J. Barber, GDC report 94/234, 9.5.1994 (GDC RC93003).

<sup>59</sup>Marr 1997, p229.

<sup>60</sup>“The Town and Country Planning Act 1953. Objection to application for consent to conditional use.” – Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Blocks to, County Clerk, 1972 (GCC R5A).

Planning Act 1953 and therefore has no jurisdiction to deal with...the specified departure...

4. The proposed use is against the public interest.
5. The site is not suitable.
6. The site is not the best site available.
7. The application is contrary to sound town and country planning principles in that it will detract from the amenities of the neighbourhood and have a harmful effect on the health, safety, convenience and the general welfare of the inhabitants of the district.

It is important to recognise that objection 1 was a protest vote – a reminder of the Treaty, rather than a point on which the trustees expected to be taken seriously. The lawyer for the trustees admitted this much in his expansion on objection 1:

I am aware that the Town and County Planning Appeal Board in a prior case has ruled that the Treaty of Waitangi does not form part of the Statute law of this Country and cannot be regarded as authority for an objection on Town Planning grounds<sup>61</sup>.

It was only much later that the principles of the Treaty were to be incorporated into planning law<sup>62</sup>. The monocultural bias and absence of Treaty principles in the Town and Country Planning Act represent a significant omission by the Crown. In this particular hearing, the Treaty could not be used effectively to protect iwi resource, environmental and cultural interests.

At the hearings on the specified departure, the owners made good use of their kaurumatua who proceeded to dispel any suggestion that this land lacked cultural or historical significance. Pita Kaua outlined the general history of the Paokahu Blocks, paying particular attention to the historical location of kainga and the burial place of the eponymous ancestor Rongowhakaata, somewhere near the mouth of the Waipaoa River<sup>63</sup>. He then summarised the role of the Paokahu pa as a place of refuge when tribes from outside of the district attacked local iwi. Other points of history related to a nearby fishing place called Te Poho-o-Tamauahi and a fresh-water well that was close to this site. Two urupa – Te Urimatai and Pewhairangi – were also identified as being in close proximity to the proposed landfill site. This evidence was similar to that given to the 1928 Land Court hearing on the Awapuni Lagoon<sup>64</sup>, reflecting the close proximity of the proposed landfill to the land reclaimed from the Lagoon. Pita concluded his evidence by saying that: "The whole

<sup>61</sup> Submissions made on behalf of the Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Block (MA 38/2/1).

<sup>62</sup> s 3(g) of the Town and Country Planning Act 1977 would soon introduce language reflecting the Treaty into planning law – but this was too late for the hearings about Paokahu. It was not until s 8 of the Resource Management Act 1991 that direct reference to the Treaty was made in planning legislation.

<sup>63</sup> Evidence of Pita Kaua before the Committee to hear a Specified Departure – 1972 (GCC 33/1).

<sup>64</sup> See Section 8.1.

area is one which was important in those early days because of its location and purpose and today the Maori people feel most upset that this land should be used as a rubbish dump<sup>65</sup>.”

Henare Ngata, who was chairman of Mangatu Blocks at the time, concentrated on the recent history of the area<sup>66</sup>. He associated the landfill with other injustices which had been imposed on the beneficial owners. In his view, the proposal for a landfill could not be separated from the potential injustice of the Turbott plan itself, which he considered to ignore the rights of owners. To him, the Turbott plan threatened to impose public recreational goods upon some of the only remaining Maori land on the Poverty Bay flats. More importantly, the Committee was reminded of public works takings near the site. This was not only an attempt to obtain some empathy for the plight of the Paokahu owners, but was also indicative of the continuing fear that public works takings might be invoked to create the tip.

In particular, Henare along with the lawyer for Mangatu Blocks drew the attention of the hearing committee to the taking of 69 acres of land along the foreshore in 1944<sup>67</sup>. The land was to become Centennial Marine Drive and, eventually, the access way to the Paokahu tip. This episode will undoubtedly be accounted for elsewhere within Rongowhakaata’s casebook evidence, so it will be mentioned here only in passing. No compensation was paid to the owners of the blocks affected because it was believed that the presence of the road would increase the value of surrounding land, opening the area up, as it would, for subdivision<sup>68</sup>. The subdivisions never transpired, partly because Centennial Marine Drive was never fully completed, partly because of zone changes which prevented any such subdivisions<sup>69</sup>, and, moreover, because few would have wanted to live next to the district’s landfill. The City constructed only half of the road. By 1972, the GCC had abandoned all thought of extending the public road to the mouth of the Waipaoa River and attempted to convert the remaining land into a public domain<sup>70</sup>. The land was eventually returned to local Maori, to become the Kopututea strip<sup>71</sup>, but only after considerable toil on the part of local iwi.

The return of the land was obviously a concern for some at the GCC who associated it with a growing and unwelcome sympathy with “a matter of principle that

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<sup>65</sup>Evidence of Pita Kaua before the Committee to hear a Specified Departure – 1972 (GCC 33/1).

<sup>66</sup>Evidence of Henare Ngata before the Committee to hear a Specified Departure – 1972 (GCC 33/1).

<sup>67</sup>NZ Gazette, p1275, 26.10.44. See also: “Centennial project at Gisborne.” – Freelance Newspaper, Wellington, 24.5.1939 (IA 62/10/64).

<sup>68</sup>70 Gisborne MB 32-37, 21.10.1947; “Paokahu 5 & 6, Awapuni Lagoon.”, Assistant District Manager, Maori Affairs, Gisborne, to Head Office, Maori and Island Affairs Department, 2.11.1973 (MA 38/2/1).

<sup>69</sup>As stated earlier, the area had been zoned *Rural* prior to 1967 and, for a short time thereafter, *Proposed recreation*. Neither of these zonings suitably accommodated the possibility of subdivision.

<sup>70</sup>“Closure of portion Centennial Marine Drive for addition to Marine Drive Domain” – Honourable Minister of Lands, Wellington, 11.6.1973 (GCC R5A).

<sup>71</sup>“Maori owners ask people to respect the sand dunes.” – Gisborne Herald, p4, 3.11.98, (GisMUS VF-Maori).

Maori interests should appear to be annoyed about anything to do with land ownership<sup>72</sup>.” While this comment summarises the attitudes of GCC staff at the time, the wider issue to which it relates is important for the argument of this chapter. The public works takings at Centennial Marine Drive provide important context for the case of the Paokahu landfill. From this narrative, it is not hard to see why local iwi were fearful of attempts to take the Paokahu lands for one purpose (in this case, a landfill) and have that land become something else (for example, a recreation reserve) – there was sufficient evidence of this type of manoeuvre in nearby land dealings. While acknowledging that public interest must be taken into account, Henare pointed out that sufficient Crown land existed for the landfill to be created even closer to the city. He concluded his evidence with a telling remark: “if the land in question were European owned the liberties taken or proposed by various public bodies over the past thirty years would never even have been contemplated<sup>73</sup>.”

The lawyer for Mangatu Blocks also concentrated on the history of the site in question, linking the attempt to site a landfill in the area with the drainage of the Awapuni Lagoon<sup>74</sup>. Likewise, the trustees questioned why the landfill *had* to be on Maori land. They suggested that Crown land near the favoured Paokahu site or the Matawhero Oxbow could have been used<sup>75</sup>. Mangatu Blocks also re-asserted the argument that the City was siting the landfill at Paokahu in order to depress Maori land values and, eventually, expand the City along Centennial Marine Drive<sup>76</sup>. The conclusion of the lawyer for the trustees was also significant: “One cannot escape the conclusion which is readily seen by the Maori owners I represent that this Paokahu Block owned by a large number of Maori owners appeals as an easy grab<sup>77</sup>.”

The reaction of the GCC to the objections of Mangatu Blocks reflects deeply ingrained cultural bias. In response to the objection that the landfill would impact upon cultural values, the Chief Engineer – principal negotiator for the City in this matter – commented that the “land is not inhabited by its owners and has not been so for many years... The Maori owners voluntarily surrendered right of occupation when they leased the property 40 years ago. There are no known marae or burial grounds on the property<sup>78</sup>.” Indeed, the land was leased to a local abattoir for graz-

<sup>72</sup>“Paokahu refuse tip access to beach?” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 14.10.1980 (GCC 33/2).

<sup>73</sup>Evidence of Henare Ngata before the Committee to hear a Specified Departure – 1972 (GCC 33/1).

<sup>74</sup>Submissions made on behalf of the Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Block (MA 38/2/1).

<sup>75</sup>“Alternative site available for city tip.” – Gisborne Herald, 21.11.72 (GisMUS VF-Local Govt Facilities).

<sup>76</sup>Marr 1997, p228.

<sup>77</sup>Submissions made on behalf of the Proprietors of Mangatu 1, 3 and 4 Blocks as trustee for the beneficial owners of Paokahu 5 and 6 Block (MA 38/2/1).

<sup>78</sup>“Objections to Paokahu Blocks specified departure application. City solicitor letter 18.4.72.” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, n.d. (GCC 01-212-03 HI). See also: Evidence of Harold Clifton Williams – 19.6.1972 (GCC 01-212-03 HI).

ing, but this could not possibly be read as a voluntary surrender of the rights of the owners, nor of their status as kaitiaki. The comment that there were no known marae or burial grounds – a deliberate attempt to discredit a spiritual link to the land – was in direct opposition to the evidence of local kaumatua, and was again contested at the later appeal hearings. These views also conflicted with evidence given by the CCC which, itself, was hardly sensitive to iwi interests when stating that “except for 2 cemeteries and a fresh water area [there was] no evidence as to Maori occupation<sup>79</sup>.” The Chief Engineer was also unsympathetic to iwi claims relating to the failure of the CCC to allow for iwi land developments in the area: “...their potential loss is only one of speculative opportunity derived mainly from the progress achieved by the city and district over recent years<sup>80</sup>.” These comments reflect the racially charged stance that the GCC adopted in its efforts to guarantee the creation of the Paokahu landfill.

Despite the seriousness of the objections and the strength of the iwi evidence, the CCC eventually accepted the departure in November of 1972, but with a number of limiting conditions. The most important of these was a 50 acre restriction on the area for landfilling, established in the belief that this area was sufficient for Gisborne’s needs<sup>81</sup>. The discrepancy between 50 and 361 acres probably highlights the speculative analysis that initially contributed to the GCC proposal. Apart from a series of procedural requirements, other important conditions included:

- A comprehensive site plan...to be developed by an engineer and a landscape architect, which could use the Turbott Plan as a guide (#2).
- Operation be subject to monitoring of groundwater under control of the PBCB. GCC to comply with [the Board’s] requirements including further investigations, tests and expert advice (#4).

The purpose of the first of these points was to have the land restored to a state in keeping with the surrounding environment:

A concept was adopted of designing and constructing the landfill to resemble an extension of the natural dunes in the vicinity. Refuse was to be placed in parallel ridges. A maximum height of 4.5 metres above mean sea level was imposed, no greater than the existing ridges. The concept was that the landfill would have a finite life and on completion would appear as if the natural dunes had intruded further into the lagoon than was the case<sup>82</sup>.

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<sup>79</sup>“Specified departure application 72/5. Gisborne City Council report by County Planning Officer.” – R.B. Hudson, County Planning Officer, CCC to County Clerk, 31.10.1972 (GCC R5A).

<sup>80</sup>“Burnard, Bull, McHugh and Kinder letter (6.4.72). Paokahu Block refuse tip scheme.” – H.C Williams, Chief Engineer, GCC, to Town Clerk, 7.4.1972 (GCC 01-212-03 HI).

<sup>81</sup>“Town and Country Planning Act 1953: specified departure application 72/5. Gisborne City Council proposed municipal rubbish tip notice of decision.” – County Clerk to GCC, c/o Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 27.11.1972 (GCC 01-212-03 HI).

<sup>82</sup>“Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites.” – October 1997 (GDC RC93003).

The point has been given emphasis here because contravention of these landscaping conventions was to become a significant concern of the land owners.

### The appeal on the specified departure conditions

These conditions, and especially the spatial restriction to 50 acres, proved unacceptable to the GCC and it submitted an appeal to the Planning Appeal Board in late November, 1972<sup>83</sup>. The justification for this view was that the tip would be exhausted within 7-10 years, preventing long-term planning and overall cost reductions. The GCC also appealed conditions relating to: restrictions on the use of sand dunes for cover material; the necessity of obtaining additional permission to tip hazardous waste; an increase in the required depth of cover material; and, the requirement that landscape restoration be carried out on a running basis. The City was apparently surprised and upset by the severity of the conditions<sup>84</sup>, further highlighting its lack of critical review in the initial design process.

The City was also surprised at the strength of public opinion witnessed at the specified departure hearing in relation to the sand dune environment. Having predetermined that this was 'waste land', the GCC had prepared little in the way of an argument to defend its position about destroying sand dunes and altering the amenity values of the site. It was in this context that the Turbott plan was once more resurrected in Council discourse – this time to justify the logic of its appeal. This tactic came as a directive from the GCC legal advisor:

I...would agree that evidence will have to be directed...to the environmental value of the sand dune areas so far as the coastal landscape is concerned...I think that town planning evidence might also now be necessary on the importance of the environmental factor so far as the sand dunes are concerned...[T]o consider the development of this area in accordance with the Turbott plan and the significance of it and otherwise of the sand dunes<sup>85</sup>.

This would not be the last time that the Turbott plan was to be exploited in order to detract attention from the real desires of the GCC. The City also attempted to elicit the support of business interests to fight its cause. By rejecting the refuse of the Watties cannery and Montana Wines<sup>86</sup> at the remaining tip along Waikanae Creek, the Chief Engineer sought their public support in resource management proceed-

<sup>83</sup>"Cook County District Scheme. Notice of appeal under s35(5) of the Town and Country Planning Act 1953." – 15.12.1972 (GCC 01-212-03 HI).

<sup>84</sup>"Paokahu Block. Rubbish tip appeal." – H.C. Williams, Chief Engineer, GCC, to Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 18.12.1972 (GCC 33/1).

<sup>85</sup>"re. Gisborne City." – L.H. Southwick, GCC, to Messers Chrisp and Chrisp, Barristers and Solicitors, 22.1.73 (GCC 01-212-03 HI).

<sup>86</sup>"Organic waste disposal." – H.C. Williams, City Engineer, GCC, to Manager, Wattie Canneries Ltd., Gisborne, and A. Corban, Corbans Winery Ltd., Auckland 14.11.1974 (GCC 33/2); "Montana Wines. re. Waste disposal 10.1.75." – H.C Williams, Chief Engineer, GCC, to Town Clerk, 4.1.1975 (GCC 33/2).

ings and lease negotiations. Indeed, these and other companies were seen to advocate for the Paokahu tip through the *Gisborne Herald*.

There were other findings of the Committee which heard the hearings on the specified departure that the City had to quickly address prior to the appeal proceedings. GCC staff maintained a stance of disbelief, if not racial prejudice, about the stated Maori values associated with the site:

Historic associations: vague reference is made to a pa site but no evidence appears to be forth coming as to where it suppositionally was, or whom lived there or when. [This was] wishful thinking on the part of objectors and over dramatised observance of a growing non-Maori trend towards homage towards anything which may honour the elements of Maori tradition<sup>87</sup>.

It appears that the main advocates for the Paokahu site would never accept the cultural argument against the landfill, especially the notion that the disposal of waste near wahi tapu was unacceptable. The GCC was convinced that the tip was in the public interest, and that the public interest should prevail over iwi rights: "In my view the need of the city in this respect outweigh all the hardships concerning the Trustees<sup>88</sup>." It needs to be said, of course, that the Town and Country Planning Act 1953 effectively included no protection for Maori archaeological sites nor for spiritual attachments to land and resources. In addition, Council staff were aware of, but actively chose to ignore, the relative significance of this land to local iwi: "in the final analysis there is the question of GCC acquiring or taking the land from its owners, most of whom are Maori owners determined to restrain their fellow New Zealanders from whittling away further the extent of ancestral lands<sup>89</sup>."

The Paokahu owners brought an appeal of their own against the decision to approve the 50 acres for landfill purposes<sup>90</sup>. Later, however, they withdrew their appeal and changed their stance to one of supporting the CCC: in other words, opposing any further consent being granted to the GCC at the appeal hearing<sup>91</sup>. The reason given to the Appeal Board for this withdrawal was to "simplify the hearing<sup>92</sup>," but the real reason was the ongoing cost of pursuing the case<sup>93</sup>. It was

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<sup>87</sup>"Paokahu Block. rubbish tip appeal." – H.C. Williams, Chief Engineer, GCC, to Messrs Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 18.12.1972 (GCC 33/1).

<sup>88</sup>"Burnard, Bull, McHugh and Kinder letter 6.4.72. Paokahu Block refuse tip scheme." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 7.4.1972 (GCC 01-212-03 HI).

<sup>89</sup>"Paokahu refuse tip scheme." – H.C. Williams, Chief Engineer, GCC, to Murray North and Partnership, 29.6.1972 (GCC 33/1)

<sup>90</sup>"The Town and Country Planning Act 1953. Notice of appeal pursuant to s35(5)." – Proprietors of Mangatu 1, 3 and 4 Blocks as Trustee and as a Beneficial Owner. 14.12.1972 (GCC R5A).

<sup>91</sup>"Between the Gisborne City Council (appellant) and the Cook County Council (respondent) before the Town and Country Planning Appeal Board: Decision." – 28.5.1973 (GCC 01-212-03 HI).

<sup>92</sup>"re: Proprietors of Mangatu 1, 3 and 4 Blocks vs Cook County Council." – Burnard, Bull, McHugh and Kinder, Barristers and Solicitors, to Secretary, Town and Country Planning Appeal Board, Wellington, 16.5.1973 (PBCB 2/38/10).

cheaper for the trustees to support the CCC than it was to lead their own case. Again, this highlights the fraught position of Maori generally within the resource management framework of the time. It might also highlight the one-sided emphasis of the Appeal hearings which, like the hearing on the specified departure, were much more concerned with biophysical and recreational concerns than with the cultural and historical significance of the site<sup>94</sup>.

The findings of the Appeal Board generally upheld the conclusions of the Committee which heard the specified departure. In terms of remedial work, the Appeal Board effectively strengthened the conditions which required landscaping to be carried out on a running basis: The "Board finds it is necessary to plan for the final form of the land as tipping is only a temporary use and in order to properly manage that use. When a site is filled it should be available for use without delay<sup>95</sup>." Oddly, however, the Board decided that it was not within its power to comment on the Turbott plan, leaving considerable ambiguity as to how end uses were to be accommodated in the process of landscaping the site. This is important because one of the subsequent complaints of the land owners was that the GCC ignored the remedial conditions. This ambiguity also produced a loophole that the City targeted for exploitation in order to sideline other conditions. It believed that the combined weight of the conditions from the specified departure and Appeal Board decisions "in practical terms borders on being ridiculous. Mr Turbott's proposition seems the only avenue for obtaining a release from the situation, thereby permitting getting on with the business of rubbish disposal<sup>96</sup>." Yet again, the GCC deliberately exploited the Turbott plan to obscure its true intent. Ironically, the GCC eventually sought to rehire Turbott to advise on the landscaping of the site<sup>97</sup>, having been ordered to seek advice from both engineers and landscape architects for this purpose<sup>98</sup>. This did not eventuate, however, because the Council simply decided to ignore the requirement for input from a landscape architect<sup>99</sup>.

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<sup>93</sup> Later, it was revealed that the trustees had incurred legal and other costs totalling \$3,546 between 1970 and 1975 in their attempt to contest the GCC. These costs were taken out of the rentals from Paokahu 5 and 6 and would have represented a high proportion of the then revenue from those lands.

<sup>94</sup> Marr 1997, p230.

<sup>95</sup> "Between the Gisborne City Council (appellant) and the Cook County Council (respondent) before the Town and Country Planning Appeal Board: Decision." – 28.5.1973 (GCC 01-212-03 HI).

<sup>96</sup> "Turbott and Halstead (6.11.73). Paokahu Block and Town Planning Appeal Board Decision." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 23.7.1973 (GCC 01-212-03 HI).

<sup>97</sup> "Paokahu refuse tip scheme. Town and Country Planning Appeal Board decision." – H. C Williams, Chief Engineer, GCC, to Town Clerk, 25.7.1973 (GCC R5A).

<sup>98</sup> See above.

<sup>99</sup> In the GCC's defence, it must be said that this was with the apparent acceptance of local iwi who "had no intention of this area becoming a park," ("Report of the meeting held at the Cook County Council chambers in connection with the Paokahu Refuse Disposal Scheme." – 5.2.1975 (GCC R5A)) so were particularly concerned about the potential return of Turbott into these discussions, as was Turbott himself (H.A. Turbott to W. Hudson, Town Clerk, 6.11.1973 (GCC 01-212-03 HI)). Nevertheless, this still represents a direct contravention of the conditions of the specified departure.

Other reactions of the GCC to the outcomes of these hearings also foreshadowed future controversies. Almost as soon as the City had been limited to a 50 acre tip site, for example, the City Engineer began to explore the possibility of infilling beyond the 6' depth of fill which was initially applied for<sup>100</sup>. This was a deliberate attempt to bypass the logic of the conditions brought down by the planning Committee and Appeal Board. As will be shown later in this chapter, the GCC would subsequently claim that it contravened this logic unknowingly, but there is no doubt that its engineer was both calculated and duplicitous in this regard<sup>101</sup>.

Up to this point, the CCC had played a reactive role, responding to the GCC as necessary. The final step in the complex planning decisions for the landfill required the CCC to take the lead. To incorporate fully the conditions of the Appeal Board and the Committee which heard the specified departure, County planning staff recommended a zone change. Proposed Change 6 – as it became known – re-zoned the area *Recreation A*, with a predominant use of farming and a series of conditional uses: parks, scenic reserves, camp grounds and, of course, refuse tips<sup>102</sup>. Proposed Change 6 appears to have dismayed some City staff<sup>103</sup>, who retained desires for a future increase in the spatial extent of permitted tipping activities. These staff viewed the plan change as a retreat from the logic of the Turbott scheme, and an overly generous compromise which was designed to appease the Maori owners<sup>104</sup>. That the GCC should frame a plan change in such highly racialised terms reflects fully its troubled relationship with local Maori. Nevertheless, the GCC had no option but to accept the plan change, which it did near the end of 1974.

It was local Maori, however, who reacted the strongest to Plan Change 6. The change was perceived as the final insult to tangata whenua who had endured both public works takings for Centennial Marine Drive and protracted resource management hearings for the Paokahu landfill. The CCC believed that it had the support of Mangatu Blocks in that its new designation preserved farming as a permitted land use<sup>105</sup>. This was certainly not the view of the either Mangatu Blocks, nor any other group of Maori connected with the area in question. Mangatu Blocks – both on its own behalf and as trustees for the Paokahu owners – submitted a lengthy and detailed objection. The balance of this submission was more the recreational focus of the zone rather than its allowance of tipping<sup>106</sup>. Again, this was seen as preclud-

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<sup>100</sup>“Paokahu Block, T&CP Appeal Board appeal. re. L.H. Southwick letter to C&C, 23.3.73.” – H.C. Williams, Chief Engineer, GCC, to Chrisp and Chrisp, Barristers and Solicitors, Gisborne 26.3.1973 (GCC 33/1).

<sup>101</sup>*Ibid.*

<sup>102</sup>“Specified departure application 72/5. Gisborne City Council report by County Planning Officer.” – R.B. Hudson, County Planning Officer, CCC to County Clerk, 31.10.1972 (GCC R5A).

<sup>103</sup>“Paokahu refuse tip scheme and Cook County Council letter 18.10.74. re: Proposed Change No. 6 to the Cook County District Scheme.” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 3.10.1974 (GCC 33/2).

<sup>104</sup>*Ibid.*

<sup>105</sup>“Proposed change No. 6.” – R.B. Hudson, County Planning Officer, to County Clerk, 7.10.1974 (GCC R5A).

<sup>106</sup>“Recommended decision on objections.” – T.L.C. Williams, Chairman of Objections Committee on Plan Changes, n.d. (GCC R5A).

ing the land developments which had been promised in 1947 as compensation for the loss of the Kopututea strip. It was also seen as locking tangata whenua out of future subdivision developments which were beginning to become economically viable. The combined weight of all these planning decisions yielded an unfavourable scenario for local iwi: on one hand, while the owners had successfully retained their land, they were prevented from using it profitably; on the other, they evidently could not use the resource management process to prevent *their* land being rezoned in such a way as to permit refuse disposal.

### Lease negotiations

These lengthy and costly planning procedures only provided the GCC with the possibility of disposing refuse at Paokahu. To transform this possibility into a reality, the Council had to acquire either a title or a lease to the land. The restriction to 50 acres dissuaded some of the City staff from their initial desire to obtain the land outright<sup>107</sup>, but others still maintained the necessity of full control through acquisition. Indeed:

In 1973 the council was still approaching ministers in an effort to gain more land for the dump and eventually recreation purposes. In a deputation early in 1973 the mayor and city engineer claimed that the present rental in perpetuity might be an option. The council mentioned that it always had the Public Works Act as a last resort but claimed it was now reluctant to use it<sup>108</sup>.

Whether this threat contained any substance is a matter for debate. It appears that the GCC had received some indication from Crown ministers that a public works taking for this area was not politically feasible<sup>109</sup>. The early 1970s saw the beginnings of a Maori cultural renaissance and a growing public sympathy for the historical plight of Maori, including a general reaction against the use of the Public Works Act. In this political context, public works takings were now considered a last resort to be actioned only in particular circumstances. However, this context did not prevent the GCC from exploiting the bargaining power retained by the *threat* of the Public Works Act. Just as this threat had influenced the direction of the planning hearings, so it also influenced the lease negotiations that were to follow. These negotiations are examined in detail because contraventions of the lease have been just as controversial for local iwi as any infringement of planning requirements.

In deciding whether they would lease the land to the Council, the Paokahu owners had decided to wait until all planning determinations had been finalised. Although the issue was still controversial amongst the owners of Paokahu 5 and 6, they

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<sup>107</sup>"E.3015. Paokahu refuse tip scheme. Town and Country Planning Appeal Board decision dated 23rd July 1973." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 25.7.1973 (GCC 33/1).

<sup>108</sup>Marr 1997, p231.

<sup>109</sup>This is implied in several letters contained in MA 38/2/1, but no formal record of the communication has been located.

decided in advance to accept a lease if a reasonable deal could be negotiated. Options to make money out of the land were limited and the use of the site for a landfill no longer had to entail losing the land permanently<sup>110</sup>. After the planning requirements were established, the Council made the first approach, with an inquiry in May of 1974 as to what terms the owners would demand to make the land available<sup>111</sup>. This initially led to a meeting among representatives of the GCC, CCC, PBCB, and Mangatu Blocks, as well as some of the kaumatua from Paokahu Blocks. That the GCC did not enter into the negotiations in good faith is reflected in its attempt to limit the influence of third parties. Subsequent to this first meeting, it appears that both the CCC and the PBCB lacked faith in the City's desire to comply with the established planning conditions and, therefore, sought to assist the trustees to formulate a suitably worded lease. The negotiators for the City tried at length to limit the effectiveness of this assistance, selfishly refusing to meet with the owners while these third parties were in attendance<sup>112</sup>. In the end, clauses 7, 11 and 12 of the lease<sup>113</sup> fully reflected the landscaping requirements of the earlier planning decisions because the owners were themselves concerned about site restoration. Nevertheless, they might perhaps have benefited from the additional support which had been offered by the CCC and PBCB. Site restoration has been a contentious issue until the present day.

In 1999, the GDC accepted that the remunerative aspects of the lease over the landfill had always been in the Council's favour<sup>114</sup>. This was especially because the land would have had only restricted use for 30 to 40 years after tipping, a result of leachate and other pollution issues<sup>115</sup>. At the time, however, the price offered by the trustees – \$100/ac/yr (but only for the 10 acres used at any one time) – was fervently contested by the Council:

The proprietors of the Mangatu Blocks appear to be motivated by some other thoughts than ones of receiving a fair return for the use of their land. Some of the terms of the lease, other than rental, read to me as a no doubt correct assumption that the people of Gisborne must have use of the land and that the present situation is then an opportunity for the Mangatu Block proprietors to place any extreme condition at all on the terms of a lease<sup>116</sup>.

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<sup>110</sup>Pers. Comm., Lewis Moeau.

<sup>111</sup>"Paokahu Block." – W. Hudson, Town Clerk, to Messrs Burnard, Bull and Co., Gisborne, 6.5.1974 (GCC R5A).

<sup>112</sup>"Paokahu refuse disposal scheme. Poverty Bay Catchment Board letter 13.12.74." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 17.12.1974 (GCC 33/2). See also: "Paokahu scheme." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 13.12.1974 (GCC 33/2).

<sup>113</sup>"Deed of lease between the Proprietors of Mangatu Blocks, Gisborne City Council and Economic Butchery Ltd." – 4.9.1975 (GCC 01-212-03 HI).

<sup>114</sup>"Solutions not easy to find for all parties." – J. Gillies, Gisborne Herald, 20.5.1999 (GisMUS VF-Maori).

<sup>115</sup>"Compensation of \$2.5m paid to Paokahu landowners." – Gisborne Herald, p1, 8.8.1998 (GisMUS VF-Local Govt. Facilities).

<sup>116</sup>"Burnard Bull and Co. 10.3.75. re: Paokahu Block lease and Town Clerk's comment 14.3.71." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, n.d. (GCC 33/2).

The Council was also offended by a clause (#8) which prevented tipping closer than 15 chains off Centennial Marine Drive – a total of 4 acres – which was to be set aside for “some hitherto undisclosed coastal road fronting building development for some indefinite time in the future<sup>117</sup>.” Of course, this was not ‘hitherto undisclosed’, but a perhaps forlorn attempt by the owners to retain the possibility of the ‘compensation’ that had been promised to them in 1947<sup>118</sup>. Nonetheless, with the lease accepted, the Paokahu landfill was now destined to proceed.

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<sup>117</sup>“Burnard Bull and Co. 10.3.75. re: Paokahu Block lease and Town Clerk’s comment 14.3.71.” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, n.d. (GCC 33/2).

<sup>118</sup>“Paokahu 5 & 6 Block.” – Burnard, Bull, McHugh and Kinder, Barristers and Solicitors, Gisborne, to Town Clerk, 6.4.1972 (GCC 33/1).

## 9.3 Operational concerns

It has already been indicated that the GCC did not necessarily obey the planning conditions or the requirements of the lease. This section briefly evaluates the operational difficulties experienced at the Paokahu landfill during the period 1976-1990 and the environmental outcomes of these difficulties up until the advent of the Resource Management Act 1991. It concludes with a commentary on the limited ability of iwi as kaitiaki and owners to maintain some degree of control over the site and its environmental effects.

### Compliance with planning and lease conditions

Over the years, there have been a number of occasions when the GCC has admitted frankly that it has not complied with either the conditions of the Appeal Board nor the lease negotiated with the owners. For example:

My impression of late is that some of the conditions established by the Town and Country Planning Appeal Board in its decision 23/6/1973 have not been properly complied with. You will recall the concern of the Catchment Board's engineer recently commenting on the leachate which was oozing out of the tip area into the stormwater drain. My impression has been on some recent visits that...staff...have been somewhat remiss about the fencing to encage windblown litter and the picking up of litter alongside the approach roads<sup>119</sup>.

...the draft report on the Paokahu Landfill indicates that Appeal Board conditions may not have been met in some ways, the report wasn't too favourable<sup>120</sup>.

The planning consent for the existing Paokahu site requires a number of operational activities. The most significant of these are continuous site restoration and leachate control. To date neither of these requirements have been satisfactorily complied with and therefore a significant deferred cost has been incurred. In addition, the lack of performance by Council may make future approvals for extension of the site relatively difficult<sup>121</sup>.

No attempt ever seems to have been made to create the ridges required by the Appeal Board decision and the height limit has been breached...[T]he landfill has been constructed as a relatively flat topped, steep sided plateau, most of which exceeds the height limits. Filling has occurred outside the boundaries of the consent area...The Engineering Department of the City and then the District Council appear to have been insufficiently aware of the strict terms of the consent. The Environmental Departments of the County,

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<sup>119</sup>"Paokahu Cover – beach sand." – H.C. Williams, City Engineer, to E. Sutton, PBCB, 6.10.1977 (GCC 33/2).

<sup>120</sup>"Paokahu landfill investigation." – J. Warren, City Engineer, GCC, to C. Willmot, GCNZ Consultants, Lower Hutt, 4.10.1988 (GCC 01-212-03 HI).

<sup>121</sup>"Compaction of the Paokahu waste disposal site." – J. Warren, Chief Engineer, GDC, 22.1.1990 (GCC 01-212-03 HI).

and District Councils and the former East Cape Regional Water Board have been unable to enforce the consent<sup>122</sup>.

The Council seldom complied with the condition limiting tipping to 10 of the 50 acres at any one time<sup>123</sup>. As a result, the remaining 40 acres, which was supposed to be used by the owners for farming, was almost never available for this purpose. Indeed, the GCC effectively abandoned the required work to re-grass the old tip-faces on a running basis and asked "for advice about how to avoid being liable for failure to comply with the requirements of the lease as the first 10 ac used for tipping will not be suitable for grazing when the 2nd 10ac starts being used<sup>124</sup>." The spatial extent of the landfill at a number of times exceeded the 50 acres. Moreover, the land that was used was not used efficiently. Clause 11 of the lease stipulated an agreed method of compaction but there was considerable evidence that this was ignored, including an admission in 1988 that "I have been unable to discover the details of the agreed method<sup>125</sup>" for compaction. That letter further stated that a compactor had not been used for some time, with council staff simply bulldozing the refuse onto the tip face and occasionally driving heavy machinery over the surface. Not only were the spatial and compaction conditions unheeded, but the GCC breached the depth of fill conditions over almost all of the site<sup>126</sup>. Inevitably, these breaches will have negative implications for the usability and amenity of the site once tipping has been completed.

Yet, preventative landscaping, pasture reinstatement and other forms of after-care were included in both the lease and the planning conditions. It is in this area that the Council was most negligent in carrying out its duties. Reports that the tip surface was "overgrown with weeds and strewn with metal<sup>127</sup>" or similar are not uncommon in GCC archives on the landfill. Rather than being part of the daily operation at the tip, as required in the planning conditions and the lease, after-care was an after-thought – something that was hurried through at the last minute when the GCC sought to extend the lease<sup>128</sup>. In forlorn attempts to prevent the pooling

<sup>122</sup>"Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites." – October 1997 (GDC 93004).

<sup>123</sup>"Paokahu refuse disposal tip." – R. Hall, City Health Inspector, to Town Clerk, 10.11.1980 (GCC 01-212-03 HI).

<sup>124</sup>"Paokahu refuse disposal tip." – B.F Miles, Town Clerk, to Chrisp and Chrisp, Barristers and Solicitors, Gisborne, 17.11.1980 (GCC R5A). This was also because of the choice of sand as a cover material which inhibited grass growth. ("Paokahu refuse disposal scheme Poverty Bay Catchment Board Letter 13.12.74." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 17.12.1974 (GCC 33/2)). A silt-clay layer would not only have helped pasture regrowth, it would also have prevented rain infiltration and consequently leaching, but this was an expense the GCC would not accept.

<sup>125</sup>"Paokahu refuse tip" – R.T. Giddens, City Health Inspector, to City Engineer, 21.1.1988 (GCC 01-212-03 HI).

<sup>126</sup>"Solid waste disposal survey by City Health Inspector and the Supervising Inspector of Health of the Department of Health. Site: 22, Paokahu." – 24.3.1977 (GCC 01-212-03 HI).

<sup>127</sup>"Paokahu refuse tip." – R.T. Giddens, City Health Inspector, to City Engineer. 21.1.1988 (GCC 01-212-03 HI).

<sup>128</sup>"Paokahu Block." – Burnard, Bull and Co., Barristers and Solicitors, Gisborne, to Town Clerk, 15.5.1974 (GCC 33/2).

of leachate, Council staff also removed several sand dunes from the site<sup>129</sup>, even though such earthworks were expressly prohibited in the various planning hearings.

The City offered a number of excuses for these lapses. When the CCC asked whether the GCC was complying with the appeal board conditions, the City replied in the affirmative “except for occasions when mechanical mishaps of one form or another have brought about short term exceptions to that<sup>130</sup>.” This was most certainly a deliberate misrepresentation of the truth. Even though machinery broke down repeatedly and the contractor who operated the tip deliberately disobeyed GCC instructions<sup>131</sup>, these facts can be attributed to the Council’s desire to manage the landfill as cheaply as possible. When choosing a contractor to manage the day-to-day operation of the landfill in 1984, the City had been offered two options:

We have calculated our price based on giving you a top class job using specialised modern machinery with qualified staff...If you require a cheaper job using older conventional machines which will not give the same standard...we would be pleased to negotiate with you<sup>132</sup>.

Having chosen the latter option, the Council’s excuse of substandard contract work to explain failure to comply with its duties was disingenuous. Indeed, one commentator has suggested that the GCC’s prime motivation in its waste management strategy was to dispose of refuse as cheaply as possible<sup>133</sup>.

Periodically, the City also made the excuse that, because the Turbott plan had been all but abandoned, the conditions relating to after-care were void<sup>134</sup>. Yet, the initial conditions were imposed irrespective of the Turbott plan. As stated previously, the GCC wanted to ignore the stipulation that a landscape architect be involved in a landscape plan for the site<sup>135</sup>. This appears to have been motivated by the possibility that architects would not accept their role being “limited to making a simple plan” but rather would pursue “public relations<sup>136</sup>.” Indeed, when initially asked for input on the landscape plan, Harry Turbott advocated for public involvement, with particular emphasis on the owners’ needs. The Council ignored this advice and, in due course, its *engineer* designed the landscaping programme for the tip himself, with little consultation between he and the trustees<sup>137</sup>. That public participation was anath-

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<sup>129</sup>“Paokahu. Beach sand cover etc.” – R. Hall, City Health Inspector, to H.C. Williams, City Engineer, 11.10.1977 (GCC 33/2).

<sup>130</sup>“Paokahu refuse tip.” – H.C. Williams, Chief Engineer, GCC to County Clerk, 2.9.1984 (GCC 01-212-03).

<sup>131</sup>“Town planning, health and buildings, Paokahu refuse tip.” – R.T. Giddens, City Health Inspector and J. Warren, City Engineer, to City Manager, 23.6.1988 (GCC 01-212-03).

<sup>132</sup>“Tender contract 639. Operation of Paokahu refuse tip” – F.J. Phelps Ltd., Gisborne, to Town Clerk, GCC, 23.8.1984 (GCC 33/2).

<sup>133</sup>GCNZ 1988, p15.

<sup>134</sup>“Paokahu Block. Plan for utilisation for 50 acre block.” – H.C Williams, Chief Engineer, GCC, to Town Clerk, GCC, 26.6.1974 (GCC 33/2).

<sup>135</sup>“Paokahu scheme.” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 13.12.1974 (GCC R5A).

<sup>136</sup>“Turbott and Halstead 6.11.73.” – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 30.11.1973 (GCC R5A).

ema to the strategies of the GCC reflects both its cultural bias and the planning legislation that enabled it to maintain this bias. Even after the enactment of the Town and Country Planning Act 1977, which included more opportunity for public participation, little changed in the way of local participation in the planning process. This general failure on the grounds of participation was reinforced by the specific failure of the Crown to incorporate the logic of the Treaty into planning legislation.

Regular fencing was also intended to be part of the ongoing remedial work at the site. Without such fencing refuse would migrate off the site, often landing on the Kopututea strip or other Maori owned land. This should have been a relatively simple clause of the lease to comply with but apathy, failure to rebuke neglectful contractors, and a general desire to cut costs where possible meant that wind-blown rubbish was a significant problem<sup>138</sup>. This might appear to be a trivial point, but the Proprietors of Mangatu Blocks complained on a number of occasions about rubbish accumulating on the Kopututea strip without a resolution to the problem<sup>139</sup>. They had only recently received that strip of land back from the Crown and the Council was unsympathetic to the owners' sense of pride in their new acquisition.

In 1974, the Appeal Board had also requested the use of low embankments and other earthworks to control leachate and runoff. In retrospect, these earthworks would not have controlled the problem, which was more significant than was first believed. In any case, the GCC never implemented the embankments<sup>140</sup>. Rather, an "inspection of the site showed that no embankments had been constructed to control the deposition of leachate and in fact a drain had been excavated part way across the tip to lead surface water and leachate directly into a drain<sup>141</sup>." The drain effectively transported the leachate off-site and into more significant watercourses. Other than this horizontal flow, there has been considerable evidence of downwards filtration of leachate as well:

There will still be leachate seepage vertically downwards through the fill into the underlying ground water. There is no easy and cheap means of eliminating this because the existing fill did not have an engineered lining system placed under it prior to filling. The best that can be done is to cap the fill to minimise infiltration and to install suitable sub-soil drainage around the fill perimeter<sup>142</sup>.

<sup>137</sup>"Paokahu refuse disposal scheme." – Burnard, Bull and Co., Barristers and Solicitors, Gisborne, to Town Clerk, 29.7.1974 (GCC 01-212-03 HI).

<sup>138</sup>"Paokahu rubbish tip." – R.T. Giddens, City Health Inspector, to Manager, F.J. Phelps Ltd., n.d. (GCC 01-212-03 HI).

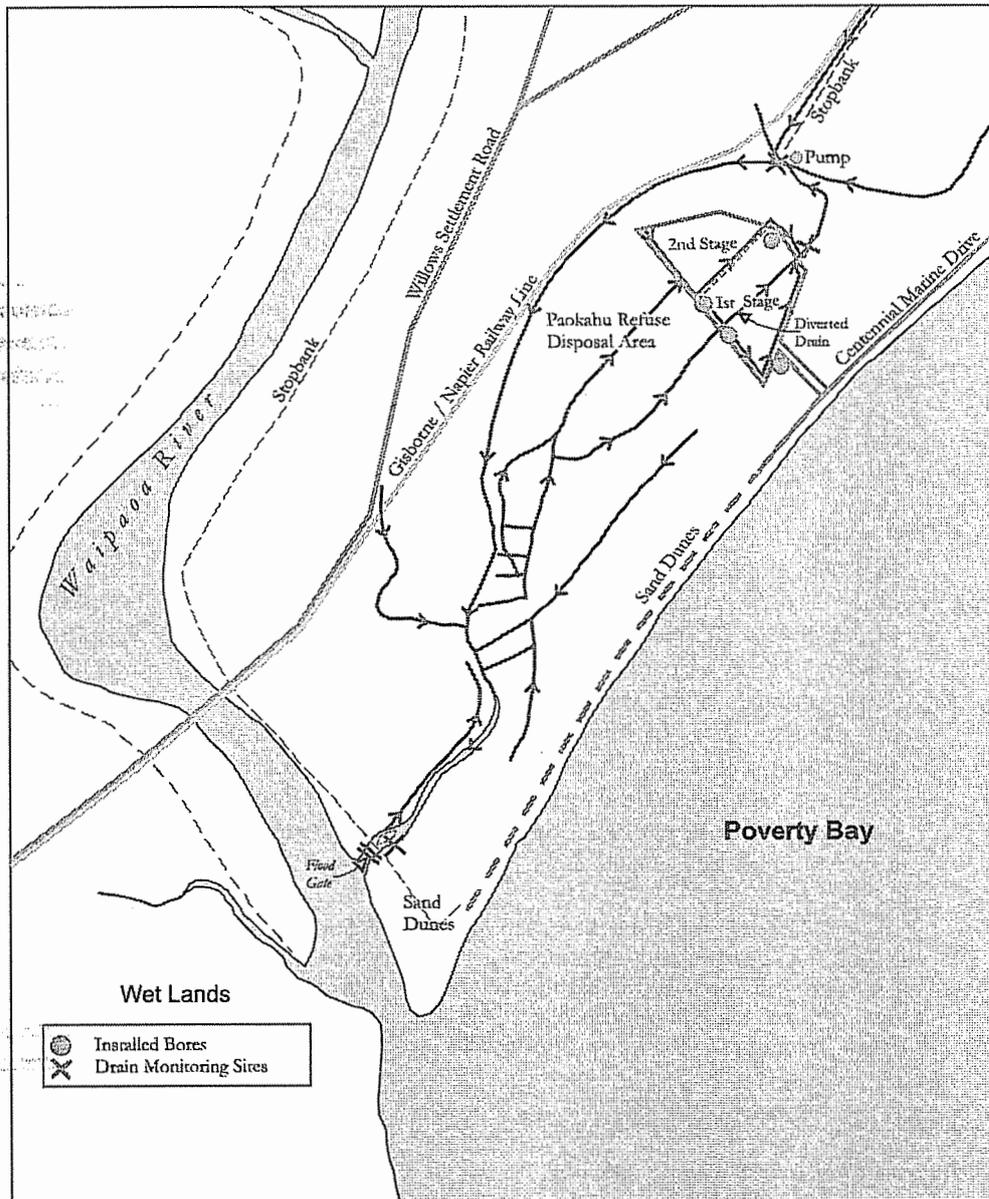
<sup>139</sup>City Engineer to Secretary, Mangatu Blocks – n.d. (GCC 33/3); "Paokahu rubbish tip and Proprietors Mangatu Blocks." – S.F. Martin, Town Clerk, to County Clerk, 18.12.1984 (GCC R5A).

<sup>140</sup>"Attention: City Health Inspector" – A. Armstrong, PBCB, to Town Clerk, 11.5.1984 (GCC 01-212-03).

<sup>141</sup>"Paokahu refuse disposal scheme." – I. E. Jones, Chief Engineer, PBCB-RWB, to Town Clerk, GCC, (GCC 33/2).

<sup>142</sup>"Planning process for Paokahu stage 2." – B. Apperley, Regional Design Engineer, GDC, 21.8.1990 (GCC 01-212-03).

Figure 9.1 – Drainage patterns in relation to the location of the landfill



In general, when the leachate problems of the tip began to emerge, mitigation measures were only pursued in *ad hoc* fashion. Several recommendations have been made over the years to address the leachate problem but these have seldom been implemented<sup>143</sup>. Perhaps ironically, when leachate mitigation work was carried out,

<sup>143</sup>Earthtech 1994; GCNZ 1988; "Paokahu landfill and proposed extension: request for additional information." – B.I. Apperley, Engineering and Works, GDC, to K. Sykes, 18.4.1994 (GDC 94003).

including the implementation of new drains and some simple bunds, it tended to be without the permission of the landowners and without the necessary consents<sup>144</sup>. Generally, City staff behaved as if the site belonged to them, and that they could therefore do what they liked with it.

By the mid-1980s, the implications of the hastily-made decisions of the early 1970s were becoming discernable. The natural layer of clay, which had earlier been considered extensive, was by this stage found to be "of indeterminate extent<sup>145</sup>." Effectively, rain could infiltrate the refuse from the surface because of the unwise use of highly permeable sand to cap the landfill, and could then exit through the base of the tip – by-passing the natural clay layer – and into the water system. By 1987, a report on the landfill pointed to a reasonably serious problem of leaching<sup>146</sup> and, although the leachate was seldom at the highly toxic end of the spectrum, it was noxious enough to be of serious concern.

When answering a pro-forma questionnaire in 1988, the Council was asked to indicate which of six standard types of leachate control it employed<sup>147</sup>. It replied "No/None" to five of these and to the question, "How is the leachate currently disposed of?", it replied "By natural means." In other words, it utilized none of the then common forms of leachate control and assumed that nature would deal with the problem. It is not surprising that drain water close to the tip could be characterised as "grossly polluted<sup>148</sup>" or even having "excessive biological pollution<sup>149</sup>." At the time of these comments, the GCC engineering staff still believed that the leachate would drain out to sea but, by now, this was considered unacceptable rather than favourable. In reality, however, the PBCB had already determined that drains around the tip emptied into the Awapuni Drain – the channel that carried the last remaining waters of what was the Awapuni Lagoon – which itself drained into the Waipaoa River not far from its mouth<sup>150</sup>. The sub-surface drainage system discharged into groundwater aquifers which also drained towards the Waipaoa. With the mouth of the Waipaoa being an historically important fishery for all the iwi of Turanganui-a-Kiwa, this is of particular concern.

These types of problem were not discovered until the late-1980s because effective monitoring programmes were implemented very late in the development of the landfill. Although there had been some monitoring from 1977<sup>151</sup>, this was entirely

<sup>144</sup>"Water resources section introductory report for Paokahu landfill applications." – P. Dawson, A. Armstrong, D. Gordon and D. Hadfield, Report GDC 97/274, 29.10.1997 (GDC 94003).

<sup>145</sup>"Investigation of Paokahu landfill" – J. Warren, City Engineer, to City Manager, 4.11.1987 (GCC 33/4).

<sup>146</sup>Royds-Garden 1987.

<sup>147</sup>"Questionnaire – leachate management – refuse landfills." – Survey prepared by M. Mitchell, Consulting Geotechnical Engineer, 1988 (GCC 01-212-03 HI).

<sup>148</sup>"Notes on GCNZ Consultants' draft report" – 9.9.1988 (GCC 01-212-03 HI).

<sup>149</sup>"Paokahu tip." – no author, 30.11.1984 (GCC 33/4).

<sup>150</sup>*Ibid.* Refer to Figure 9.1.

<sup>151</sup>"Paokahu tip." – no author, 30.11.1984 (GCC 33/4).

insufficient and there was “a need for more regular sampling e.g. once a year, rather than spasmodic sampling that has occurred to date<sup>152</sup>.” In 1984, the local catchment board also began to draw attention to the lack of monitoring at the site and an internal letter suggested that more force should be applied in this regard. The Chief Engineer commented on this letter that the “history of effects at Paokahu have proven to date that finesse of that kind is unwarranted. [There is] no indication of water downgrading in 16 years of operation<sup>153</sup>” This is a truly contradictory statement: in order to prove the lack of a necessity to carry out monitoring, the City should first have carried out a monitoring programme.

In itself, this paucity of a proper monitoring system was a contravention of the Appeal Board conditions. Leachate from the site is predicted to continue to escape well after the site is abandoned<sup>154</sup>. A report commissioned in 1988 bemoaned the lack of existing data on water quality, stating that it was very hard to judge the environmental effects of the landfill without such data<sup>155</sup>. Even the present environmental effects cannot adequately be measured because they cannot be placed in historical context. As late as 1997, a Council officer was able to state that ground-water quality data which has been collected by the applicant in the early years of landfill operation has been scant. Monitoring bores which were drilled were not maintained and have been subsequently lost by landfill activity<sup>156</sup>. Where monitoring was carried out it appears to have seldom been completed off-site, meaning that the wider effects of the landfill have been unreported<sup>157</sup>.

### Third-party ‘management’

Amendments to the Water and Soil Conservation Act during the 1970s had given additional responsibility to catchment boards for pollution issues which affected the water system. These included the capacity to demand water rights from local authorities. The local catchment board had also been granted certain authorities in the regard of the landfill in the 1973 Appeal Board hearing. The authorities included monitoring the site and policing various conditions. This clearly-established mandate does not mean, however, that the local catchment board necessarily responded to the concerns highlighted in the previous section. The Board certainly perceived the problem – “The tip is in the opinion of Board officers, not up to standard<sup>158</sup>.” It also knew that it could legally force the City to apply for a water right for the landfill<sup>159</sup> and that, if the Council was forced to apply, the condition of

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<sup>152</sup>*Ibid.*

<sup>153</sup>Marginalised comment, presumably City Engineer on “Gisborne City Council. Paokahu tip.” – A.F. Armstrong, Chief Engineer, ECCB, to Chairman, Water Committee, ECCB, 5.7.1984 (GCC R5A).

<sup>154</sup>“Investigation of Paokahu landfill.” – J. Warren, City Engineer, to City Manager, 4.11.1987 (GCC 33/4).

<sup>155</sup>GCNZ 1988, p26.

<sup>156</sup>“Paokahu landfill stormwater and leachate resource consent applications.” – GDC Report 97/275, 29.10.1997 (GDC 94003).

<sup>157</sup>Data obtained March 1994 to April 1995 (GDC 94003).

<sup>158</sup>R. Hall, City Health Inspector, to A. Armstrong, Engineer, ECCB, 23.3.1984 (GCC 01-212-03).

the tip was such that the right probably would not be granted<sup>160</sup>. For a variety of reasons, however, it failed to carry out its duty.

The relationship between the two authorities did not encourage constructive and effective critique. When the Catchment Board first began to complain about the environmental effects of the Paokahu site, the City Health Inspector quoted that "I do not recall that any of your officers have brought to my attention any adverse effects of the tip as regards surface or ground water pollution..."<sup>161</sup> It would appear, therefore, that there was little correspondence about the landfill between the two agencies in the first decade of its existence. Although the Board had sent a strong letter of reprimand to the City in 1977 about failure to comply with conditions<sup>162</sup>, it did not pursue a stronger course of action. The Catchment Board knew of the "financial situation" of the GCC and perhaps this is why it pursued only "realistic preventative requirements at realistic costs"<sup>163</sup>. This theme of pursuing 'realistic' objectives and of the failure of local authorities to carry out their policing duty re-occurs throughout Part III of this report.

The CCC scarcely played any role from the time it granted the consent in 1974. When it very occasionally sent letters of inquiry to the City, it apparently accepted the replies without further investigation. For example, when the CCC made a request for information in 1984, the City Engineer replied that, other than the outcomes of isolated mechanical mishaps, nothing "else has departed from the requirements of the Cook County Council, the East Cape Regional Water Board, the Department of Health and the Planning Tribunal"<sup>164</sup>. This, of course, was not the case, but the decision of the CCC not to follow-up its inquiries with site inspections meant that it had little idea of the environmental truth of the site. Interestingly, these communicative deceptions were not only related to inter-authority relationships. Within the GCC, the Engineering and Works and Environment and Planning sections appeared to be in regular competition, if not open-conflict. This was to the point where one would not accept the advice of the other:

The refuse tip engineering at Paokahu, or anywhere else outside the City Boundary, has no involvement with the Gisborne City District scheme. It is not my wish that the Chief City Health Inspector should involve the City Planner in the matter, he having no brief from me to perform any other

<sup>159</sup>"Gisborne City Council. Paokahu tip." – A.F. Armstrong, Chief Engineer, to Chairman, Water Committee, ECCB, 5.7.1984 (GCC R5A).

<sup>160</sup>"East Cape United Council regional waste survey. Minutes of the Technical Committee." – 12.10.1988 (GCC 01-212-03 HI).

<sup>161</sup>R. Hall, City Health Inspector, to A. Armstrong, Engineer, ECCB, 23.3.1984 (GCC 01-212-03).

<sup>162</sup>"Paokahu refuse disposal scheme." – I. E. Jones, Chief Engineer, PBCB and RWB, to Town Clerk, GCC 11.8.1977 (GCC R5A).

<sup>163</sup>"Gisborne City Council. Paokahu tip." – A.F. Armstrong, Chief Engineer, to Chairman, Water Committee, ECCB, 5.7.1984 (GCC R5A).

<sup>164</sup>"Paokahu refuse tip." – H.C. Williams, Chief Engineer, GCC, to County Clerk, 2.9.1984 (GCC 01-212-03).

function other than those which go with the District Scheme and its furtherance of the Town and Country Planning Act. Of recent years the City Planner has taken upon himself involvement with the design of reserves and other functions which are the delegated responsibility of officers with knowledge and skills in those particular fields. In the case of refuse disposal I look to the City Health Inspector and Engineering Staff equipped with a basic knowledge in public health engineering<sup>165</sup>.

These types of conflicts may seem of marginal relevance to Treaty of Waitangi proceedings, but they are an important determinant of the long-term pollution at the Paokahu site. The general framework for resource management failed in the district, largely because it was fragmented and disorganised, leading to *specific* impacts on Maori and their environmental values.

### **New use, expanded use and iwi liaisons**

The environmental effects outlined thus far were serious from the start, but there is no doubt that they became more worrying with time. By 1987, over 36,000m<sup>3</sup> per year of refuse was deposited at the landfill<sup>166</sup> – much more than had initially been envisaged. This was not the result of an unexpected population increase, but came about because of an increase in industrial usage of the site. In addition, a regional waste survey conducted in 1987 advocated for the Paokahu operation to accept waste from all over the region<sup>167</sup>. Smaller tips in outlying rural areas were no longer economically or environmentally viable and it was thought that centralisation of tipping facilities was an appropriate strategy. This appears to have been accepted in principle without consultation with the owners.

There were other issues which should have demanded more input from the owners. In 1990, milliscreens – a fine mesh to extract solid matter from sewage – were installed at the Gisborne sewage pumping plant. The collected solids were transported to the landfill for disposal, yielding 1,500T/yr of human waste<sup>168</sup>. Although land-based disposal is more appropriate under tikanga Maori than disposal at sea, the landfilling of milliscreenings further compounded an already complex relationship between the Paokahu owners and their land. Although the owners had been consulted on the burial of milliscreenings at the site<sup>169</sup>, they apparently remained uncertain as to whether agreed protocols were being carried out. Perhaps of more concern, a variety of hazardous substances were landfilled at Paokahu, despite the fact that it was not certificated as a co-disposal facility<sup>170</sup>. The exact amount of haz-

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<sup>165</sup>“Paokahu projected life?” – H.C. Williams, Chief Engineer, GCC, to R.T. Giddens, City Health Inspector, 18.11.1985 (GCC 33/3).

<sup>166</sup>“re: Regional waste survey.” – R.T. Giddens, City Health Inspector, to Royds Garden Ltd., 5.8.1987 (GCC 01-212-03 HI).

<sup>167</sup>Royds-Garden 1987, p33.

<sup>168</sup>Apperley 1993, p3.

<sup>169</sup>“Paokahu landfill: milliscreening etc.” – B. Apperley, Engineering and Works, GDC, to Urban Services Engineer, GDC, 1.2.1991 (GCC 01-212-03).

ardous tipping will never be known because adequate records were never kept<sup>171</sup>. At one point, 300 truckloads of asbestos roofing taken from state houses was buried at the tip, without the acquisition of additional permits and with only minor adjustments to standard tipping procedures<sup>172</sup>. There were other, smaller shipments of asbestos, such as one from the local hospital in 1988<sup>173</sup>. Car bodies stored at the tip also showed signs of leaching and, whereas other forms of leachate at the tip were of low-toxicity, this type of pollution is serious indeed<sup>174</sup>.

It was organic waste, however, that was to cause the most significant problems. The amount of refuse disposed at the landfill increased rapidly during the 1980s, in keeping with Gisborne's evolution as a major centre for food processing. By the mid-1980s, 27-37kT of food processing waste – matter which putrefies quickly and the organic component of which is easily leached – was landfilled at Paokahu<sup>175</sup>. This represented about half of the volume of all refuse to arrive at the site<sup>176</sup>. Principal contributors to this vegetable waste included: tomato by-product from Cedenco; excess corn and other vegetable waste from Watties; and grape pulp from the district's wineries. To the lay person, vegetable waste may not appear to be a serious concern, but its effluent has a high Biochemical Oxygen Demand (BOD), meaning that it depletes oxygen from the water systems into which it escapes. If effluent with a high BOD discharges into a watercourse for any length of time the waterway will effectively die. The sensory effects of this type of waste, as well as other food wastes like "2 truck loads of fish leftovers dumped [ex-Watties] and covered each week<sup>177</sup>" are nauseating, but the effects on the water system would have had a lasting significance.

Yet, this did not have to be the case. Organic refuse of this nature should have been suitable for recycling and, in many other centres around New Zealand, refuse from primary processors is recycled. There were only a few attempts to recycle the organic content disposed of at the landfill, with a notable success being the Cedenco operation at Willows Road which ensiled tomato waste into a viable fertiliser<sup>178</sup>. However, attempts to extend this type of operation were curtailed by the Council taking the shorter-term, cheaper options of continuing to dump the mate-

<sup>170</sup>"Paokahu landfill extension." – R.F. Beale, Roading Manager, and J.D. Wells, Projects Engineer, to City Manager, 2.8.1989 (GCC 01-212-03). Co-disposal landfills allow for the disposal of both domestic and hazardous waste.

<sup>171</sup>"Regional waste survey." – P. Burrows, Senior Health Inspector, GDC, to Chief Health Inspector, GDC, n.d. (GCC 01-212-03 HI).

<sup>172</sup>"Asbestos disposal." – Environment and Planning, GDC, to N. West, Engineering and Works, GDC, 20.8.1991 (GCC 01-212-03).

<sup>173</sup>Memo – 18.2.1988 (GCC 01-212-03 HI).

<sup>174</sup>"Regional waste survey." – P. Burrows, Senior Health Inspector, GDC, to Chief Health Inspector, GDC, n.d. (GCC 01-212-03 HI).

<sup>175</sup>"Paokahu landfill – trial of Panekaha Bentonite." – no author, n.d. (GCC 01-212-03).

<sup>176</sup>Royds-Garden 1987, p22.

<sup>177</sup>"Coastal plan hui." – W.J. Turner, Chief Engineer, GCC to N. West, Urban Services Engineer, GCC, 9.3.1993 (GCC 01-212-03).

rial. Several trial schemes had been recommended but most were abandoned because the GDC did not want to spend the money<sup>179</sup>. Recycling is seldom a cost-realistic alternative to tipping, but in the case of Paokahu it would have been viable in the medium term. If the Council had pursued a sufficient waste minimisation strategy, rather than simply making platitudes to such a strategy<sup>180</sup>, then the problems that were to emerge would have been more manageable.

By the late 1980s the acceleration in use, as well as the compaction inefficiencies, led to the near exhaustion of the tipping area<sup>181</sup>. Indeed, the considerable increase in organic refuse to be landfilled at the site led to compaction inefficiencies of greater magnitudes because the material would not settle satisfactorily<sup>182</sup>. The lease was due to expire in 1990, and the Council began to explore the possibility of obtaining an extension to the lease in the hope that it could add another layer of refuse on the existing site<sup>183</sup>. The lease had first been reviewed in September of 1980, seemingly without major controversy. It is noteworthy, however, that during these negotiations the GCC told the Proprietors of Mangatu Blocks that the "Council has at all times rigidly complied with the terms of the lease<sup>184</sup>" and that it desired the trustees' lawyer to assure his "clients that its actions were carried out unaware that it had not fulfilled all its obligations<sup>185</sup>." Only a short time prior to this, an internal letter commented that "certain conditions attached to the deed are impossible to comply with<sup>186</sup>."

The 1990 lease review was more heated because the effects of the landfill and the extent of non-compliance had become common knowledge. The Council undoubtedly enraged the issue by attempting to play the negotiations out in the local media in advance of contacting the owners<sup>187</sup>. This appears to have been an attempt to

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<sup>178</sup>Unfortunately, this 'success' had environmental impacts of its own, including the runoff of effluent with a very high BOD (Complaint 009, Water Resources Section, (GDC COM95); "Cedenco deposits along Willows Road." – D. Hadfield, Water Conservation Officer, to P. Dawson, Senior Water Conservator, 10.4.1995 (GDC COM95)). Ironically, these substances were discharged into the Awapuni Drain from its western side, whereas the Paokahu landfill was on its east.

<sup>179</sup>"Composting proposals" – W.J. Turner, Chief Engineer, GCC to Chief Executive, 29.9.1992 (GCC 01-212-03) vs "Composting proposals" – W.J. Turner, Chief Engineer, GCC, to District Urban Engineer, 1.10.1992 (GCC 01-212-03).

<sup>180</sup>"Application for landuse consent. Paokahu landfill." – P. Stickney-Hunt, Report GDC 94/254, 9.5.1994 (GDC 94003).

<sup>181</sup>Royds-Garden 1987; GCNZ 1988.

<sup>182</sup>"Paokahu landfill." – N. West, Urban Services Engineer, GCC, to Chief Environmental Health Officer, August 1990 (GCC 01-212-03).

<sup>183</sup>"Paokahu projected life?" – H.C. Williams, Chief Engineer, GCC to R.T. Giddens, City Health Inspector, 18.11.1985 (GCC 33/3).

<sup>184</sup>"Refuse disposal tip. Paokahu." – R.C. Hall, City Health Inspector, to Wilson Barber and Co., Barristers and Solicitors, 29.6.1981 (GCC R5A).

<sup>185</sup>"Paokahu tip foreshore access." – S.F. Martin, Town Clerk, GCC, to Messers Burnard, Bull and Company, Barristers and Solicitors, Gisborne, 19.11.1980 (GCC 33/2).

<sup>186</sup>"Paokahu refuse disposal tip." – R.C. Hall, City Health Inspector, to Town Clerk, GCC, 10.11.1980 (GCC R5A).

embarrass the owners into accepting the 'public will.' Nevertheless, the trustees, recognising the fraught position of a Council with no other suitably researched or prepared site, succeeded in increasing the rental to \$6,000 per annum<sup>188</sup>. Another factor which complicated these proceedings was the negotiations between the GCC and a neighbouring property owner who in 1989 offered 15.8ha of (non-Maori) land for tipping purposes<sup>189</sup>. That the Council bought this piece of land – known as the Gavin block – without first acquiring the necessary consents to use it as a landfill<sup>190</sup> reflected the 1970s attempts to take land and seek permits later. It also highlighted the intention of the GCC to maintain a long-term landfill presence at, or nearby, Paokahu, something which should have been signalled to the Maori owners before the Council bought the land.

The lease reviews served to focus iwi attention on the landfill, but lease negotiations were only one form of interaction between the owners/trustees and the GCC. The following quotation represents possibly the most cynical of manoeuvres *vis-à-vis* the Paokahu landfill:

Mr Ruru asked if Mangatu Blocks, as managers of the existing site and surrounding land, could have a copy of the Paokahu Stage 1 Preliminary Study Report dated August 1988. We have subsequently reviewed this report and find some sections of it could be prejudicial to our future negotiations. Preparation of a summary of the document may be a more suitable way to go, although we may be obliged to release the document if called upon<sup>191</sup>.

In this case, as well as in other examples, GCC staff exemplified a bureaucracy which would do everything in its power to disrupt the meaningful participation of the owners, and their trustees in their collective quest to maintain control over their land. It is also important to recognise that the GCC, and later the GDC, could pursue these objectives because it was allowed to do so. With respect to public participation, in general, and Treaty partnership, in particular, planning legislation was ambiguous to the point where Treaty principles were non-existent. In the history of the Paokahu landfill examined thus far, there is no evidence of a Crown agent, or any other national agency, intervening within, monitoring or otherwise ensuring practices in keeping with the Treaty of Waitangi.

<sup>187</sup>"For the Attention of Mr L. Moeau" – J.A. Geard, Acting Town Clerk, to Secretary, Mangatu Blocks, 27.6.1986 (GCC 01-212-03 HI); "Paokahu Tip." – L.R. Moeau, Secretary, Mangatu Blocks, to Acting Town Clerk, 29.6.1986 (GCC 01-212-03 HI).

<sup>188</sup>"Mangatu Blocks 16.12.85. re. Paokahu 20.234ha lease." – H.C. Williams, Chief Engineer, GCC to Town Clerk, 31.1.1986 (GCC 33/2).

<sup>189</sup>B.J. Gavin, Resident, to City Manager, 17.1.1989 (GCC 01-212-03).

<sup>190</sup>"Applications by the GDC Engineering and Works Dept relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites." – October 1997 (GDC 93004).

<sup>191</sup>"Paokahu landfill planning process." – B. Apperley, Engineering and Works, GCC, to Acting Manager, Engineering and Works, GCC, 30.8.1990 (GCC 01-212-03).

## 9.4 Landfill and resource management under the RMA

Local planning under the Town and Country Planning Acts (1953 and 1977) and the Water and Soil Conservation Act (1967) had, therefore, failed to incorporate the values of local Maori. There is considerable doubt as to whether the legislative successor to these Acts – the Resource Management Act (RMA) – represents a significant departure from this position. By directly referencing a requirement to take into account the principles of the Treaty (s 8), Maori groups had hoped that the RMA would provide a better platform to have their concerns heard in planning arenas. However, the Waitangi Tribunal has already been critical of the RMA<sup>192</sup>, suggesting that the sections in Part II which were designed to incorporate Maori interests (ss 6e, 7a and 8) tend to be overwhelmed by the other objectives of the Act. Two sets of consents on the Paokahu landfill were heard under the RMA – in 1993-94 and in 1997. These consents provide another useful case study of iwi participation under the new legislation, and of whether or not Treaty principles are being adhered to in planning decisions.

### The 1993-94 consent hearings

Although the Catchment Board had chosen to ignore the need for water rights for the landfill in the 1970s and 1980s, under the RMA there was no option but for the Council to apply for a range of permits. Section 15 of the RMA established a presumption against direct and indirect discharges to waterways. Consequently, discharge permits have to be obtained for all such discharges. In 1993, the GDC applied for permits for the Paokahu facility relating to discharges to land, discharge to air, discharge to water, diversion of waterways and temporary storage of hazardous substances<sup>193</sup>. As the Mayor was later to acknowledge, after enactment of the RMA the GDC was “immediately struck a difficulty. Without the testing background that should have been going on from 1975, we had some difficulties in supporting the notion that there would be no adverse effect from the new site<sup>194</sup>.” The length of the consents applied for was 15 years with a guarantee of after-care for 30 years thereafter. Oddly, this was intended to be an “interim measure” only, something to buy the Council time while it looked for other sites<sup>195</sup>. The 15 year duration implies something more permanent than an ‘interim measure’. Perhaps stranger still, at least for those who are not accustomed with the notion of unitary authorities, the GDC applied to itself for the discharge permits. Gisborne District, which was created by a local government reorganisation in 1989, is one of only four unitary authorities in the country. This means that it is the only consent authority within its jurisdiction; unlike other councils there is no regional council to which

<sup>192</sup>See, for example, the Ngawha Geothermal Resources Report, 1993.

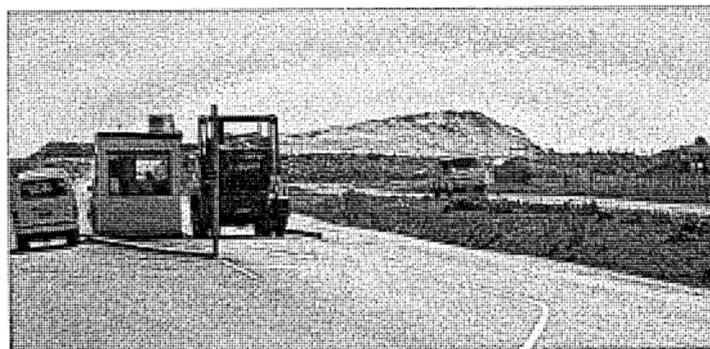
<sup>193</sup>“Paokahu landfill technical committee meeting.” – 12.8.1993 (GDC 93004).

<sup>194</sup>“Compensation of \$2.5m paid to Paokahu landowners.” – Gisborne Herald, p1, 8.8.1998, (GisMUS VF-Local Govt. Facilities).

<sup>195</sup>“Application for landuse consent. Paokahu landfill.” – P. Stickney-Hunt, GDC, Report 94/254, 9.5.1994 (GDC 93004).

the GDC has to apply for discharge rights. As will be shown throughout the remainder of Part III of this report, the unitary status of GDC brings into question its ability to act impartially.

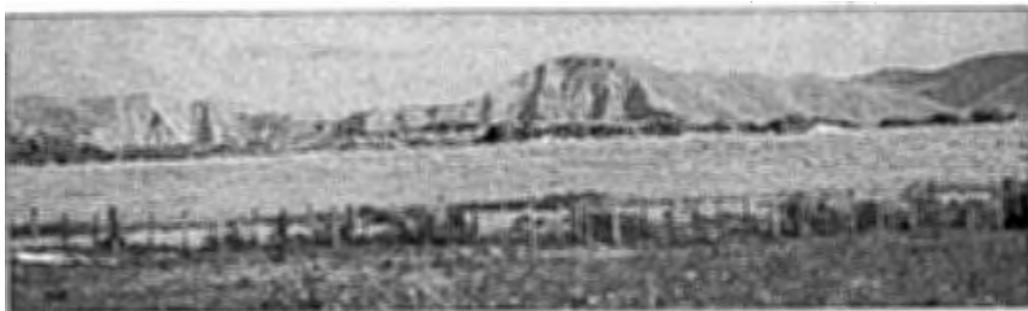
*Figure 9.2 – Views of the Paokahu landfill*



**Above:** from the east.

**Middle:** from the entrance on Centennial Marine Drive.

**Below:** from the west, looking towards Te Kuri a Paoa



Accompanying these applications for discharge permits, was an Assessment of Environmental Effects (AEE). Constructed under s 88 and the 4<sup>th</sup> Schedule of the RMA, such assessments have to identify not only biophysical effects but impacts on affected individuals, groups and their values. AEE often become the centre-piece of proceedings under the RMA, so the research that is incorporated into them is of primary importance. For this reason, it is particularly unfortunate that the GDC began the research process for its consent applications at a very late date. Initially, it had intended to start the process of preparing a resource consent application in mid-1993 with the expectation that it could have the consents issued before the end of that year<sup>196</sup>. Not for the first time, the Council was attempting to complete a planning process within an unrealistic timeframe. For example, the GDC had been warned as early as 1990 that archaeological assessments and Maori consultation would be time consuming, but the Council appears not to have heeded this advice<sup>197</sup>. Interestingly, the AEE made a comment that there were “no known urupa or other archaeological features<sup>198</sup>”, repeating the Council’s error of 1972 and highlighting that simple background research had not been completed. By this stage, it was far too late to construct an adequate programme of site research and to carry out the consultative requirements of the RMA in a meaningful way. Moreover, requisite data for the AEE relating to ground and surface water contamination had not even been completed when the AEE was released to the public<sup>199</sup>.

The internal correspondence of GDC staff during late 1993 and early 1994 reflects an apparent state of panic. For example, at a technical committee meeting to discuss the discharge permit applications, the “[l]ack of time was again discussed especially in respect of the AEE. It may be that the first draft will be the only draft. Consultation must therefore take place as soon as possible<sup>200</sup>.” While there is much that could be criticised in the AEE that followed, it is true to say that it represented a recognition of the problem of leachate to an extent not witnessed in GDC publications to that date. The Council had finally recognised that the leachate problem was “less than desirable, that better leachate control measures will be required” and that “groundwater flow from the site moves NW towards the Awapuni Drain<sup>201</sup>.” Yet, even within the Engineering and Works staff, there was concern that the AEE was “a bit light<sup>202</sup>.” Other reviewers hired by the Environment and Planning section of the GDC believed that the report underestimated the adverse environmental impacts of the tip<sup>203</sup>, or that it was superficial in its analysis<sup>204</sup>.

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<sup>196</sup>“Paokahu landfill technical committee meeting.” – 12.8.1993 (GDC 93004).

<sup>197</sup>“Meeting with Jan Crawford, Planning Consultant.” – 18.1.1990 (GCC 01-212-03).

<sup>198</sup>Apperley 1993, p13.

<sup>199</sup>“Paokahu landfill and proposed extension: request for additional information.” – B. Apperley, Engineering and Works, GDC, to K. Sykes, 18.4.1994 (GDC 93004).

<sup>200</sup>“Paokahu landfill technical committee meeting.” – 19.8.1993 (GDC 93004).

<sup>201</sup>Apperley 1993, p17.

<sup>202</sup>“Paokahu technical committee meeting.” – 27.8.1993 (GDC 93004).

<sup>203</sup>Taylor and Taylor 1995.

Although the GDC was finally publishing the truth about the site, the public still remained uninformed about the wider implications of the landfill:

The hydrogeological evidence put forward by the applicant...is sparse. The applicant has approached the AEE with a localised view concentrating on the envelope of the site alone. No regard is given to the present or potential effect of leachate on the groundwater environment from the immediate boundaries of the contaminated site<sup>205</sup>.

The problem with this type of oversight is that under the AEE system, unless the public is made fully aware of the full range of impacts, the potential for meaningful public input is low. It would have been impossible, for example, for members of the public to compare the Paokahu site with alternatives. A submission made on behalf of the Minister of Conservation was particularly scathing of the AEE in terms of insufficient regard to environmental effects and to the identification of alternative sites<sup>206</sup>. Three alternative sites were identified in these applications and all three were discarded, principally on the basis of cost. The search for the least expensive option, which had heavily influenced the evolution of Paokahu, remained as the primary motivation of the GDC<sup>207</sup>. Within the AEE, a considerable amount of text was devoted to other infrastructural concerns within the district in an attempt to force the reader into accepting the view that the District should spend as little as possible on developing and maintaining the landfill<sup>208</sup>.

The applications were relatively silent about iwi environmental values. Likewise, the AEE was a technically-oriented document with little recognition of the cultural values affected by the landfill<sup>209</sup>. As such, it probably failed to meet the requirements of s 88 or the 4<sup>th</sup> Schedule of the RMA. Te Runanga o Turanganui-a-Kiwa (TRO-TAK) objected to the consents on the basis of ss 6e (the relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga), 7a (kaitiakitanga) and 8 (statutory recognition of the principles of the Treaty) of the RMA. These sections form part of the all-important Part II of the Act, but they have been criticised elsewhere for offering little more than token recognition of iwi environmental values<sup>210</sup>. Although they represent a significant

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<sup>204</sup>“Application for landuse consent. Paokahu landfill.” – P. Stickney-Hunt, GDC, Report 94/254, 9.5.1994 (GDC 93004).

<sup>205</sup>Tonkin and Taylor 1994, p89; See also: “Paokahu existing site: discharge to land of leachate.” – J. Barber, GDC, Report 94/220, 6.5.1994 (GDC 93004).

<sup>206</sup>Submission on behalf of the Minister of Conservation – P. Williamson, Regional Conservator, Department of Conservation, 18.2.1994 (GDC 93004).

<sup>207</sup>Memo – N.E. West, District Urban Engineer, GDC, to Manager, Engineering and Works, GDC, 30.6.1993 (GCC 01-212-03).

<sup>208</sup>Apperley 1993.

<sup>209</sup>Section 9.2 of the AEE (Apperley 1993) does little more than list the consultation processes that proceeded publishing of the report – It contained a paucity of information about the outcomes of those processes and few attempts to evaluate iwi concerns beyond information which emerged in those processes.

<sup>210</sup>Beverly 1998; Boast and Edmunds 1996; Nuttal and Ritchie 1995.

achievement well beyond the scope of the recognition afforded to the Treaty and its principles in previous planning legislation, they mean nothing if councils fail to adequately consult or fail to involve iwi in the decision-making process.

Yet, one of TROTAK's principal complaints was that there had been insufficient time for proper consultation on the discharge permits<sup>211</sup>. Consultative hui began only in the latter months of 1993, well after the point at which strategies had been established<sup>212</sup>: Local iwi were not involved in the selection of alternatives; they were merely *reported to*. Indeed, at least one staff member voiced concern that iwi were effectively being consulted after the event<sup>213</sup>. The consultation hui were managed by the Engineering and Works section, hardly the most obvious division of a council to manage such a delicate set of negotiations. Likewise, Paokahu Blocks were dissatisfied with the level of its involvement in the decision-making process. It was obviously wary of the GDC's application and especially the AEE and called for an independent audit into whether the Council had satisfactorily complied with previous lease and planning conditions<sup>214</sup>. To the owners, this was an important part of their ability to gauge the validity of the consent application of the GDC. The Council apparently did not take this call particularly seriously<sup>215</sup>. The cost of participation under the RMA is high, requiring considerable legal and technical advice. Many councils open the door to iwi participation, but few provide the means for iwi to enter through that door. In the Gisborne case, the door was scarcely ajar and iwi received little assistance from the Council in their preparations.

That said, the Environment and Planning section of the GDC applied more attention to needs of iwi in its evaluation of the application of Engineering and Works<sup>216</sup>. The planning staff appear to have seriously evaluated iwi attachments to the water system and their role as kaitiaki over that system. It, too, was unconvinced that the consultation with iwi had been adequate and recommended for a future model:

A Community Group is to be formed in regard to the operation of the Landfill site. The Committee shall meet a minimum of once every six months for the purposes of assessing the level of adequacy of landfill operation and management. The members of the committee are to be appointed by the Manager and shall include one representative each of the tangata whenua, the [DoC], residents from Willows Road, residents from Centennial Marine Drive, one to represent other conservation groups jointly, and relevant Council staff<sup>217</sup>.

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<sup>211</sup>"re. Objection to resource consent applications PD 94008-PD94012, DA94005-8; DL95005-7; WP94003, WP94004." – W. Te Aho, Te Runanga o Turanganui-a-Kiwa, 18.2.1994 (GDC 93004).

<sup>212</sup>"Paokahu landfill extension meeting." – 20.8.1993 (GDC 93004).

<sup>213</sup>Marginalised comment by P. Burrows, Health Officer, GDC, in "Paokahu landfill technical committee meeting." – 19.8.1993 (GDC 93004).

<sup>214</sup>G. Ria, Mangatu Blocks, to Engineering and Works, GDC, 13.5.1994 (GCC 01-212-03).

<sup>215</sup>Memo – B.I. Apperley, n.d. (GCC 01-212-03).

<sup>216</sup>"Application for landuse consent. Paokahu landfill." – P. Stickney-Hunt, GDC, Report 94/254, 9.5.1994 (GCC 01-212-03).

While this represents a positive move designed to overcome Engineering and Works' demonstrable antipathy towards consulting with the public, it is noteworthy that tangata whenua are simply 'lumped in' with other interest groups, leading to the possibility that their concerns will be diluted.

### The 1997 consent hearings

Ultimately, the conclusion of the Environment and Planning officers was to recommend the granting of the consent, but for a reduced duration of 10 years<sup>218</sup>. However, this conclusion was never presented at the scheduled hearings because Engineering and Works withdrew its application in advance of those hearings. The withdrawal was in recognition of the inadequacies of the application<sup>219</sup>. In 1997, the Engineering and Works division re-submitted its application with only minor alterations to the documents submitted in 1993<sup>220</sup>.

Yet, the nature of the 1997 case was different from the 1993-94 debates. The defining issue in 1997 appears to have been impacts on the natural character of the local landscape, rather than discharge of leachate. This was in part a reflection of the renewed disputes over after-care at the site, an issue which had been accentuated because the new round of consents was targeted towards adding another layer onto the established Paokahu landfill, rather than developing new tipping areas on the Gavin block. The Gavin block option was not abandoned, but the GDC made it clear that it would prefer to exhaust the present site first before moving on<sup>221</sup>. Natural character of the coastal environment, protected under s 6(a) of the RMA, was not at the centre of owner concerns: they were more anxious about the ultimate usability and biophysical outcomes of the site. However, the same set of processes that were spoiling the natural character of the landscape – for example, a sprawling and deepening mound that was out of keeping with the surrounding area – also caused the problems that concerned tangata whenua. Nevertheless, the concerns of tangata whenua appear to have been diluted in the effort to evaluate change in natural character. This reflects a broader difficulty within the RMA wherein iwi concerns tend to be unfairly balanced against environmental issues<sup>222</sup>, with the latter often cancelling out the former. Although this could, in turn, be said to reflect the core tensions in the Treaty itself, between Article I and Article II<sup>223</sup>, the rangatira-tanga of tangata whenua over environments which are important to them should be guaranteed under Article II.

<sup>217</sup> Application for landuse consent. Paokahu landfill." – P. Stickney-Hunt, GDC, Report 94/254, 9.5.1994 (GCC 01-212-03).

<sup>218</sup> *Ibid.*

<sup>219</sup> "Water resources section introductory report for Paokahu landfill applications" – P. Dawson, A. Armstrong, D. Gordon and D. Hadfield, GDC, Report 97/274, 29.10.1997 (GDC 93004).

<sup>220</sup> "Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites." – October 1997 (GDC 93004).

<sup>221</sup> *Ibid.*

<sup>222</sup> Boast and Edmunds 1996.

As part of the process of applying for discharge permits for the Paokahu site, the GDC admitted that its consultation with iwi had been inadequate. In particular, the “consultation that had been carried out since the 1993 application was mainly if not exclusively with the Proprietors of Paokahu Blocks...Much of the consultation which took place with this group was directed towards the lease arrangements<sup>224</sup>.” This error reflected the Council’s narrow focus on site-based impacts and, in turn, its ignorance of leachate discharge into the wider environment. The site-specificity of the consultation was grounds for local Maori to claim that the consultation had been against the logic of the 4<sup>th</sup> Schedule of the RMA, as well as Part II of the Act. Moreover, there was a frank admission by the GDC that consultation for the present application had also been inadequate – “Such lack of consultation with the broader iwi may have put Council in breach of the Treaty of Waitangi obligations<sup>225</sup>.” Local iwi concluded their submission with the comment that the “submitters have no confidence in the ability of the Council to plan, manage or monitor the sites<sup>226</sup>.” Other issues of concern included<sup>227</sup>:

- The plan to collect leachate and discharge it through the City sewage outfall. This may have removed the problem from the site but, in the view of tangata whenua, it did not solve the problem.
- Lack of a Maori representative on the Hearings Commission.

Although the GDC was considered to have consulted adequately with owners (as opposed to all affected iwi), the owners were by no means unconcerned. The GDC staff member who reviewed the application commented that “I consider that extensive consultation has occurred with the owners of the Paokahu blocks [but that t]he duty to consult does not demand that agreement be reached<sup>228</sup>.” While this is true under the RMA and while one could probably find grounds for such an argument within Treaty principles, this specific case of consultation was not rigorous enough to arrive at such a conclusion.

In the end, the 1997 consent hearings were yet another self-fulfilling prophecy. Despite being censured for not adequately evaluating alternatives in 1993, the GDC

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<sup>223</sup>It is an accepted Treaty principle that the Crown has the right to make environmental legislation in the national interest – part of its *kawanatanga* role. The Muriwhenua Fisheries Report, 1988, concludes that “The cession of sovereignty or *kawanatanga* gives power to the Crown to legislate for all matters relating to ‘peace and good order’ and that includes the right to make laws for conservation control. Resource protection is in the interests of all persons. Those laws may need to apply to all persons alike.” However, the Crown should not be seen to extend ‘conservation control’ in ways that over-ride the *rangatiratanga* concerns of Article II unless it has exhausted all possible alternatives.

<sup>224</sup>“Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites.” – October 1997 (GDC 93004).

<sup>225</sup>*Ibid.*

<sup>226</sup>“Paokahu landfill stormwater and leachate resource consent applications.” – GDC Report 97/275, (GDC 94003).

<sup>227</sup>“Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites.” – October 1997 (GDC 93004).

<sup>228</sup>*Ibid.*

carried out little in the way of research into alternative sites from 1993 to 1997. The Council was in no position, therefore, to transfer its disposal operations to another site, making it impossible for the consent authority to recommend another location for the landfill<sup>229</sup>. Thus, the conclusion of the reviews on the application is not surprising:

There is a compelling need, at least in the short term to continue disposing of refuse. There would be a considerable lead time, at least three years before any alternative arrangements could be put in place within the District. A proper study of alternatives would take 5-7 years. The council has recognised the need to carry out a study of options for refuse disposal in the medium term. There seems little practical alternative to continuing at Paokahu for a short period<sup>230</sup>.

In other words, these proceedings under the RMA rewarded the GDC for wasting time by providing it with more time to waste. The inability of Environment and Planning or an external environmental agency (e.g. Ministry for the Environment, Department of Conservation) to combat the delaying tactics of the Council also forms an important theme in Chapter 12.

### The 1998-99 settlement

The granting of consents in 1997 was not the end of the matter. Once more, the Council had consents for refuse disposal but did not necessarily have guaranteed use of the land. The lease had once again expired and, by this time, the Paokahu owners were in a strong bargaining position. On this occasion, the negotiations surrounding use of the site were to be framed not only in terms of an appropriate lease but also in terms of compensation. The GDC paid \$2.2m to the Paokahu owners for "breaches that go back, in some cases, 30 years<sup>231</sup>" and to cover use of the tip through until the end of 2002<sup>232</sup>. Included in the agreement was provision for two small pieces of land adjoining the landfill site, including the Gavin Block, to be transferred to the Paokahu owners. This was to ensure the availability of the Gavin Block for future tipping operations. A sum of \$300,000 was also paid to the Kopututea owners in order to guarantee access to the beach for sand to cover the tip face. Many of the details of this agreement are hidden from public view but the attitude of Paokahu owners to the deal is possibly encapsulated in comments that "Paokahu and Kopututea owners settled with the District Council after realising the compensation they felt entitled to would bankrupt the Gisborne community<sup>233</sup>."

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<sup>229</sup>"Paokahu landfill stormwater and leachate resource consent applications." – GDC Report 97/275, 29.10.1997 (GDC 93004).

<sup>230</sup>"Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites." – October 1997 (GDC 93004).

<sup>231</sup>"Compensation of \$2.5m paid to Paokahu landowners." – Gisborne Herald, p1, 8.8.1998, (GisMUS VF-Local Govt. Facilities).

<sup>232</sup>"Solutions not easy to find for all parties." – J. Gillies, Gisborne Herald, p3, 20.5.1999 (GisMUS VF-Maori).

While there is nothing to suggest that the Paokahu owners are overly disgruntled by the agreement, it is noteworthy that the agreement focuses solely on them. As already highlighted, the GDC had been criticised for consulting only with the owners rather than with all local iwi concerned about the environmental effects of the landfill. This issue of 'who are the affected parties' in resource management decisions is becoming increasingly important. It should have been especially important in this case because the settlement with the owners "removed the need for a hearing before the Environment Court<sup>234</sup>." The settlement not only provided a resolution for lease issues, it also formed a pre-hearing negotiation to settle environmental complaints which meant that "an expensive legal argument before the Environment Court would not now be necessary<sup>235</sup>." These types of transaction, which seem to be a logical component of the RMA<sup>236</sup>, are particularly worrying in the context of the Treaty. Having proceeded from a 19<sup>th</sup> Century history of land deals whereby Crown agents negotiated with one iwi or hapu to purchase land at the expense of another's interests, the RMA ushers in an era wherein local authorities can settle environmental disputes with a limited number of the affected iwi or hapu. Case law suggests that the Environment Court is not the place to resolve competing claims to mana whenua<sup>237</sup>, yet the GDC may have formulated a deal with one group of Maori on the basis of an over-simplified conception of mana whenua issues.

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<sup>233</sup>"Hardship for area leads trustees to agree on Paokahu." – J. Gillies, *Gisborne Herald*, p3, 20.5.1999 (GisMUS VF-Maori).

<sup>234</sup>"Paokahu site owners settle with council over tip use." – *Gisborne Herald*, p1, 9.7.1998 (GisMUS VF-Local Govt. Facilities).

<sup>235</sup>*Ibid*.

<sup>236</sup>Gleeson 1995.

<sup>237</sup>*Tawa v Bay of Plenty RC*, 1995, A18/95; *Sea Tow Ltd v Auckland RC*, [1994] NZRMA 204.

## 9.5 Lasting impacts

To conclude this chapter it is important to state that the lasting effects of the Paokahu landfill are not minor or ephemeral. As had already been shown, the effectiveness of the natural clay layer in acting as a barrier to downwards infiltration had been questioned during the 1980s and 1990s. However, the problem went well beyond infiltration – the “drains on the margins of the present landfill site penetrate the Te Hapara sands, so there is exchange of groundwater and surface water<sup>238</sup>.” In recent times, the water table has been found to be considerably higher than initially thought. In other words, the impact of landfill discharges to the water system are more serious than was initially believed because leachate comes into direct contact with the sub-surface water system<sup>239</sup>. Up to 45% of incident rainfall percolates through the base of the landfill and mixes with groundwater<sup>240</sup>. More importantly, while there has for some time been knowledge that organic pollution is relatively high, it has only more recently been discovered that more noxious forms of leachate affect the nearby water system. In quantifications of alkalinity, chloride, calcium, magnesium, sodium, potassium, ammonium-N, iron, aluminium, boron and zinc from water bores on neighbouring properties “most of the elements were detectable at quite high levels” and there was also evidence of cyanide, arsenic, chromium and lead<sup>241</sup>.

The Awapuni Drain receives much of the leachate and it is not surprising that there is a significant level of ammonia pollution therein<sup>242</sup>. This and other forms of landfill effects on the Awapuni waterway have led to loss of “aquatic life in the Awapuni Drain, especially eels, which Tangata Whenua ascribe to the leachate and contaminated stormwater which has been reaching the drain since the start of tipping operations<sup>243</sup>.” Having said this, however, it would be more accurate to state that the effects are assumed:

Little is known about the ecology in the Awapuni Drain as there is no available information but it is assumed by the consent authority that there is aquatic life present...No investigations have been conducted by the applicant to characterise the aquatic life in Awapuni Drain which is currently the main receiving environment for discharges from the landfill. There is a considerable amount of anecdotal evidence to suggest aquatic life (both saline and freshwater flora and fauna) is present in the Awapuni Drain. Shrimps, snails, small fish, eels, ducks and other wildlife has been purported to frequent the Awapuni Drain. Local people have suggested that Paokahu landfill operation

<sup>238</sup> Apperley 1993, p13.

<sup>239</sup> GCNZ 1988, p3.

<sup>240</sup> *Ibid.*, p17.

<sup>241</sup> *Ibid.*, p19.

<sup>242</sup> “Water permits.” – I. Petty, GDC, Report 94/218, 6.5.1994 (GDC 93004). Ammonia is a typical marker of leachate pollution.

<sup>243</sup> “Applications by the GDC Engineering and Works Department relating to the various landuse consent application for options A, B and C for the Paokahu landfill existing and extension sites.” – October 1997 (GDC 93004).

has had a major impact on the flora and fauna since landfill operation commenced in 1975<sup>244</sup>.

It is the absolute paucity of monitoring that stands out as the most significant concern in the history of the Paokahu landfill. Without such monitoring, the true impact of the landfill on the local ecology cannot be known. The lack of monitoring, however, is but a small part of a nested hierarchy of neglect and negligence that extends back in time to the early 1970s as well as out of the district, towards the seat of the Crown. A complex array of regulatory authorities led to a fragmented form of environmental management which meant that the questionable attitudes and activities of City engineers were overlooked and unpoliced. Moreover, there is almost no history of central government agencies intervening to improve this situation. Treaty issues are national concerns; they require national-level monitoring, policing and implementation. It is negligent to assume that local level agents will implement the logic of the Treaty in the absence of a clear mandate and the possibility of central government coercion.

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<sup>244</sup>“Paokahu landfill stormwater and leachate resource consent applications.” – GDC Report 97/275, 29.10.1997 (GDC 93004).

## Pollution of inner-city waterways and fisheries

In some ways, this Chapter is designed to provide background for the Chapter that follows it. The submarine sewerage outfall – evaluated in Chapter 11 – is by far the most important pollution issue to form an iwi environmental grievance in the case book area. However, it is impossible to understand the development and subsequent controversy of the submarine sewage scheme without first having understood the broader history of water pollution in the Gisborne area. This Chapter provides an account of that broader history and focuses on the waterways in and around Gisborne City. It first outlines three types of river and near shore pollution: coastal pollution from the sewage disposal system employed up to 1967; sewage overflows from ‘emergency’ discharge outlets to city rivers; and effluent discharges from industrial premises. Subsequently, it evaluates the (mis)management of these pollution sources before proceeding to discuss their long-term impacts on resource spaces of local iwi. While the pollution issues outlined in this Chapter are no longer as salient in local environmental debates as they once were, they were a significant source of despair for local iwi until the 1980s. It is only since that time that the increas-

ing scope and significance of the submarine sewerage outfall has tended to overshadow other local pollution issues of interest to local iwi.

As was shown in Chapter 6, the waterways in and around what is now Gisborne City were important mahinga kai for nga iwi o Turanganui-a-Kiwa. Tidal mudflats provided shellfish in abundant quantities, sub-tidal creeks like the Waikanae Creek yielded considerable numbers of ducks, eels and other wildlife, while the Turanganui, Taruheru and Waimata rivers supplied mullet and shellfish. The Kaiti shore platforms were probably the most important shellfishery in the entire district and even Midway Beach provided significant quantities of white pipi up until the 1960s. What remained of these fisheries after the reclamation and realignment activities of the Harbour Board (Chapter 6) and Industry (Chapter 8) was soon to be lost to local iwi. A stark history of industrial and domestic pollution has rendered the fisheries in close proximity to the City unusable. The protection afforded to Maori fisheries under Article II of the Treaty was meaningless in the context of Gisborne City: most of the shellfish which can be found close to the City today are not fit for human consumption.

## 10.1 Early forms of sewage disposal

The mixing of wastewater with natural water is a particularly sensitive topic for Maori. In traditional times, the favoured means of sewage disposal was burial to land, a system which returned to Papatuanuku that which was rightfully hers. This was, in effect, a process of recycling whereby human effluent could be reproduced as fertilizer over time and within the soil. With the arrival of European environmental precepts, discharge of sewage to water has become the common means of disposal throughout New Zealand and, indeed, the issue has taxed the Waitangi Tribunal on numerous occasions<sup>1</sup>. That Gisborne presents an extreme example of these concerns is confirmed in Chapter 11, but the problem of sewage disposal in Gisborne has a long and vulgar history. Early developments which preceded the submarine sewerage outfall and affected the waters close to the City are discussed in this Section.

### From nightsoil collection to reticulation

Until the early part of the 20<sup>th</sup> Century, Gisborne's population was not served by an advanced sewerage system, even in the context of that time. Many locals had to dispose of their own sewage, usually through burial in backyards and private gardens. Others were serviced by a nightsoil collection system which was at best rudimentary. It appears that the Gisborne Borough never developed a coherent system for disposal of nightsoils and for many years used the sand dunes behind the beaches as dumping sites. Other accounts of disposal practices suggest that the nightsoils were occasionally dumped on the beach itself, much to the dismay of local Maori<sup>2</sup>. Eventually, the Gisborne Borough Council (GBC) established a nightsoil depot at a designated dumping site near Pacific Street. This was also controversial from the viewpoint of local iwi. The land had been taken under the Public Works Act in 1908, originally to be used as a public cemetery, but was subsequently found to be unsuitable for this purpose<sup>3</sup>. The land was then converted into a public reserve, but with a portion of it used as a nightsoil depot. In 1922, the Cook County Council (CCC) attempted to take 10 more acres of this land to form its own nightsoil depot. The GBC protested this move to the Health Department but, on the basis of advice from the Medical Officer of Health in Napier, the Health Department allowed the CCC operation to be established<sup>4</sup>.

The GBC established the first local system of sewerage reticulation in 1911 when its population was about 8000<sup>5</sup>. It was built after the discovery that levels of typhoid fever in the district were disproportionately high compared with the national average<sup>6</sup>. The Borough had been built on the swampy confluence of several waterways and, with a relatively poor

<sup>1</sup> The ground-breaking examples are the Motunui-Waitara Report 1983, the Manukau Report 1985 and the Mangonui Sewerage Report 1988.

<sup>2</sup> Pers. comm. Pita Tupara.

<sup>3</sup> "Nightsoil depot at Awapuni." – Gisborne Municipal Council, to Minister of Public Health, 14.3.1922 (HD 33/20).

<sup>4</sup> "CCC and GBC." – Minister of Health, to Chrisp and Chrisp Solicitors, Gisborne, Minister of Public Health, Director General of Health and Medical Officer of Health, Napier, 6.6.1922 (HD 33/20).

<sup>5</sup> Williams 1966.

population, an impoverished housing stock, and an ineffective nightsoil disposal system, enteric disease was common. Early records of the development of the system show the elation of the Borough's inhabitants about the prospect of evading such diseases through sewage reticulation<sup>7</sup>. Nevertheless large parts of the Borough remained unconnected to the sewerage system, with Whataupoko and Kaiti, for example, left unreticulated until well after the Second World War<sup>8</sup>. While the reticulation system that was created can justifiably be criticised, the unreticulated parts of the city suffered from dysentery epidemics for years to come<sup>9</sup>. Although the nightsoil collection continued, and although some of the collected material was still being dumped behind local sand dunes, most of the nightsoils could be deposited straight into the septic tanks that accompanied the new reticulation system<sup>10</sup>. Despite its elementary nature, the new sewerage system removed enough of the Borough's effluent to improve the typhoid statistics.

### Sewerage outfalls and septic tanks

The reticulation system did not solve the problem of sewage disposal for a growing Borough; it merely provided a convenient means of moving sewage off the properties of land-owners. At the end of the reticulation system, the mechanism of disposal – “septic tanks on the beach front with short outfalls into the surf zone<sup>11</sup>” – introduced problems of its own. The septic tanks were located at Kaiti and Stanley Road, the latter being not far from the present outfall. There were two other short outfalls, located nearby to each of the Kaiti and Stanley Road septic tanks. These were used for trade wastes and will be discussed in more detail later in this Chapter. The objective of the septic tanks was not treatment. Rather, they were a temporary staging point for the Borough's effluent – a holding place to delay the discharge of sewage until the tide came in: The outfall pipes only barely extended passed the surf zone. This system may have removed Gisborne's sewage from public view, but it had a particularly detrimental effect on environmental values and local fisheries. In the mid-1930s, the outfalls were extended<sup>12</sup>, but not sufficiently to thwart an unfavourable amount of backwash.

The capacity of each of the septic tanks was about 250,000 gallons which was sufficient for the population in 1911, but allowed little room for expansion<sup>13</sup>. This was to become a

<sup>6</sup> “Gisborne's submarine sewerage disposal.” – H.C. Williams, former City Engineer. Report for interested parties vested with the council, 4.5.1988 (GCC 37/6). See also: “CCC and GBC.” – Borough Solicitor, GBC, to Minister of Public Works, 8.5.1922 (HD 33/20).

<sup>7</sup> “Borough sewerage system.” – Gisborne Times, 22.9.1915 (GHB CB).

<sup>8</sup> “Sewage disposal. Borough of Gisborne.” – Auckland Metropolitan Drainage Board, to Secretary for Marine and Director General, Department of Health, 1.10.1951 (MW 48/737/16).

<sup>9</sup> “Condition of Borough sewers.” – Medical Officer of Health, Gisborne, to Town Clerk, GBC, 20.3.1941 (HD 11/1/1).

<sup>10</sup> “Gisborne City Council sewerage loan, 1960. £400,000.” – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 12.9.1960 (HD 1/1/1).

<sup>11</sup> “Gisborne sewerage treatment and disposal.” – W.J. Turner, Engineering and Works, GDC, 20.9.1993 (GCC 01-330-01).

<sup>12</sup> “Kaiti septic tank.” – 27.7.1936 (GHB MB).

<sup>13</sup> Porter 1952, p5.

common mistake in the history of sewage disposal in the Gisborne area. Although the outfalls were intended to be used only at high tide, the capacity problems at the septic tanks were so severe by the 1950s that the outfalls operated "continuously at all stages of the daily tide cycle<sup>14</sup>." Because "retention periods of less than 6 to 8 hours are then possible, under existing peak flow conditions, bacterial treatment is wholly ineffective. In any case both installations have reached a stage where de-sludging is no longer practicable, and sewage is passed direct to outfalls, in a crude state<sup>15</sup>." Thus, the legacy of an inexpensive system was that it was impossible to subsequently add any form of sewage treatment. More importantly, when the population of Gisborne increased in the inter-war years the capacity problems only got worse. By 1941, the septic tanks were estimated to be a third of the required size, meaning that they could not "function as septic tanks and merely serve as very inefficient holding tanks<sup>16</sup>." From the beginning of the Second World War, and with a system that was never designed for an increasing flow, the condition of the septic tanks had deteriorated to the point where they could not be cleaned or inspected for twenty years thereafter<sup>17</sup>. When the septic tanks were decommissioned in the late 1960s, they had become such a hazard that "it was far too dangerous to contemplate getting inside or sucking the contents out. The roof slabs were smashed in and filled over<sup>18</sup>."

Although the septic tank and outfall system was designed almost entirely from the perspective of moving the Borough's sewage from view, the environmental implications of the system had become observable by the 1940s. Indeed, the "Midway Beach during those years was grossly polluted and little used<sup>19</sup>." Reportedly, faecal matter washed whole onto the beaches<sup>20</sup> – the objective of 'hiding' Gisborne's effluent was a comprehensive failure. Later, the City Engineer was moved to recall the situation as follows:

At Kaiti [there was]...an overloaded septic tank alongside the Cook Monument. Its putrid effluent drained into the sea at low tide level at Scott's Point, 600 metres SE of the end of the breakwater. At low tide the more hardy could stand dry foot alongside the outlet to watch the dark or milky effluent decant onto the sea surface. Similarly, the Stanley Road septic tank...emptied its liquor...at the low water mark onto the beach opposite Stanley Rd. At spring low water one could walk round the seaward end of the 12 inch diameter cast iron pipe and look up inside the pipe where it rested fully exposed on the beach sand<sup>21</sup>.

<sup>14</sup> "re. Sewage disposal." – R. Sanderson, Borough Engineer, to Town Clerk, 4.3.1955 (GCC 37/2).

<sup>15</sup> "re. Sewage disposal. Sponge Bay." – City Engineer, GBC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 01-330-01).

<sup>16</sup> "Condition of Borough sewers." – Medical Officer of Health, Gisborne, to Town Clerk, GBC, 20.3.1941 (HD 11/1/1).

<sup>17</sup> "Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/6).

<sup>18</sup> "Gisborne's submarine sewerage disposal." – H.C. Williams, former City Engineer. Report for interested parties vested with the council, 4.5.1988 (GCC 37/6).

<sup>19</sup> Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/6).

<sup>20</sup> "Sewage disposal. Borough of Gisborne." – Auckland Metropolitan Drainage Board, to Secretary for Marine and Director General, Department of Health, 1.10.1951 (MW 48/737/16).

Again, this graphic description only attests to the sensory effects of the septic tanks – the lasting effects on fisheries and spiritual values remained relatively unreported, but nonetheless significant for this report.

It is noteworthy that departments of the Crown were aware of the magnitude of the situation. In 1938, the Medical Officer of Health advised against a local request to install bathing sheds on Waikanae Beach, stating that “owing to the effluent from the septic tank which discharges into the sea at the end of this road, it is not advisable to encourage bathing within at least twelve chains of this pipe<sup>22</sup>.” The Health Department’s interest in this matter appears to have been limited only to the potential effect on bathers: there was only scant consideration of fisheries pollution; there is no indication in the Health Department files of attention to Maori views on the water regime. Moreover, the Health Department appears to have been hesitant about ordering the Council to fix its sewerage problems. The Borough failed to even reply to the Department’s requests for information, yet the latter agency decided not to pursue enforcement measures for this breach of good conduct<sup>23</sup>.

The Ministry of Works also knew of the problem, releasing results of bacteriological tests in 1952 which highlighted extensive pollution in excess of levels hazardous to human health at both Kaiti and Waikanae beaches. These tests, along with those conducted by local health officers and local authorities, were entirely targeted to pollution of bathing beaches, revealing the cultural preoccupations of testing agencies. However, the impact on fisheries can be inferred from the water quality data. Tests at Stanley Road between October 1950 and June 1951 all yielded more than 1,800+ faecal coliforms (FC) per 100ml, while tests at the bathing pavilion at Waikanae Beach resulted in between 900 and 1,800+. Today, the maximum accepted level for bathing beaches is 200FC/100ml, while the maximum for shellfisheries is 100FC/100ml. These values for Waikanae Beach were confirmed in 1958 tests and results from that year for Kaiti Beach also ranged up to the then maximum recordable value of 1,800. Obviously, the taking of paua, kina or crayfish at Kaiti or pipi from Midway Beach – two important shellfisheries for local iwi – would have entailed considerable risk to human health.

In what was to become a common excuse for poor environmental performance, the Porter report, which was commissioned to investigate solutions for Gisborne’s sewerage problems, found that much of this could be attributed to the pollution levels in the City’s rivers<sup>24</sup>. While the rivers were undoubtedly polluted<sup>25</sup>, the total extent of effluent from these rivers was small compared with the outfall pipes, making this assumption highly improbable. At the time, it was assumed that agricultural run-off was causing the pollution in the rivers, but the high values at Kaiti and Waikanae were correlated with high levels of colif-

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<sup>21</sup> “Gisborne’s submarine sewerage disposal.” – H.C. Williams, former City Engineer. Report for interested parties vested with the council, 4.5.1988 (GCC 37/6).

<sup>22</sup> “Bathing facilities at Stanley Rd.” – Medical Officer of Health, to Town Clerk, GBC, 18.2.1938 (HD 11/1).

<sup>23</sup> “Letter” – Dr L.S. Davis, Medical Officer of Health, Gisborne, to GBC, 30.4.1945 (HD 11/1/1).

<sup>24</sup> Porter 1952, p8.

<sup>25</sup> See following Section.

orms of *human* origin<sup>26</sup>. Moreover, while there were many claims that the rivers caused beach pollution in the 1950s, almost all of these had been postulated before bacteriological tests had been completed within those rivers<sup>27</sup>. From the very start, the claim that rivers rather than sewerage outfalls caused coastal pollution was supposition. Even today, sufficient bacteriological monitoring to prove conclusively the source of pollution has not been carried out.

Regardless of the source of the pollution, something should have been done about the problem, but this was not the case. Although planning agencies could possibly have claimed an insufficient mandate to address such issues, with the enactment of the Water Pollution Act in 1953 they had few legitimate excuses. Section 2(a) of the Coastal Water Standards associated with the Act said that “no matter is to be drained or dumped so as to lead to the disrupting or fouling of fishing grounds” and s 3(c) prohibited the dumping of solids of animal origin and coliform bacteria of human intestinal origin on shellfish beds<sup>28</sup>. It is notable that this Act contained little in the way of protection of cultural linkages to particular water spaces and is entirely silent about Maori values. This said, however, ss 2(a) and 3(c) should have been sufficient to prevent the degree of water pollution evident in Gisborne from 1953. At the very least, section 3(b)(iv) should have been invoked to limit coliform bacteria to 500 per 100ml – a maximum which was then considered suitable for bathing.

### External regulation of Gisborne’s sewage disposal practices

There were some attempts to address the coastal pollution problems during and after the 1950s, but these were fraught with contradiction. In 1950, the GBC applied to the Local Authority Loans Board (LALB) for approval of a loan to extend the reticulation system and to enlarge the septic tanks at Kaiti Beach and Stanley Road<sup>29</sup>. The general administrative purposes of the LALB were outlined in Chapter 4 of this report but the office of the Loans Board also served as a triage point in the hierarchy of environmental administration. Under the LALB process, loans for infrastructural improvements which might have had an impact on the environment were to be co-approved by design engineers of the Ministry of Works and environmental health officers of the Department of Health. From the perspective of present times, it is quite bizarre that one of the few forms of national environmental control should be instigated through what was essentially a *treasury* process. However, this process is important for the purposes of this report because it represents the only opportunity in the decision-making processes of the time for public participation and Crown involvement. Up until 1967, once a polluting facility was established there were

<sup>26</sup> “re. Sewage disposal.” – N.R. Sanderson, Borough Engineer, GBC, to Town Clerk, 4.3.1955 (GCC 37/2).

<sup>27</sup> “Gisborne City sewerage sea pollution.” – H.C. Williams, Chief Engineer, GCC, to Medical Officer of Health, 10.03.58 (GCC 37/2).

<sup>28</sup> “Sewer outfalls into tidal waters. Tests to determine suitability of proposed outfall sites.” – L. Thomas, Design Office, Ministry of Works, April 1956 (GCC 37/2).

<sup>29</sup> “Memo.” – Secretary, LALB, to Director General of Health, 19.12.1950 (HD 11/1/1).

very few mechanisms for its removal or for mitigation of its effects. If Treaty issues were to be incorporated into environmental decision-making, it had to be at this juncture. This particular application was also an important precursor to the more controversial applications to the LALB by Gisborne authorities that were to follow.

Improvements to the reticulation system would have further impacted on the capacity problems at the septic tanks<sup>30</sup>, so the Loans Board rightfully questioned the loan application in the absence of more satisfactory plans to dispose of the waste<sup>31</sup>. Indeed it was stated that the "efficiency of the septic tanks is so low as to raise doubt [as to] whether the use of septic tanks should be continued<sup>32</sup>." There appears to have been considerable debate within the Department of Health as to the merits of the existing system and of the extensions, especially about whether the scheme should have been disallowed until the plans included removal of the Stanley Road septic tank<sup>33</sup>. Other commentators went further and advocated for secondary treatment by oxidation ponds in the vicinity of Awapuni Lagoon<sup>34</sup>. This was on the basis that the GBC was merely attempting to bring its sewerage system up to pre-War standards (primary treatment), rather than implementing post-War technology and practice (secondary treatment). Effectively, it was carrying out the work 20 years too late "which has made it more extensive than it should have been<sup>35</sup>." Interestingly, this is precisely the dilemma that faces Gisborne District today in the regard of its present sewage disposal facilities.

In recent times, Gisborne iwi have criticised the local authority on the basis that it has taken a least-cost approach to managing sewerage issues, leading to seemingly insurmountable problems. This type of criticism was also valid in the 1950s, and forms the basis of a scathing report on the LALB application from a Ministry of Works engineer:

I knew too much about the history of the handling of local body projects in Poverty Bay...to be content to rely on the good intentions of a present day Borough Council. The tendency towards economic expediency of the moment appears to be inherent in most local body planning. We do not need to look further than the local sewage proposals as submitted to the Loans Board to see what the local authority would have been prepared to inflict upon Gisborne merely to satisfy a demand for action at the most agreeable possible financial cost to the ratepayers<sup>36</sup>.

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<sup>30</sup> "Gisborne sewage disposal." – H.C. Williams, Chief Engineer, GBC, to C.C. Collom, Auckland Metropolitan Drainage Board, 30.10.1957 (GCC 37/2).

<sup>31</sup> "re. Loan proposals and the Loans Board's comments relating to same." – G.F. Clapcott, Consulting Engineer, GBC, to Mayor, GBC, 9.4.1951 (GCC 37/2).

<sup>32</sup> "GBC sewerage and water reticulation extension loan." – Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 22.1.1951 (HD 11/1/1).

<sup>33</sup> Department of Health, Wellington, to Medical Officer of Health, Gisborne, 30.1.1951 (HD 11/1/1).

<sup>34</sup> "Memo." – Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 2.2.1951 (HD 11/1/1); "Sewage disposal. Borough of Gisborne." – Auckland Metropolitan Drainage Board, to Secretary for Marine and Director General, Department of Health, 1.10.1951 (MW 48/737/16).

<sup>35</sup> "Memo." – Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 2.2.1951 (HD 11/1/1).

<sup>36</sup> "Gisborne Borough Council. Sewerage extension loan." – Ministry of Works, Gisborne, to Commissioner of Works, Wellington, 20.5.1952 (MW 50/316).

Treasury had also commented upon the local discourse wherein environmental quality was repeatedly sacrificed to the least-cost option. It had signalled out Gisborne as one of six centres nationally with an extreme pollution problem and recommended a government subsidy to encourage better treatment<sup>37</sup>. In 1951, Treasury introduced a policy which stipulated that all future loans for sewerage works would only be accepted if sewage was to be treated. It appears, however, that this policy was not implemented in the Gisborne case.

Despite the significant reservations of the Ministry of Works, Treasury and the Department of Health, the loan was approved in August of 1952<sup>38</sup>. This was on the basis that a more satisfactory mechanism of disposal would be implemented at a later date and that the GBC must start the process of investigating this mechanism forthwith<sup>39</sup>. It was to be 15 years before this mechanism was implemented and, even then, the solution – in the form of a submarine sewerage outfall – paid no attention to the need for more treatment. In part, this delay reflected factors outside of the control of the local authority<sup>40</sup>, but it also represented the GBC's desire to spend the minimum unless it was compelled to do otherwise. That the Crown agents comprising the LALB failed to adequately compel the GBC in this regard is a significant omission. The steady growth of the Borough in the 1950s and the improvements to the reticulation system authorised by the Loans Board brought an increased sewage load to the septic tanks. With this load being passed through to the near-shore zone, the impact on local shellfisheries was particularly severe. Although human effluent tends not to affect negatively the *quantity* of shellfish, it certainly affects the wisdom of its consumption. Several kaumatua interviewed in the course of research for this report commented that the 1950s and early 1960s witnessed a decline in the use of shellfisheries near to the city of Gisborne. This was no doubt related to the high probability of enteric disease after consumption of shellfish from such heavily polluted waters.

<sup>37</sup> "Item 1024. Suggested government subsidy for sewage treatment." – September 1951 (T 40/746).

<sup>38</sup> "Local Government Loans Board." – Secretary, LALB, Treasury, to Commissioner of Works, Wellington, 25.8.1952 (MW 50/316).

<sup>39</sup> "Gisborne Borough Council: Sewerage and water reticulation extension loan 1951. £195,000." – D. McKillop, Commissioner of Works, to Secretary, LALB, Treasury, 7.8.1952 (MW 50/316).

<sup>40</sup> Refer to the analysis of the Sponge Bay proposal, Section 11.1.

## 10.2 Sewage overflows and City rivers

The loan, which was approved by the LALB in 1952, included monies for linking several of the reticulation sub-systems together, so that the overall system could function as a single unit<sup>41</sup>. This involved the creation of pipes to traverse the major rivers, as well as Waikanae Creek and a number of smaller streams. From its inception in 1911, however, the reticulation system had more direct linkages with the City's watercourses. If a power outage caused a system failure, for example, a series of gravity-based 'emergency' overflows were engaged and, in places, the City's rivers became the default reticulation system. As the reticulation system began to age and the pipes began to crack so as to let stormwater mix with wastewater, the system would reach capacity during most rainfall events. On these occasions the 'emergency' overflows would again engage, along with a number of inverted siphons built into the pipes over the rivers. These pollution events are examined in detail because they effectively destroyed any remaining chance of consuming fish from City rivers and creeks.

### Designed for emergencies

Like the septic tank and outfall mechanisms that served as its terminus, the sewage reticulation system had been constructed at least possible cost. The pipes were of a particularly narrow gauge and had not been installed with a growing population in mind. Although the reticulation system was designed from the start to include emergency discharge outlets, when population growth began to strain the capacity of the system in the 1930s and 1940s a number of new outlets were appended. At that time, the "public health authorities began to view with concern the overflowing into streams and rivers<sup>42</sup>" but, nevertheless, the GBC was to add many more overflows. On some occasions, it was required to seek consent from the Health Department and, where this correspondence has been identified, the majority of cases were authorised. The only exception to this rule was in the case of watercourses administered by the local harbour board, which occasionally rejected requests for additional overflows in fear of pollution which might have corroded vessels at their moorings<sup>43</sup>. The capacity problems of the reticulation system would only get worse after the Second World War. New state housing subdivisions at Kaiti required connections to the Borough sewerage scheme, placing even greater strains on the ageing pipe system<sup>44</sup>.

All of the Borough's reticulation sewers were designed to be separate from the rainwater system. However, the disorderly addition of unauthorised stormwater connections and natural attrition of the cheaply made pipes conspired to circumvent that intention<sup>45</sup>. The problem of infiltration was made manifestly worse by an earthquake in 1941 which cracked

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<sup>41</sup> "Memo." – Secretary, LALB, to Director General of Health, 19.12.1950 (HD 11/1/1).

<sup>42</sup> "Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GBC, 12.11.1958 (GCC 37/2).

<sup>43</sup> No title – 17.8.1944 (GHB MB).

<sup>44</sup> "re. Sewage disposal 'Sponge Bay'." – City Engineer, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2).

<sup>45</sup> Porter 1952, p6.

many of the sewerage pipes and separated the joins between others. This had the effect "that these by-passes come into operation more often than was ever intended and are too often in operation at times when flood conditions in the streams they discharge into are not sufficient to rid the nuisance created thereby<sup>46</sup>." This problem of low flow and a lack of river flushing has become worse over time, especially since the Waipaoa River Flood Control Scheme effectively limited the number of overflows into the Taruheru<sup>47</sup>.

With stormwater conduits, natural watercourses through the soil and rock structure, and sewerage connecting at so many places, the problem of overcapacity was all but impossible to quantify<sup>48</sup>. It was harder still to address – especially in the context of a local authority which wanted to spend as little as possible on infrastructure. This was the root cause of the problem. Although such factors as earthquakes are unforeseeable, the system was poorly designed and, moreover, very poorly maintained<sup>49</sup>. The stormwater system itself was deficient, having been based on an unrealistic and "unusually short storm return period<sup>50</sup>." Specifically, the design of the Kaiti subdivision was oriented towards a one in 2-5 year storm, whereas the maximum capacity should have reflected a one in 5-10 or even a 20-50 year storm<sup>51</sup>. The Commissioner of Works was aghast at the City Engineer's calculations for the incorporation of Kaiti sewage, believing that they underestimated peak sewage flows and probable infiltration<sup>52</sup>. The state-housing subdivision had been built on the cheap by the State Advances Corporation and it overwhelmed a stormwater/wastewater system constructed on the cheap by the City.

That it was difficult to quantify and address the problem of stormwater ingress into the wastewater system is certain; that the Council failed to complete basic accounting and testing of the sewerage pipes between 1952 and 1983 was a matter of budgetary choice<sup>53</sup>. Indeed, it had been directed by LALB agencies to carry out such a survey in 1960, but had sidelined and ultimately ignored the demand<sup>54</sup>. By 1990, it had been discovered that up to 60% of rainfall entered the sanitary sewer system<sup>55</sup>. Even a moderate rainfall could lead to significant problems with overcapacity because the pipes had never been designed to have any rainfall enter into them. On the other hand...

<sup>46</sup> "Condition of Borough sewers." – Medical Officer of Health, Gisborne, to Town Clerk, GBC, 20.3.1941 (HD 11/1/1).

<sup>47</sup> "Poverty Bay and coastal waters. Preliminary classification." – J. Wells and J. Warren, GCC, to City Manager, 7.8.1989 (GCC 01-233-07).

<sup>48</sup> "Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GBC, to Council, 12.11.1958 (GCC 37/2).

<sup>49</sup> "Appraisal of sewerage system." – Steven Fitzmaurice and Partners Ltd., Auckland, for GCC, August 1983 (HD 32/237).

<sup>50</sup> "Gisborne City sewerage system." – L. Thorstenson, Director, Division of Public Health, to Steven Fitzmaurice and Partners Ltd., Auckland, 14.9.1983 (HD 32/237).

<sup>51</sup> "Appraisal of sewerage system." – Steven Fitzmaurice and Partners Ltd., Auckland, for GCC, August 1983 (HD 32/237).

<sup>52</sup> "Gisborne sewage disposal loan. £255,505." – Commissioner of Works, to District Commissioner of Works, Napier 24.9.1956 (MW 50/316).

<sup>53</sup> "Gisborne City sewerage system." – L. Thorstenson, Director, Division of Public Health, to Steven Fitzmaurice and Partners Ltd., Auckland, 14.9.1983 (HD 32/237).

In times of excessive flow in the sewers due to wet weather, scour valves are opened where the sewers cross the Taruheru River and Turanganui River, permitting direct discharge from the surcharged sewers to these rivers. This is done to avoid wide-spread discharges from the sewer system onto land<sup>56</sup>.

In other words, the rivers were considered expendable because discharges into waterways were more desirable than discharges onto the properties of ratepayers. That Council staff had the discretion to open the scour valves on these occasions is a matter for interpretation. Often the pumping system would simply fail when sewage/stormwater flow began to increase – like all other components of the system, the pumping mechanisms were prone to malfunction because of cheap construction<sup>57</sup>. In 1960, the local Medical Officer of Health declared that the pump stations were antiquated and needed replacing<sup>58</sup>, but this was not to happen until the late 1980s. The outcomes of this negligence served to enrage local ratepayers into accepting that the only solution was the construction of more overflows into local rivers and streams. Even in 1998, Gisborne residents were prepared to overlook overflow discharges to rivers as long as they could see progress being made with discharges to private property<sup>59</sup>. While this may appear short-sighted on the part of the ratepayers, nobody today would envy their circumstances:

...back pressure has often caused sewage to flood private properties. This is particularly so in the Kaiti area where gully traps and manholes overflow, and the sewage runs over private land and streets and eventually empties into the harbour via the stormwater system<sup>60</sup>.

It is also significant that there has always been a high percentage of Maori living in Kaiti<sup>61</sup>. The short-sightedness of the City years earlier had burdened disproportionately a state-housing subdivision with a high number of relatively poor Maori. The quotation, above, also highlights the fact that there was considerable overlap between overflows to land and overflows to water: Whether directly or indirectly, the City's waterways became the default receiving environment for sewage in times of moderate or stronger rain.

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<sup>54</sup> "Report of meeting between Mayor, Engineer, Town Clerk, GCC, and District Commissioner of Works, Napier, Director of Division of Public Health, Wellington, Medical Officer of Health, Gisborne, Senior Health Inspector and representatives from Ministry of Works, Public Health, Engineering section." – R.C. Lough, Public Health Engineering Section, Ministry of Works, Wellington, 22.8.1960 (HD 1/1/1).

<sup>55</sup> Notes from Gisborne sewerage environmental summit, 23.1.1990 (GCC 01-233-07); "Gisborne sewerage system study." – W.J. Warren, City Engineer, GCC, to City Manager, 7.11.1988 (GCC 37/7).

<sup>56</sup> "Evidence of S.J. Fitzmaurice." – Facsimile of evidence presented to Chrisp, Caley and Co., Barristers and Solicitors, Gisborne, 21.3.1990 (GCC 01-233-07).

<sup>57</sup> "Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/2).

<sup>58</sup> "Gisborne City Council sewerage loan 1960. £400,000." – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 12.9.1960 (HD 1/1/1).

<sup>59</sup> "Facilitator urges fair wastewater lobbying – two schools of thought are emerging." – Gisborne Herald, p1, 21.10.1998 (GisMUS VF-Local Govt. Facilities).

<sup>60</sup> "Gisborne City Council sewerage loan 1960. £400,000." – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 12.9.1960 (HD 1/1/1).

<sup>61</sup> In the 1996 Census, Kaiti registered 49.7% Maori, whereas the wider urban area of Gisborne returned 37.6% and the nation, as a whole, 14.5%.

Figure 10.1 presents the location of the 46 overflows to streams and rivers as well as the overflows to land which had been accounted for by July 1990. As can be seen, sewage overflows discharged into the major rivers as well as their tributary streams. This type of pollution was both spatially and temporally a systematic occurrence, and would have had a significant cumulative impact. One of the most troubled sites related to the Parau Street overflow which discharged into the Kopuawhakapata Creek. Not only did this site have no water rights for discharges, it did not even register on the Council's documentation of overflow sites<sup>62</sup>. The Parau Street overflow was a concern not only because it caused gross pollution of the Kopuawhakapata Creek but because, from there, it also polluted the inner harbour<sup>63</sup>. Residents had complained about the pollution as early as 1932, with several letters being written to the Minister of Health in 1946<sup>64</sup>. The main overflow was not decommissioned until well into the 1990s and not after numerous complaints had been made through the local and national media. Another overflow to be depicted in the national media was associated with the Kaiti drain in Seymour Road. This overflow discharged into an open drain which flowed into the Waimata River and was located next to the Te Wharau Primary School. The secretary of that school had complained about visible faecal pollution in the drain during 1983 and asked the ECCB to test the water quality<sup>65</sup>. The results – which are presented in Table 10.1 – illustrate gross levels of pollution<sup>66</sup>.

Table 10.1 – Bacteriological monitoring, Kaiti Drain.

Site	Total coliforms/100ml		Faecal coliforms/100ml	
	Maximum	Median	Maximum	Median
Seymour Rd footbridge	20,000	7,764	20,000	3,850
Seymour Rd culvert	20,000	10,728	10,100	2,661
Marian Drive	20,000	4,672	20,000	2,205

A particularly serious example was the Innes Street overflow into the Waikanae Creek<sup>67</sup>. Although this discharged only occasionally, when there was an overflow the discharge represented a high proportion of the flow in the Creek. The Wainui Stream overflow was the most controversial. The pump associated with this overflow had begun to malfunction in the early 1980s and by the latter half of that decade had completely ceased to function<sup>68</sup>.

<sup>62</sup> "Unauthorised discharge. Parau Street." – A. Armstrong, Chief Engineer, PBCB-RWB, to Messrs Nolan and Skeet, 19.5.1983 (GDC 365-04).

<sup>63</sup> "Board query on abattoirs discharge." – 21.4.1970 (GHB CB).

<sup>64</sup> "Letter." – E.A. Gardner, Resident of Parau Street, Kaiti, to Minister of Health, Wellington, 14.4.1946 (GHB MB).

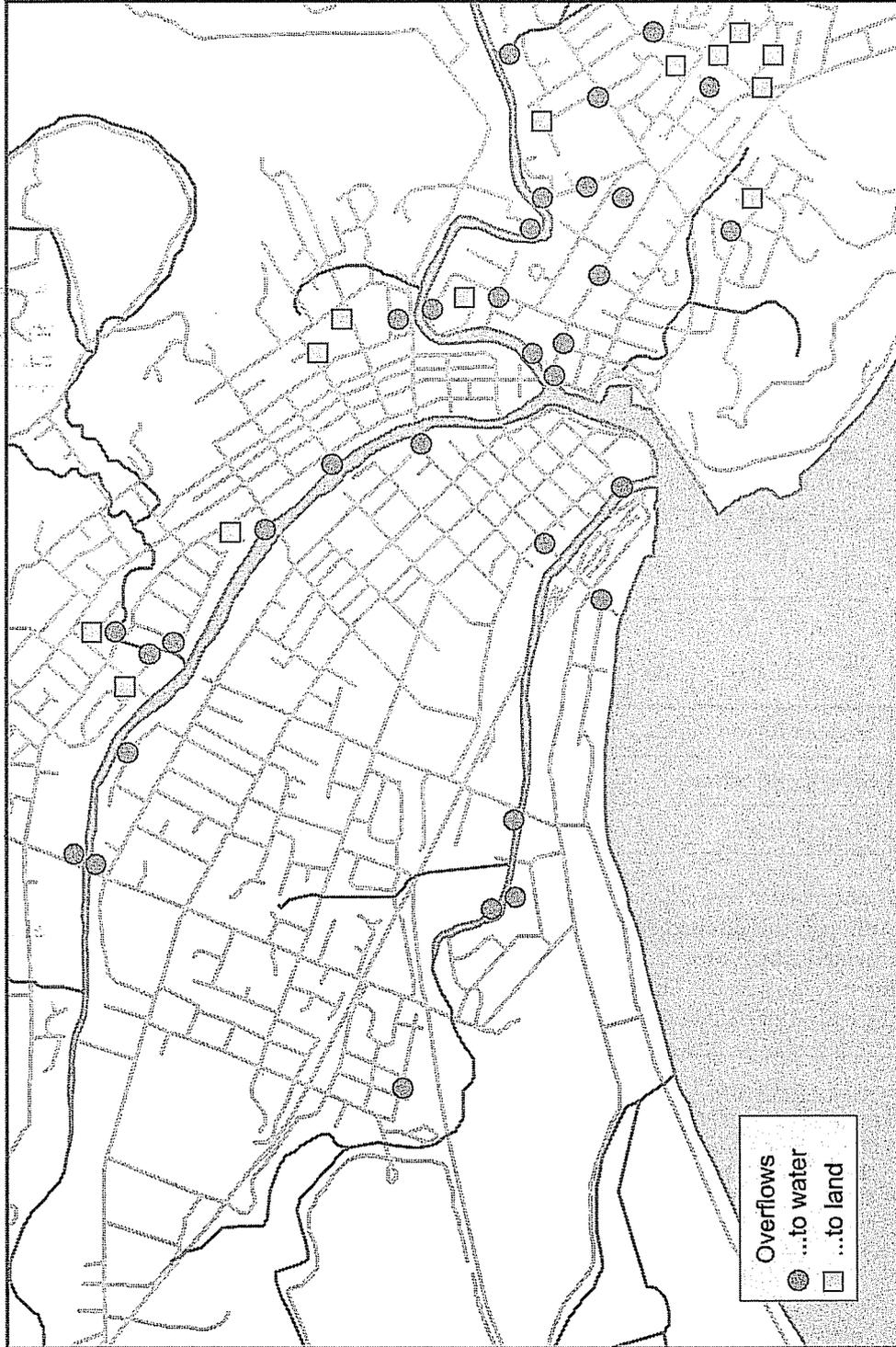
<sup>65</sup> R. Miller, Secretary, Te Wharau School Committee, to Secretary, ECCB, 24.10.1983 (GDC 365-04).

<sup>66</sup> "Water quality data." – A. Armstrong, ECCB, to Secretary, Te Wharau School Committee, 28.10.1983 (GDC 365-04).

<sup>67</sup> "Water standards and city waterways." – R.C. Hall, City Health Inspector, to Engineer, PB-RWB, 21.3.1979 (GDC 365-04).

<sup>68</sup> "Overflows into Wainui Stream." – W.J. Warren, City Engineer, GCC, to City Manager, 9.7.1987 (GDC 365-04).

Figure 10.1 – Sewage overflows to waterways and land



This meant that rather than being an 'emergency' overflow, the discharge was effectively permanent. It appears that the relevant local authorities knew of the problem for quite some time and although the Wainui overflow was depicted on the front pages of the Gisborne Herald many times during the late 1980s, nothing was done about the problem until much later<sup>69</sup>. The CCC was particularly angered by the City's refusal to address this particular case:

The City Engineer was quoted [in a newspaper article] – 'My approach is to take a whole look at sewerage and decide what the City can afford.' Our opinion is that the City has more of an obligation than just what it can afford; it has a responsibility for the maintenance of public health and should address this issue accordingly<sup>70</sup>.

In summer, the mouth of the Wainui Stream turns into a lagoon and many of the suburb's young children played in the water<sup>71</sup>. Yet, in February of 1987 bacteriological tests registered 12,700FC/100ml at the mouth of the stream<sup>72</sup>. This was grossly in excess of the recommended level for bathing of 200FC/100ml. At one time, the mouth of the Wainui was a favoured pipi collection area for Ngati Oneone hapu, so it can be assumed that local iwi found this type of pollution particularly distasteful.

The extent of published information on iwi reactions to the overflows is rather limited. At one point, a consultant to the GCC invited iwi representatives to a meeting of affected parties. At that meeting...

There was agreement that the current situation where sewage backs up onto private property is unacceptable. The concept of changing the overflow point to the major rivers during times of major storm on a short and medium term basis received the support of all persons present although the view was expressed by some that in the long term such an arrangement should be improved upon<sup>73</sup>.

This should not be read as implying that local Maori found this 'solution' to be satisfactory. As already stated, there were many Maori living in the area of Kaiti which was worst affected by sewage discharges to land, and it is understandable that these locals would want to have the land discharges resolved first. Whatever the case, it is absolutely certain that the overflows had a significant effect on the viability of consumption of shellfish from within the City rivers.

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<sup>69</sup> "Wainui Stream sewage overflow." – R.D. Elliot, CCC, to City Manager, 2.7.1987 (GDC 365-04).

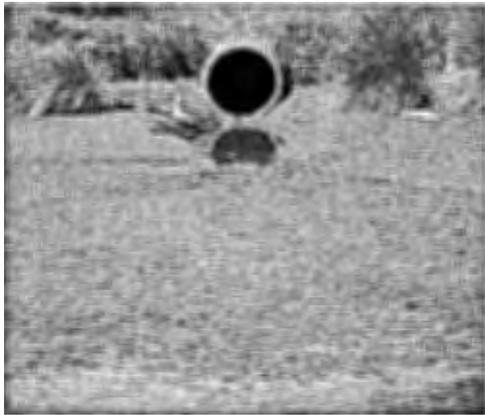
<sup>70</sup> *Ibid.*

<sup>71</sup> "re. Monitoring of bacteriological quality at beachwater streams and lagoons." – D. Shephard, County Health Inspector, CCC, to ECCB, 6.9.1983 (GDC 365-03).

<sup>72</sup> "Wainui Stream sewage overflow." – R.D. Elliot, CCC, to City Manager, 2.7.1987 (GDC 365-04).

<sup>73</sup> GCC, to S.J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., Auckland, 2.8.1988 (GCC 37/7).

Figure 10.2 – Stormwater or wastewater?



Pipes flowing into Waikanae Creek – these flowed through old landfills and carried unspecified 'stormwater' into the Creek.

The examples discussed above were not isolated incidents. In one week during 1987, there were 11 separate overflow incidents into Gisborne rivers<sup>74</sup>. During another week, when there several power cuts in the region, over two million litres of sewage flowed into Gisborne rivers because the pumping stations failed<sup>75</sup>. The local Medical Officer of Health renewed his call for the pumping stations to be replaced with new models which incorporated a non-electrical back-up system, but this proposition was not heeded. Indeed, the GCC would not even keep the logging equipment for the pump stations in working order, meaning that many of the pollution events went unrecorded. When Catchment Board staff asked the City Engineer to comment on this problem the latter replied that "it is not worth visiting the Waimata Road overflow counter...[K]eeping it in repair and recording the data...is a time and money wasting exercise. In our opinion it is an unnecessary drain on public funds with no commensurate benefit to public health or good government<sup>76</sup>." Given that the "overflows contribute to gross visible pollution of watercourses and rivers. Faecal matter is a common sight in rivers,<sup>77</sup>" the City's indolence in this regard is appalling.

### Overflow administration

Importantly, planning and public health agencies only began to show significant interest in the issue when the national media highlighted the local impact of sewage overflows. A consumer affairs programme on television proved to be the only successful form of motivation for the GCC and its overseers. In 1983, an episode of 'Fair Go' focussed on the overflows and their effect on property owners. In turn, the episode acted as a catalyst for

<sup>74</sup> "Sanitary sewer overflows. Week commencing 13.7.87" – B. Swainson, Operations Engineer, GCC, to Secretary, ECCB, 21.7.1987 (GDC 365-04).

<sup>75</sup> "Inter-office memorandum." – Medical Officer of Health, Gisborne, to Director General of Health, 29.3.1974 (HD 32/237).

<sup>76</sup> "Water rights for overflows. Waimata Road and Stafford Street." – H.C. Williams, Chief Engineer, GCC, to Secretary, ECCB, 26.9.1980 (GDC 365-04).

<sup>77</sup> "Gisborne City Council sewerage loan 1960. £400,000." – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, Wellington 12.9.1960 (HD 1/1/1).

the Local Authorities Affairs Committee to give the issue special attention<sup>78</sup>. It was discovered at a meeting of the Committee that the Medical Officer of Health had decided not to pursue legal proceedings against the GCC even though his Department had seriously considered such a move in September of 1983. Other evidence included a detailed history of the operation of overflows in Kaiti<sup>79</sup>. This history showed that the GCC had responded to complaints of backflow from property owners by incrementally adding more overflows to rivers. The Council's attitude to this circuitous link between overflows to property and overflows to water had infuriated an engineer working for the Department of Health who had met with local authority staff to discuss the issue<sup>80</sup>. Rather than solving the problem as the engineer had suggested, the GCC merely diverted the problem to another waste sink.

Other evidence presented to the Local Authorities Affairs Committee was sufficient for members of that committee to suggest there had been a range of policy and enforcement failures. It was particularly concerned that complaints had been ignored for nearly six years even though these complaints had been made beyond as well as within Gisborne. Obviously, the fact that locals had to use the national media to prosecute their case reflects the lack of opportunities for meaningful public participation in environmental decision-making processes of the time. The environmental legislation that subdued these opportunities can again be questioned, especially as Maori will inevitably have had fewer resources to attract media attention than other members of the public.

The Fair Go programme also highlighted systemic failure within the Health Department itself. The Minister of Health criticised his own Department on the basis that it had not fulfilled its public health responsibilities in Gisborne and that this had been the case for a long time<sup>81</sup>. After all, the Department had approved the reticulation system for Kaiti in 1958<sup>82</sup>. Moreover, in the same decision that approved Kaiti's reticulation, the Medical Officer of Health also authorised a number of sewage overflows into the Turanganui River. This authorisation was supposed to be of a temporary nature – the Health Department could not lawfully approve long-term emergency overflows. Yet, it assured the Council that it “would take no steps at this stage to prevent such work unless a grave nuisance was created. It would be understood, of course, that when the new sewer reticulation comes about, all these overflows will be abandoned<sup>83</sup>.” When the reticulation system was finalised, the overflows were not abandoned. It is evident that the Health Department knew of their continued existence but it did nothing to prevent the Council's long-term use of the ‘temporary’ overflows.

<sup>78</sup> “Gisborne sewerage.” – Minutes of the Local Authorities Affairs Committee, 6.12.1983 (HD 32/237).

<sup>79</sup> “Sewage overflows. Kaiti, Gisborne” – Ministry of Health, Napier, to Director of Public Health Division, Wellington, 11.8.1983 (HD 32/235).

<sup>80</sup> “Report on meeting with Gisborne City Council.” – J.H. Feltham, Senior Environmental Health Engineer, Department of Health, 20.9.1983 (HD 32/237).

<sup>81</sup> “Gisborne sewerage system.” – Department of Health, Wellington, to Minister of Health, 3.8.1983 (HD 32/235).

<sup>82</sup> “Sewer overflows.” – Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 24.10.1958 (HD 11/2/1).

<sup>83</sup> *Ibid.*

At the local level, a number of poor decisions determined the scale and extent of sewage overflows. For example, many industrial yard areas were connected directly to the sewerage system due to "concerns by the...Catchment Board over possible pollution of the city waterways by run-off from those yards<sup>84</sup>." The overcapacity problem was significantly heightened by this discharge of industrial yard washings directly into the sewerage system. The Catchment Board's concerns were not unfounded – the washings were highly polluted and, if they had continued to be discharged through the stormwater system, they would have seriously affected the quality of the water into which that system flowed. However, the more compelling option would have been to force at-source treatment or waste minimisation on the industrial premises, so that relatively clean washings could be discharged into stormwater pipes.

Budgetary decisions were the principal failure of the Council in regard of the sewage overflows. A Department of Health report on the Gisborne situation was scathing of the Council's failure to address the overflow problem at a financial level<sup>85</sup>. It also questioned the motivations of the City Engineer who refused to acknowledge the seriousness of the problem. Even by 1987, when the impact of the sewage overflows was widely known and public support for change was strong, the GCC still failed to direct enough money to the issue. The recently appointed City Engineer lamented the fact that although some expenditure had been diverted, "sufficient funding...is not even provided in the estimates to adequately fund the maintenance of the sewage...systems<sup>86</sup>." Maintenance was inadequate and, therefore, the problem of stormwater-wastewater mixing steadily worsened, but there was even less money for the necessary capital works to solve the problem. The new City Engineer made his councillors aware of the irrationality of this situation:

The maintenance and rehabilitation of the City's essential services is under funded. The resolution of this problem in a time of difficult economic conditions is a challenge to the Council and its officers. If the problem is not addressed adequately, however, the condition of the City's services will continue to decline such that the resolution of the problem will become increasingly difficult irrespective of economic conditions<sup>87</sup>.

By delaying the inevitable, the GCC merely rendered the inevitable more expensive.

Compounding the situation in an even more irrational manner, the GCC continued to add poorly designed components to the reticulation system, even after the extent of pollution from overflows was recognised. In 1976, the Council applied for a loan to reticulate a new subdivision, with the result that a number of proposals to add narrow-gauge pipelines and

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<sup>84</sup> "City sewerage and stormwater systems. Proposed redirection of industrial yard stormwater from sewers to stormwater system." – B. Apperley, District Design Engineer, GDC, to P. Dawson, Senior Water Conservator, GDC, 23.12.1993 (GCC 01-284-03).

<sup>85</sup> "Report on meeting with Gisborne City Council." – J.H. Feltham, Senior Environmental Health Engineer, Department of Health, 20.9.1983 (HD 32/237).

<sup>86</sup> "1987/88 estimates. Maintenance and rehabilitation." – W.J. Warren, Chief Engineer, GCC, to City Manager, Report E.4110, 6.5.1987 (GCC 37/6).

<sup>87</sup> *Ibid.*

simple pumping stations with overflows were forwarded to Department of Health officials<sup>88</sup>. The local Medical Officer of Health requested that the loan be rejected until a more satisfactory design was drafted. However, despite the apprehension of the office of the Director General of Health, the LALB approved the loan with its design intact<sup>89</sup>.

Earlier, the Director General had recommended that all but the pumping station overflows be sealed over and eliminated, but he did not instigate an official directive to complete this task<sup>90</sup>. A similar recommendation had been made in 1956, when the Commissioner of Works stated that new components of the reticulation system both could and should "be so designed that overflow points are very few – at pump stations only, and can only operate in an emergency, such as a prolonged power failure<sup>91</sup>." Like all other Crown advice this was apparently ignored. In the same year, the Ministry of Works had adopted as policy a decision that sewage overflows would be considered 'outfalls' and that it would expect all local authorities to eliminate them<sup>92</sup>. Yet, it apparently did nothing to bring its policy into effect in Gisborne. Although this point has been laboured, it is, nevertheless, of fundamental importance. Crown agents knew of the environmental problems in Gisborne; they also had the ability to follow up their recommendations with concerted action. That the departments which comprised the LALB chose to do nothing more forceful than draft letters of apprehension means that they were as negligent as any of the local administrators. They failed to consider and bring into effect the principles of the Treaty by allowing the GCC to persist with a sewage system that was inexpensive but environmentally detrimental in its construction.

### Water rights, catchment boards and sewage overflows

The water rights process under the Water and Soil Conservation Act 1967 should have been sufficient to halt the expanding problem of sewage overflows. With amendments to the Act in 1971 and 1973, a clear course of action had been given to the local Catchment Board – which was soon to be known as the East Coast Catchment Board and Regional Water Board (ECCB-RWB). The GCC should have been asked to apply for water rights for all of its facilities with a pollution problem. In the case of emergency overflows, some may have been allowed with stringent conditions and improvements schemes attached, while others may have been prohibited outright. However, during the latter half of the

<sup>88</sup> "Gisborne City Council: reticulation and street improvements loan 1976. \$200,000." – P. Hinds, Medical Officer of Health, Gisborne, to Director General of Health, 3.11.1976 (HD 32/321).

<sup>89</sup> "Loan for reticulation." – Local Authority Loans Board, Treasury, to GCC, 9.12.1976 (HD 32/321).

<sup>90</sup> "Gisborne City Council sewerage loan 1960. £400,000." – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, 12.9.1960 (HD 1/1/1).

<sup>91</sup> "Gisborne sewage disposal loan. £255,505." – Commissioner of Works, to District Commissioner of Works, Napier 24.9.1956 (MW 50/316). Note that the Ministry of Works were also concerned about effluent seepage from private septic tanks and septic tanks which collected the sewage of unreticulated suburbs. It was particularly dismayed by the GCC's allowance of these facilities which was itself an attempt to cut costs. If the GCC had prohibited such septic tanks, as had most other local authorities by this stage, it would have had to reticulate new areas at considerable expense ("Report on meeting held in City Council chambers." – 2.3.1971 (MW LGC 1/1/25).)

<sup>92</sup> "Report and minutes of four meetings of the Pollution Advisory Council." – 6.12.1956 (MW 48/737/3).

1970s, the GCC made applications for water rights only for some of its emergency overflows – the ECCB-RWB did not make the Council apply for rights in all cases. Moreover, it appears that the Catchment Board seldom refused an application for a water right and sometimes these rights applied to the most controversial of overflows<sup>93</sup>.

In fairness, some of the overflows did not need water rights because they had been notified existing uses (NEU) at the time of the enactment of the Water and Soil Conservation Act. If overflows had been designated on an official list in 1967, they were permitted regardless of their environmental outcomes – the Act scarcely challenged the *status quo* level of pollution. As can be seen in Table 10.2, 23 of the 33 overflows had no water right. However, the situation was worse than these statistics indicate – there were another 13 overflows that were in operation at the time but neither the GCC nor the ECCB-RWB were to know about their existence until many years later. The GCC was so apathetic about this issue that it had not even completed an inventory of its overflows, nor documented their location.

Table 10.2 – Status of sewerage overflows, 1983.

Status	Sewer pump stations with overflows	Overflows unrelated to pump stations
Renewed water rights	6	-
Existing water rights	2	2
No water rights	6	2
No water rights but NEU	9	6

It is doubtful whether the ECCB-RWB should have *ever* authorised sewage overflows under legislation of the day. Up until the mid-1980s, the accepted understanding amongst local authorities was that emergency overflows would only be issued with a water permit if they were engaged, on average, not more than once a year. The record for an ‘emergency’ overflow which discharged into Waiteatea Stream – a tributary of the Waimata River – indicates that the maximum of no more than one discharge per year was not adhered to in the Gisborne case: 1974, 43 discharges; 1975, 26; 1976, 18; 1977, 14; 1978, 4; 1979, 0; 1980 and 1981, 49<sup>94</sup>. On a number of occasions the ECCB-RWB was moved to comment that “the frequency of the overflows from the pump stations gives rise to the opinion that they go beyond the true emergency situation<sup>95</sup>.” Yet, in a number of cases water permits were issued and, in other cases, the ECCB-RWB did not press the GCC to obtain water permits.

<sup>93</sup> For example, Innes Street, an overflow into the Waikanae Stream and Magnolia Street, which discharged into the Waimata River (“Water standards. City waterways.” – R.C. Hall, City Health Inspector, to Engineer, PBCB-RWB, 21.3.1979 (GDC 365-04)). By the early 1980s, only 3 water rights applications for emergency overflows had been refused (“City sewage overflows.” – Editorial, Gisborne Herald, 27.7.1983 (GDC 365-04)).

<sup>94</sup> “Waimata Rd. sewer main. Waiteatea Strm.” – H.C. Williams, Chief Engineer, GCC, 3.2.1986 (GDC 365-04).

<sup>95</sup> “re. Sewage overflows. Wainui Beach” – J. Roe, ECCB, to F.M. Burt, Wainui resident, 2.7.1987 (GDC 365-04).

From December of 1985, there was a significant level of concern in the correspondence of engineering staff at the GCC. This related less to a realisation of the environmental effects of the overflows and more to a decision in an Auckland case before the Planning Tribunal<sup>96</sup>. The Tribunal's finding declared unlawful the granting of water rights for emergency discharges and established a precedent for how the Catchment Board should have managed the GCC's overflows. This provided the ECCB-RWB with the necessary support to confront the GCC about its overflows. The CCC had also noted the implications of the 1985 ruling and attempted to use it as leverage against the GCC:

With the Water Right now expired [Cook County] Council's concern is what will now constitute an emergency for Gisborne City. From the comments of the City Engineer, overflows of raw sewage will continue due to the fact that both the pump stations at Steele Road and Wilson Street are not capable of handling the flows basically whenever heavy rains occur. Council's contention is that such overflows would not be emergencies but in fact could be termed common occurrences<sup>97</sup>.

The ECCB-RWB, however, was more circumspect in its usage of the Auckland decision, preferring to foster cooperation with the GCC even though it knew that this case gave it the ability to stymie future water rights application<sup>98</sup>. In other words, the Catchment Board chose not to implement either legislative or case law to the fullest extent of its capacities.

The GCC believed that the Catchment Board should have authorised every application for a water right. Again, the argument was that the property of ratepayers was ground to be protected, whereas waterways were expendable because of the need:

...to ease the distress and danger to public health which comes about through the possibility of an uncontrolled discharge of raw sewage onto private property...in a manner which constitutes a real nuisance and a danger to both their health and as a consequence the health of the community...The application for the overflow device to enable the Huxley Road sanitary sewer to decant over into the Huxley Road stormwater system is designed to ensure that when inevitable and uncontrolled overflowing of sewage is about to occur, it will gain access into the Huxley Road stormwater system in an orderly and less distressing fashion, the Huxley Road stormwater pipe being a [drain flowing into] the Kōpuawhakapata Creek<sup>99</sup>.

Eventually, the public outrage over the Fair Go programme led the ECCB-RWB to take a firmer line. It was supported by the Department of Health which objected to four Council applications for water rights in 1982. Several water right applications for emergency overflows had been forwarded to the Department for comment<sup>100</sup>. One of the more controver-

<sup>96</sup> Turner J., Planning Tribunal, A86/85, 13.12.1985.

<sup>97</sup> "Wainui Stream sewage overflow." – R.D. Elliot, CCC, to City Manager, GCC, 2.7.1987 (GDC 365-04).

<sup>98</sup> "City sewerage water rights. Sewage discharges." – A.F. Armstrong, Chief Engineer, ECCB, to Town Clerk, GCC, 19.12.1985 (GDC 365-04).

<sup>99</sup> "Water rights application. Gisborne City Council." – H.C. Williams, Chief Engineer, GCC. Evidence in support of water right application, 23.11.1982 (GDC 365-04).

<sup>100</sup> "Application for discharge right." – GCC, 18.8.1982 (HD 32/235).

sial was for an overflow into a creek alongside an intermediate school. In response to this particular application, a Department official commented that:

...we have been told that sewage overflows already occur whenever there is heavy rainfall and this would suggest to us that the problem is not just one of occasional blockages. If indeed the problem is one of stormwater getting into the sewerage system then we suggest that money should be spent on that problem rather than on diverting the overflow into the stream adjacent to the school<sup>101</sup>.

The Department objected to the overflow on the basis that "such discharges could cause a potential danger to public health and create nuisance<sup>102</sup>." Subsequently, in 1983, the ECCB refused two water rights<sup>103</sup>. The Council appealed this decision<sup>104</sup>, but the findings of the ECCB-RWB were upheld in all but one case. Unfortunately, this was not the end of the matter. Although it would be very difficult to obtain a water right from that point on, many of the overflows had already been granted rights. The impact of *existing* overflows continues even today.

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<sup>101</sup>"Water right application from GCC." – Ilminster Intermediate School, Gisborne, to ECCB, 23.9.1982 (HD 32/235)

<sup>102</sup>"GCC applications 82086 and 82089. Rights to discharge untreated sewage." – Department of Health, Gisborne District Office, to ECCB, September 1982 (HD 32/235).

<sup>103</sup>"Gisborne City Council water rights and Opotiki County Council water rights." – ECCB, 26.1.1983 (HD 32/235).

<sup>104</sup>"Notice of appeal by Gisborne City Council against the decision of the East Cape Catchment and Regional Water Board." – 2.3.1983 (HD 32/235); "Gisborne City Council overflows." – Head Office Director, Division of Public Health, to Ministry of Health, Napier, 17.8.1983 (HD 32/237).

### 10.3 Gisborne Refrigerating Company – the Kaiti freezing works

The Gisborne Freezing Company opened at a harbourside site in 1896 but was closed in 1901, before reopening in 1902 as the Gisborne Sheepfarmers Frozen Meat Company<sup>105</sup>. For most of its existence, the works were known as the Gisborne Refrigerating Company (GRC) and for the ten years before its closure, as Weddel-Kaiti Ltd. The location of the site can be criticised for many reasons. The land itself was historically important to local Maori and, when the works were demolished in 1996, a number of archaeological discoveries were made<sup>106</sup>. While the primary reason for the location of the works was to be close to the port, it is also the case that the site was considered outstanding because it offered a relatively inexpensive option for disposing of waste. The river and the sea were both close at hand to provide a tidal means of transporting waste off-site.

#### GRC and pollution, 1896-1977

Almost from the start of its operation, the Kaiti works was controversial in the regard of waste disposal. In 1897, the Harbour Board lawyer stated that it was time...

...to bring up the question of refuse being allowed to flow into the river. If allowed ...an epidemic might visit the place, and now was the time to consider the question of putting in a condition that all the stuff should be taken through a pipe and discharged at the end of the breakwater on the eastern side<sup>107</sup>.

The Harbour Board had an interest in this matter both because the water in question was within its management jurisdiction and because it leased the site to the company. The 'solution' of a pipe at the end of the breakwater was implemented soon after this memorandum from the Harbour Board. Thereafter, the waste from the works was simply "discharge[d] at the low water mark next to the breakwater<sup>108</sup>" – there was basically no treatment of the blood, fat, and offal washings that were sent out to sea. At a subsequent date, a second short outfall was added<sup>109</sup> which separated blood from other waste. The result, however, was the same as both pipes barely reached the surf zone. Later still, the pipes were shifted further east along Kaiti Beach<sup>110</sup>, but the outlets remained in close proximity to the reef.

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<sup>105</sup>Robinson 1989, p17.

<sup>106</sup>No title – Gisborne Herald, 24.7.1996 (GisMUS VF-Freezing Industry).

<sup>107</sup>"Harbour Board. Blockyard lease." – Poverty Bay Herald, 21.12.1897 (GHB CB).

<sup>108</sup>"Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/2).

<sup>109</sup>Special hearings committee. Weddel-Kaiti coastal permits." – I.K. Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04); Works committee minutes – 8.2.1945 (GHB MB).

<sup>110</sup>No title – Gisborne Herald, 16.4.1970 (GisMUS VF-Freezing Industry).

Figure 10.3 – The GRC freezing works in 1909<sup>111</sup>



Note the extensive mudflats on the near side of the Turanganui River. In traditional times, these were prolific sources of pipi. Pollution from sources like the freezing works, as well as the removal of mudflats by reclamations (see Chapters 6 and 8), removed this food source.

In 1913, there had been several complaints to the Minister of Public Health about the “unsanitary state of foreshore at Gisborne near the breakwater<sup>112</sup>.” It was alleged that three men had contracted typhoid fever while working in close proximity to the outfall. If this was true, then how much more serious it must have been to consume shellfish from the nearby reef which had been used by local iwi for centuries. At the time, there appeared to be some confusion as to which agency was responsible for protecting water quality against industrial pollution. On recognising the extent of shoreline pollution, the Borough Council had passed on the matter of enforcement to the local Hospital Board, believing that it had a mandate for protecting water quality through the Health acts. The Hospital Board, however, believed that this issue was the responsibility of the Borough and returned the request for action to the local council<sup>113</sup>. As early as 1919, some local administrators had talked of the need to close the freezing works at its harbourside location because it was considered a significant nuisance to public health<sup>114</sup>.

<sup>111</sup>Source: Gisborne Museum and Arts Centre.

<sup>112</sup>Extract from ‘Dept of Agriculture, Industries and Commerce NZ.’ – 15.10.1913 (AG 40 1915/2a).

<sup>113</sup>“Drainage on foreshore.” – Gisborne Times, p13, 28.7.1913 (GHB CB).

<sup>114</sup>“The Harbour problem.” – Poverty Bay Herald, 10.2.1919 (GHB CB).

Apart from such minor alterations as a slight lengthening of the outfall pipe, the assumptions and outcomes of disposal were not to change until the 1970s<sup>115</sup>. In 1956, the GRC works discharged an average of three million litres of waste per day but the “character and strength of these wastes [was] not known at this stage<sup>116</sup>.” The outcomes of this effluent were publicly known, however, and led the local Medical Officer of Health to write a series of strongly worded letters to the manager of the GRC<sup>117</sup>. Essentially, the waste from the works was pumped into the sea “without any treatment other than removal of coarse floating solids by means of screens<sup>118</sup>.” Although the works had a fellmongery to collect some of the fat and other solids, virtually all of the blood from the works was sent out to sea in untreated form. The fellmongery would have done almost nothing to lower the bacteriological impacts on the receiving waters. With an average of 3,500 sheep per day killed at the works during the 1950s<sup>119</sup>, this amounted to a very significant effluent load for the near shore area at Kaiti.

Figure 10.4 – Insanitary conditions inside the Kaiti works, 1913<sup>120</sup>.



During the late 1950s, the Health Department increased its pressure on the GRC to alter its practices. In a meeting held between the Ministry of Works, GRC, the Medical Officer of Health and the Gisborne Harbour Board in 1958, it was ascertained:

That the [GRC] had not been instructed by any authority to improve its trades waste disposal standards;

<sup>115</sup>“Beach polluters face prosecution.” – Poverty Bay Herald, 16.3.1971 (GHB CB).

<sup>116</sup>“re. Sewage disposal. ‘Sponge Bay’.” – Chief Engineer, GBC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2).

<sup>117</sup>B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, to General Manager, GRC, 16.12.1958 (HD 1/1/1).

<sup>118</sup>Porter 1952, p5.

<sup>119</sup>H.C. Williams, Chief Engineer, GCC, to C.C. Collom, Chief Engineer, Auckland Metropolitan Drainage Board, 18.11.1957 (GCC 37/2).

<sup>120</sup>Source: Gisborne Museum and Arts Centre.

That the Health Department was the only authority which could do that and that it would be left to the Health Department to take what action it thought fit with respect to encouraging an improved Refrigerating Company disposal standard<sup>121</sup>.

After this meeting, the Medical Officer of Health wrote that:

As a result of the...meeting it was left to me to formerly advise your company that the present trade effluent from your Freezing Works is polluting the Kaiti foreshore and there is a possibility of the trade waste effluent drifting into the harbour basin, producing more remote pollution...I would be most grateful if you would consider what steps you are prepared to take with regard to the treatment or reduction of the freezing works trade wastes discharging at Kaiti<sup>122</sup>.

While this letter appears to address the problem, the Health Department eventually accepted a relatively limited treatment proposal by the GRC. During 1959, the company installed screening and 'save-all' systems at the plant. These devices may have reduced the particle size of fat entering coastal waters but they did not address the bacteriological concerns. While it appears that the Health Department was the authority mandated to protect water quality prior to 1967, there is little evidence that it ever attempted to fulfil this mandate.

The 1960s witnessed an increase in production at the Kaiti site with a beef killing floor added in 1965. One of the worst reports about the impact of the works at this time complained of a range of objectionable material which was washed up on City beaches:

1. The sea was very brown in colour and practically a 'liquid manure' mix,
2. Sheep's plucks were floating on the water and lying on the beach,
3. Parts of the intestinal tracks and viscera etc. of sheep, were also visible,
4. Sheep's hocks were also lying on the beach,
5. The beach was covered with a mixture of fine debris from your operations<sup>123</sup>.

The works manager replied that there were exceptional circumstances (equipment failure) which explained the pollution. However, the local Health Inspector was convinced that the plant needed to be redesigned. He gave a clear message to the GRC that this type of discharge was a public health nuisance under the Health Act 1958, but concluded his letter merely by threatening prosecution in the event of future discharges of this nature. Future discharges of this nature were evident; prosecutions from the Health Inspector were not.

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<sup>121</sup>"Gisborne Refrigerating Company trade wastes and City sewerage." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 27.11.1958 (GCC 37/2).

<sup>122</sup>B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, to General Manager, GRC, 16.12.1958 (HD 1/1/1).

<sup>123</sup>"Outfall works from refrigeration plant." – Q. Morrison, Health Inspector, to General Manager, GRC, 13.1.1969 (GCC 37/4).

The Harbour Board led the strongest campaign against the GRC's environmental record. Offensive matter discharged through the works outlet would frequently bypass the break-water and come into the harbour on the tide<sup>124</sup>. The Harbour Board was concerned that the works effluent was lowering the pH of the water in the Harbour, slowly turning that water into a mild acid bath in which vessels were corroding<sup>125</sup>. The Yacht Club on Kaiti beach also complained vigorously about the obvious nature of pollution, on one occasion documenting a 'fatty slick' a number of hectares large on the water caused by works discharges<sup>126</sup>. A science class from a local school at one point tried to raise awareness of the pollution, highlighting "tapeworms and eggs in the water" and that "despite Health Department signs, many people were still seen to be collecting shellfish<sup>127</sup>." While some of these protests were vociferous, they brought about little in the way of a response from either the company or an agency of environmental protection.

The works also generated a considerable volume of indirect pollution. The works site included large areas of impermeable concrete from which wastewater would at times be washed into the stormwater system. Two large stormwater pipes crossed the Esplanade from the works to discharge into the Harbour Basin<sup>128</sup>. Other drains exited the site and into the Kopuawhakatapa Creek. A 'cattle bath' at the works which was used to wash beasts prior to their slaughter regularly overflowed into the harbour<sup>129</sup>. The GRC believed that the Borough Council had no right to complain about this because the effluent was no more offensive than the stormwater pipes belonging to the Borough. This exchange pre-figures later debates between industry and local authorities about the legitimacy of the Council as an environmental regulator. Indeed, it would have been difficult for the local authority to take the high ground on industrial pollution while its own pollution record could so easily be called into question.

## The GRC submarine outfall

By 1971, the public health authorities began to take the impact of the Kaiti works more seriously, with further threats to prosecute the GRC if it failed to mitigate fat pollution on Kaiti and Waikanae beaches<sup>130</sup>. In 1977, effluent from the works was eventually transferred to a new outfall – 1162m long and with its diffusers at a depth of 12.2m<sup>131</sup>. The location of this outfall was only a few hundred metres north of the previous outfall, along Kaiti Beach. As will be shown in Chapter 11, the strategy of constructing a new outfall for the works was entirely antithetical to the will of the LALB. The City Council had for many

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<sup>124</sup>"Offensive matter discharged into Harbour." – Works Committee, 25.2.1943 (GHB MB)

<sup>125</sup>"Board may stop drain discharge into basin." – Poverty Bay Herald, 29.11.1960 (GisMUS VF-Water Pollution).

<sup>126</sup>"Works outfall is causing 'concern'." – Poverty Bay Herald, 26.5.1983 (GHB CB).

<sup>127</sup>"Evidence of pollution at Kaiti Beach." – Poverty Bay Herald, 10.1.1970 (GisMUS VF-Freezing Industry).

<sup>128</sup>"Drains discharging into Harbour basin." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 15.6.1960 (GCC 37/4).

<sup>129</sup>"Harbour Board monthly meeting." – Poverty Bay Herald, 29.4.1935 (GHB CB)

<sup>130</sup>"Beach polluters face prosecution." – Poverty Bay Herald, April 1971 (AG 1971/12/125b)

<sup>131</sup>Report and recommendations of the Special Committee to hear Weddel Kaiti water permits – November 1993 (GCC 01-330-04).

years suggested that the works use the domestic outfall at Kaiti which was soon to be phased out of use. This was the outfall from the Kaiti septic tank which had earlier caused significant pollution of mahinga kai at the Kaiti shore platforms<sup>132</sup>. In 1960, despite the protestations of the LALB that the City's planned submarine sewerage outfall should take the works waste, the City Engineer attempted at length to sell the alternative scheme to the management of GRC:

I put it to you that...this outfall, discharging adequately screened works effluent, and perhaps with a few feet of pipe tacked on to the discharge end...would be an efficient permanent safe and reliable mode of disposal for screened meat wastes carried by salt water. I am of that opinion and am carrying the banner to the Loans Board representatives accordingly because I believe the advantages are overwhelming for your Company, my Council, relations between them and the public in general<sup>133</sup>.

By 1967, the City Engineer was still trying to sell his concept to the Pollution Advisory Council (PAC), celebrating "the modest extensions that would be required to convert the retired domestic outfall at Kaiti into an efficient meat works outfall<sup>134</sup>." It is notable that by 1985, only one other works out of the country's 38 major meat works of the time were not catered for by municipal wastewater systems<sup>135</sup>. A full account of the discussions between the GCC and the PAC about the works effluent is incorporated into Chapter 11. For now it is sufficient to suggest that direct pollution of the Kaiti wave platforms by meat works waste should have ceased in 1967 when the City's submarine sewerage outfall was commissioned. It is a significant and inexcusable omission that this pollution should have continued for another 28 years.

Three schemes were developed as proposals for new GRC outfalls: extending the existing outfall along the lines of the engineer's letter to the PAC in 1967; and two others which involved longer outfalls<sup>136</sup>. The Harbour Board gave its approval to one of the longer outfalls in 1971<sup>137</sup> as did the Ministry of Transport – which was responsible for structures erected in the marine zone – in 1976<sup>138</sup>. A local representative of the Department of Health objected to the proposal on the basis that it would lead to "possible future non-compliance with adjacent classified waters<sup>139</sup>." This argument was a little hopeful: the waters would not be classified for another 16 years but, if they had been so classified at the time, it is undoubtedly the case that the outfall would have been rejected. After all, the local Department of Health was accurate in its prediction that "we consider that the pres-

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<sup>132</sup>Refer to Section 10.1.

<sup>133</sup>"City sewerage scheme and meat wastes disposal." – H.C. Williams, Chief Engineer, GCC, to Manager, GRC, 16.9.1960 (GCC 01-330-04).

<sup>134</sup>"Gisborne City industrial wastes disposal." – H.C. Williams, Chief Engineer, GCC, to Secretary, Pollution Advisory Council, 6.3.1967 (GCC 37/4).

<sup>135</sup>Resource consent application – Weddel Kaiti Ltd. (Submissions on CP92001-93011).

<sup>136</sup>"Yes' to pipeline extension." – Poverty Bay Herald, 21.12.1971 (GHB CB).

<sup>137</sup>"Yes' to pipeline extension." – Poverty Bay Herald, 21.12.1971 (GHB CB).

<sup>138</sup>Works committee minutes – 8.6.1976 (GHB MB).

<sup>139</sup>"Objection to GRC application." – Department of Health, Gisborne, to Secretary, PBCB-RWB, 6.6.1973 (HD 32/237).

ence of fats and of excessive blood discoloration could be found offensive and constitute legally a nuisance, as well as a substantial cause of detraction of local important amenities<sup>140</sup>.” Of course, pollution of this magnitude affected more than just aesthetic concerns. Although the diffuser for the new GRC outfall was set in deeper water than its predecessor, there remained after its construction significant pollution of shellfisheries at Kaiti.

The pipeline that was eventually constructed was located at the end of Kaiti Beach Road, at which a small pumping station and an emergency discharge pipe were also positioned. The emergency pipe was to become a controversial component of the system, but the major pipeline was by no means free of controversy itself. As before, beyond simple screening, the effluent discharged from the pipe was all but untreated<sup>141</sup>. Because the system was dependent on the pump station, power cuts would lead to the dumping of works waste into the surf zone through the emergency outlet.

The initial water right for the GRC outfall was granted in 1973, after it was applied for under the Water and Soil Conservation Act 1967<sup>142</sup>. In 1983, the Catchment Board granted a new water right for the GRC outfall as well as for the emergency pipeline<sup>143</sup>. The latter water right would not have been granted any time after 1986 when precedent setting cases before the Planning Tribunal prohibited any further water rights for emergency outfalls<sup>144</sup>. Because both sets of rights were initially granted for ten years, however, little could be done about either pipeline until 1993. For the major outfall, there were only limited conditions – “virtually the only quality parameters imposed<sup>145</sup>” were limits on total fat and floating fat<sup>146</sup>. Even in the regard of such aesthetic concerns as fat discharge, the water rights should perhaps have included stronger conditions. A consultant to the Council had suggested that “a quite modest cost” was all that was required to ensure that the discharge was substantially free of fat<sup>147</sup>. However, the GRC successfully fought against this modest imposition of a cost. It is also significant that the 1983 consent did not impose monitoring requirements. Later in the 1980s, it was almost impossible to gauge the full effect of the outfall:

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<sup>140</sup>*Ibid.*

<sup>141</sup>Later, the gauge of the screens was reduced and two dissolved air fat reclaimers (DAFs) were added to the system. However, this was an aesthetic gesture – it removed almost none of the bacteria from the flow (“Application for resource consents under section 88 of the Resource Management Act 1991.” – Application from Weddel-Kaiti Ltd., May 1993 (Submissions on CP92001-93011)).

<sup>142</sup>Gisborne City Council. Sewage disposal of Gisborne Refrigeration Company effluent.” – P. Hinds, Medical Officer of Health, Gisborne, to Director General of Health, 2.4.1973 (HD 32/237).

<sup>143</sup>The water right for the outfall was WR 82138, while that for the emergency discharge was WR 83014. (“Special hearings committee, Weddel-Kaiti coastal permits.” – I.K. Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04))

<sup>144</sup>These are the same cases as mentioned for the sewerage overflows to rivers, as mentioned in Section 10.2.

<sup>145</sup>Report and recommendations of the Special Committee to hear Weddel Kaiti water permits – November 1993 (GCC 01-330-04).

<sup>146</sup>“Summary of Regional Water Board involvement with waste discharge to Poverty Bay.” – A. Armstrong, n.d. (GDC 365-04).

<sup>147</sup>“Submission by counsel for the Conservation Division of the Gisborne District Council.” – Preliminary classification hearings (GDC 369-03).

...discharge is from a meatworks, the bacteria count for which would be quite high. No bacteriological data is available for this outfall as routine bacteriological monitoring is not required as part of the water right condition<sup>148</sup>.

For many years, therefore, iwi and other members of the community who were concerned about the pollution of shellfish could only point to anecdotal evidence. There were no data to substantiate their claims that GRC pollution had rendered the Kaiti wave platforms dysfunctional as a shellfishery.

### The 1993 water permit hearings

When the water rights expired in 1983, Weddel-Kaiti Ltd. applied for five new discharge permits for the outfall, including the right to discharge from the emergency outfall. The Director General of Conservation had earlier ensured the highest level of scrutiny for the applications by ordering that the Weddel coastal permits be treated as applications for restricted coastal activities under the Resource Management Act (RMA)<sup>149</sup>. While the coastal permit hearings for the Gisborne District Council (GDC) outfall<sup>150</sup> overshadowed the Weddel-Kaiti hearings, they remain a source of grievance for local iwi today. Whereas previous environmental management decisions pertaining to the Weddel outfall produced little in the way of a published record, the 1993 consent hearing was well documented. The hearing is given greater attention at this point in the discussion both because of the existence of this documentation and because it provides an important local test case for whether ss 6e, 7a and 8 of the RMA could protect Maori resource spaces.

The outlook and strategy of Weddel-Kaiti Ltd. in this consent procedure is worthy of note. In its application, the company suggested that the Kaiti Beach was not even used for recreation<sup>151</sup>. The Assessment of Environmental Effects (AEE) which accompanied the application contained more bold statements along these lines. For example, "evidence produced at previous hearings by users of the area for recreational purposes...suggest that there is little effect caused by the discharge other than a psychological reaction to knowing that waste water is discharged in that particular area<sup>152</sup>." The AEE also claimed that "the experience of 15 years operating the existing system shows that the actual effect on the environment is minor<sup>153</sup>." Likewise, there was supposedly no conspicuous oil, colour change, odour or significant effect on aquatic life in evidence during the history of the outfall. Tangata whenua came first under the heading 'persons affected,' but the application and the AEE were almost entirely silent about how local Maori might have been affected

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<sup>148</sup>Fitzmaurice and Partners Ltd. 1988, p53.

<sup>149</sup>"Direction under Section 372(1)(c) of the Resource Management Act 1991." – G. Kerrison, Department of Conservation, to A. Hill, Consents Administrator, GDC, 27.5.1993 (GCC 01-330-04); "Outfall structures: occupation of space." – J. Irving, Regional Solicitor for Regional Conservator, Department of Conservation, to Chairman, Special Hearing Committee, GDC, 14.10.1993 (GCC 01-330-04).

<sup>150</sup>Refer to Section 11.5.

<sup>151</sup>Resource consent application – Weddel Kaiti Ltd. (Submissions on CP92001-93011).

<sup>152</sup>Assessment of environmental effects – Resource consent application, Weddel Kaiti Ltd. (Submissions on CP92001-93011).

<sup>153</sup>*Ibid*.

by the outfall. The Kaumatua Committee of Poho-o-Rawiri Marae were singled out as the only tangata whenua grouping that Weddel-Kaiti Ltd. had consulted with. This suggests that the company believed the effects field of the outfall to be limited to the Kaiti area, whereas tangata whenua would no doubt believe the whole of Turanganui-a-Kiwa to be 'spoiled' by the outfall. Thus, all local iwi should have been consulted. Generally, the company's application was a technical affair, one which was restricted to the supposedly limited biophysical impacts of the outfall<sup>154</sup>.

The views of local iwi on this particular consent hearing were subdued by the fact that it was contemporaneous with hearings on the domestic sewerage outfall. Although several objections were submitted by iwi groups about the Weddel outfall, the local runanga did not present evidence at the hearings for that outfall. A lawyer acting for the GDC surmised that "lack of money probably" led to this outcome<sup>155</sup>. To participate in one decision-making process under the RMA is costly enough, and it may well have been beyond the means of the Runanga to fight two cases at once. A GDC staff member had earlier misread iwi concern about the domestic outfall as somehow representing a lack of concern on the part of tangata whenua about the Weddel outfall<sup>156</sup> and it appears that this logic was again assumed in the 1993 hearings. Like almost all of the objectors to the Weddel outfall, Maori submitters called for a binding timetable of improvements to be imposed upon the company<sup>157</sup>.

While iwi representatives did not appear in person, several submissions from Maori groups had been received by the consent authority. The Tairawhiti branch of the Maori Women's Welfare league suggested that the Weddel outfall was injurious to recreational pursuits and the potential for Maori tourism. Its main objection, however, was that the outfall was "detrimental to the kaimoana of the area<sup>158</sup>." Te Runanga o Turanganui-a-Kiwa (TROTAK) stated in its submission that "the discharges are repugnant to the culture and tikanga of the people represented by this Runanga" as well as impacting upon "the Mana whenua rights and the tino rangatiratanga of" those people<sup>159</sup>. Kathie Fletcher, who submitted a statement as part of the TROTAK submission linked the Weddel outfall to previous injustices in the area. After the Endeavour arrived in Turanganui-a-Kiwa and local men were killed by its crew...

From that day when blood ran thick on the sand and in the sea – the desecration of the Bay and its rivers has been ongoing, including the blasting of the sacred rock

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<sup>154</sup>Refer also to: "Environmental audit of existing operations of Weddel Kaiti Meat Processing Plant, Gisborne." – MIRANZ Meat Research, April 1993, Hamilton (Submissions on CP92001-93011).

<sup>155</sup>"Gisborne District Council. Planning Tribunal appeal relating to the discharge of sewage." – A.T. Randerson, Barrister, Auckland, to Nolan and Skeet, Barristers and Solicitors, Gisborne, 29.3.1994 (GCC 01-330-04).

<sup>156</sup>GCC, no stated author, to J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., Auckland, 2.8.1988 (GCC 37/7).

<sup>157</sup>"Special hearings committee. Weddel-Kaiti coastal permits." – I.K. Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04).

<sup>158</sup>*Ibid.*

<sup>159</sup>re. Submission pursuant to section 96 of the Resource Management Act 1991." – Te Runanga o Turanganui-a-Kiwa, 15.5.1993 (GDC 365-04).

from the river<sup>160</sup> and now finally the pumping of sewage and other waste products into the surrounding waters<sup>161</sup>.

In this declaration, the blood of the men killed by the Endeavour crew mixes through time with the blood deposited on the shellfisheries by the freezing works. TROTAK concluded its submission by saying that “if the cultural basis is outweighed by the economic considerations” then a range of strict conditions should be placed on the company. This wording is indicative of the grounds on which the hearings were based. Weddel-Kaiti argued that, as it was the single biggest employer in the District and as the freezing industry was at that time undergoing a period of sustained restructuring, it was unwise to force treatment options upon it. It claimed that substantial improvements to limit bacteriological output would require an upgrade to secondary treatment which the company could not afford<sup>162</sup>. This was a barely concealed threat to close the works if its managers were forced to upgrade the environmental performance of the factory.

The economic considerations *were* to be given more weight than cultural considerations, highlighting that there is insufficient strength given to the duty to consider the principles of the Treaty under the RMA. Despite the fact that emergency discharge pipes were by this time illegal, the company claimed that the emergency outfall pipe was necessary because the waste had to go somewhere. The special committee of the GDC formed to hear the case did not allow the emergency discharge permit, but allowed a co-requisite permit for its occupation in the coastal zone<sup>163</sup>. This rather odd combination was based on a liberal interpretation of a clause in the RMA:

Section 341(2) RMA provides a defence against prosecution in the case of an emergency discharge if it can be proven that...the action or the event was necessary for the purposes of saving or protecting life or health...[and] the action or event was beyond the control of the defendant.

Thus, the committee claimed there was no need for it to give the company “tacit consent to pollute”. Yet, of course, it *had* given tacit consent simply by allowing the occupation permit for the emergency pipe. There was seemingly no other reason to allow the continued existence of the emergency pipe other than it to perform its role in ‘emergencies.’ While such a pipe could exist legally, there was no incentive for the company to upgrade its infrastructure. This bizarre set of interpretations highlights the extent to which the GDC desired to protect at all costs the processing industries of Gisborne. Ultimately, the special hearings committee granted the Weddel coastal permits on the basis that “exceptional circumstances existed,” namely that it was unrealistic to terminate such a major discharge

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<sup>160</sup>Te Toka-a-Taiau. Refer to Chapter 6.

<sup>161</sup>Evidence of Kathie Fletcher, Te Runanga o Turanganui-a-Kiwa, 15.5.1993 (GDC 365-04).

<sup>162</sup>“In the matter of the Resource Management Act 1991 and in the matter of application by Weddel New Zealand Ltd. for certain resource consents (restricted coastal activities).” – Report and recommendations of the Special Committee to Minister of Conservation, November 1993 (GCC 01-330-04).

<sup>163</sup>“In the matter of the Resource Management Act 1991 and in the matter of application by Weddel New Zealand Ltd. for certain resource consents (restricted coastal activities).” – Report and recommendations of the Special Committee to Minister of Conservation, November 1993 (GCC 01-330-04).

overnight<sup>164</sup>. The economic importance of the industry to the community was also stated as a justification for the decision.

Apart from economic matters, the key concern of the hearings had been the concept of 'reasonable mixing.' Poverty Bay had earlier been classified under the Water and Soil Conservation Act 1967 in such a way that the waters above the diffuser of the Weddel outfall were SE – the lowest level of protection<sup>165</sup>. However, the waters immediately around this small zone of SE were classified SB – suitable for bathing – and, in relatively close proximity to the outfall diffuser, the shoreline of Kaiti was SA – the highest level of classification, providing for the protection of shellfisheries. The focus on 'reasonable mixing' relates to the significant potential for effluent to cross the boundary between SE and SB. It would be beyond the necessities of this report to examine the intricate web of case and legislative law which surrounds the issue of reasonable mixing and more will be said about the Poverty Bay classification later in this report. For now, it is sufficient to suggest that the basis of the debate about reasonable mixing was, again, grounded in aesthetic concerns – the visibility of the sewage plume and the amount of grease that traversed the classification boundaries. In short, the issue had limited relevance to the *spiritual* and *mahinga kai* concerns of local iwi. These latter issues were subsumed by the competing economic and aesthetic discourses and did not receive the attention they deserved if s 8 of the RMA is to be anything more than a token gesture.

Regardless, local iwi were likely to have been pleased that the special committee found that the outfall was in breach of the 1983 consent *vis-à-vis* the extent of the mixing zone. While this did not prevent the consents from being granted, it provided the basis for more stringent conditions for the Weddel outfall. The conditions placed upon the consent included a monitoring programme and steps to reduce the grease and fat quotient that led to the aesthetic misdemeanours<sup>166</sup>. The only condition which came close to the concerns of iwi, however, was provision being made for the disinfection of the waste stream to reduce the number of pathogens in the water<sup>167</sup>. This condition was established as part of a binding timetable – the company was required to upgrade its treatment facilities by October 1999.

Despite the fact that the company's outfall had survived a resource management hearing that it probably should not have survived, Weddel-Kaiti Ltd was by no means satisfied with the outcome of the hearing. It believed that it was "unreasonable to require the company to implement full secondary treatment of its waste stream in the immediate future<sup>168</sup>." In the years after the consent hearing, the company made a number of threats to close the works if it was forced to live up to the consent conditions. However, the issue

<sup>164</sup>"Decision gives consent to two Bay discharges." – Gisborne Herald, p1, 4.12.1993 (GisMUS VF-Freezing Industry).

<sup>165</sup> Refer also to Sections 10.5 and 11.4.

<sup>166</sup>"In the matter of the Resource Management Act 1991 and in the matter of application by Weddel New Zealand Ltd. for certain resource consents (restricted coastal activities)." – Report and recommendations of the Special Committee to Minister of Conservation, November 1993 (GCC 01-330-04).

<sup>167</sup>"Special hearings committee. Weddel-Kaiti coastal permits." – I.K Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04).

<sup>168</sup>"Decision gives consent to two Bay discharges." – Gisborne Herald, p1, 4.12.1993 (GisMUS VF-Freezing Industry).

was soon resolved by fate – in 1995 the management of Weddel-Kaiti Ltd announced that the freezing works was to close as part of a restructuring of the Weddel group of companies<sup>169</sup>. The explicit pollution at the northern end of Poverty Bay was to cease, but iwi had received little assistance from the changes to resource management legislation that were supposed to incorporate their values and the logic of the Treaty.

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<sup>169</sup>Egis 1999, p3.

## 10.4 Other industrial discharges to water

Even though the environmental impact of the Weddel plant was significant, it represents only some of the industrial pollution that was discharged into local rivers and along the Gisborne coast. The history of Gisborne is closely tied to the primary processing sector. The economic dependency of the City on this form of industry has meant that its environmental outcomes have at times been given insufficient attention. This Section provides a brief précis of the range of industrial polluters which discharged into local waterways, further impacting on the utility of those waterways as mahinga kai.

### Other forms of meat industry pollution

The GRC was not the only freezing company in Gisborne. Not only were there other works of significant size, there were also a number of smaller slaughterhouses, which served the local community and each had their own environmental effects. At the turn of the 20<sup>th</sup> Century, many of the slaughterhouses were located conveniently alongside one of the Borough's waterways. Maynards in Peel Street, for example, attracted the attention of the Chief Veterinarian because "the drainage is hardly satisfactory to appearances as the overflow passes into [a] river which passes through Gisborne<sup>170</sup>." Another example attests to the primitive nature of the technology employed to prevent runoff from these properties: "The drainage is composed of a zinc lined channel to a wooden tub which is emptied on to the land<sup>171</sup>." Generally, the disposal system for all the slaughterhouses mentioned in Department of Agriculture archives consisted of nothing more than a wooden channel which led to the nearest convenient waste sink – often a waterway. On the basis that such facilities presented an all too obvious public offence, there were numerous petitions from residents presented to the Cook County Council about slaughterhouses<sup>172</sup>.

Similar problems also existed with other processing facilities that targeted the Gisborne domestic market. A number of these small-scale meat and dairy processors were identified as a public nuisance, even as late as the early 1970s. Some examples include:

- The Gisborne Co-operative Dairy Company which discharged milk waste with a very high Biochemical Oxygen Demand (BOD) into the Taruheru River<sup>173</sup>.
- Sewell's piggery which discharged effluent into the Taruheru at Makaraka<sup>174</sup>.
- Okitu Dairy Co. which had an outfall into Waikanāe Creek<sup>175</sup>.
- Mills Poultry Farm and processing plant which disposed effluent into the Waipaoa River<sup>176</sup>.

<sup>170</sup>Government Veterinarian, to Chief Veterinarian, Department of Agriculture, 29.11.1902 (AG 40/1915/2a).

<sup>171</sup>*Ibid*

<sup>172</sup>See: "Petition re. slaughter house. Whataupoko." – 15.3.1895 (GisMUS 72-122); "Petition" – 7.10.1898 (GisMUS 72-122); "Police report on nuisance." – 19.12.1892 (GisMUS 72-122)

<sup>173</sup>"Sources of pollution." – November 1969 (HD A464/27b).

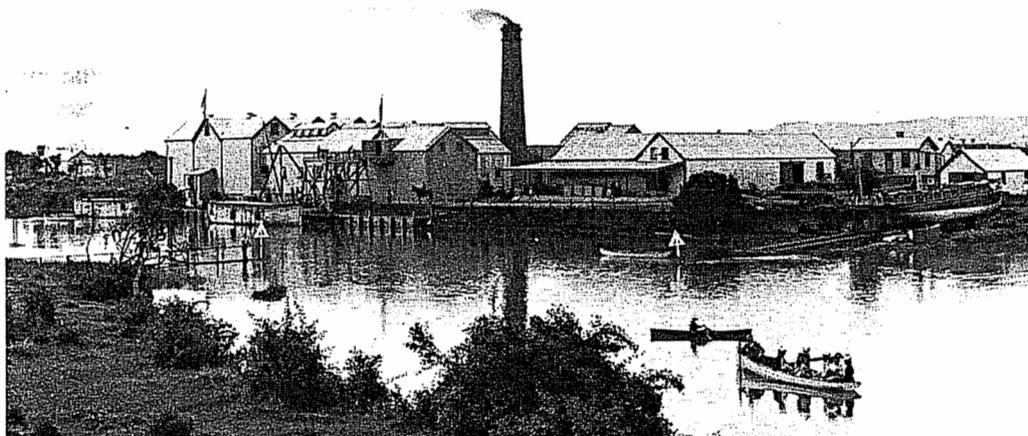
<sup>174</sup>"Known sources of pollution in the Poverty Bay Catchment Board area." – 17.10.1969 (PBCB 2/91).

<sup>175</sup>*Ibid*

<sup>176</sup>"Sources of pollution." – November 1969 (HD A464/27b).

Where these operations polluted the water system, complaints were occasionally forwarded to the Health Department for further action<sup>177</sup>, but little appears to have become of such correspondence. While the individual polluting activities may have been small, the lack of policing of this sort of activity is unfortunate: the cumulative impact of so many point sources of effluent would have been significant.

*Figure 10.5 – Nelson Brothers Freezing Works on the Taruheru River, 1891<sup>178</sup>.*



The impact of other freezing works would have been significant as well. The Nelson Brothers plant was located in very close proximity to the Taruheru River, near to what is today Lytton Road. There were two principal reasons for this location: it was relatively easy to transport sheep down the river to the works and subsequently to the port; and, the river could be used as a waste sink. The works opened in 1889 and immediately thereafter there were reports of waste – up to the size of whole carcasses – floating down the river<sup>179</sup>. Nearly all of the works' waste was, at that time, channelled into the river, despite the fact that the pipi beds downstream of the works were a regular source of food for local Maori. It appears that the local community reacted strongly to this pollution. As a result, the company attempted to construct a pipe to the sea in 1914 in order to avoid pending prosecution over its discharge to the river<sup>180</sup>. This pipeline was subsequently approved by the Marine Department<sup>181</sup>, but it was not long after this pipe was constructed that the works were closed. By 1923, the works had become uneconomic and were abandoned.

An almost identical situation emerged on the Waipaoa River with the Poverty Bay Farmers' Meat Company and a works which was opened in 1916 near Kaitaratahi. By 1923 the com-

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<sup>177</sup>*Ibid.*

<sup>178</sup>Source: Gisborne Museum and Arts Centre.

<sup>179</sup>Robinson 1989, p17.

<sup>180</sup>No title – Gisborne Times, 30.6.1914 (GHB CB).

<sup>181</sup>“Harbour Board.” – Poverty Bay Herald, 29.3.1915 (GHB CB).

pany was insolvent<sup>182</sup>. Again, a principal reason for choosing the site was the ability to remove waste material from the site as cheaply as possible. A simple ditch was dug between the works and the river and blood, fat, offal and even hides were allowed to drift into the river at night. The Nelson Brothers company took over the management of the Waipaoa works after it abandoned the Taruheru plant, but by 1931 this site was also closed down<sup>183</sup>.

While these works were relatively short-lived – albeit with considerable environmental impacts – the abattoir owned by the local authority was a more long-standing environmental nuisance. The abattoir was situated close to the sand dunes on Centennial Marine Drive, at its junction with Pacific Street. The land had been taken from iwi for this purpose under the Public Works Act in 1902<sup>184</sup>, making it controversial with local iwi from the start. Even in its design phase, government agencies questioned the logic of the site. The Chief Veterinarian was asked to comment on the suitability of the site in 1901 and, in a letter to the Health Department, forewarned of the likelihood of direct pollution of the foreshore<sup>185</sup>. The pipeline and slipway employed at the abattoir to take waste matter away from the plant barely reached the high tide mark, but appeared to operate irrespective of the tide cycle. Other wastes were simply washed out of the abattoir and onto the surrounding sand dunes – a “concrete apron slopes away from the loading ramp and washing waters soak away<sup>186</sup>.” In 1945, the local health inspector commented after a visit to the site that the abattoir was “discharging waste liquids and stomach contents of slaughtered beasts onto the sand, approximately sixty feet above the low water mark<sup>187</sup>.” Reports such as this received critical comment both locally and nationally because Waikanae Beach – a nationally-renowned bathing beach – was only a few kilometres north of the discharge<sup>188</sup>. While the impact on Maori resource spaces was equally important, it was apparently overlooked in correspondence between government departments. The combined impact of this outfall and the domestic sewerage outfall at nearby Stanley Road was sufficient to terminate the use of Midway Beach for pipi gathering by 1960<sup>189</sup>.

In the mid-1950s, the abattois discharged an average of nearly 57,000 litres of effluent into Poverty Bay per year<sup>190</sup>. This represented the sewage from 28,000 sheep, 5000 cattle and 2,500 pigs. Although this was a much lower throughput than the Kaiti works, it was, nonetheless, a significant source of pollution. Tests conducted by the DSIR in the early 1970s

<sup>182</sup>Robinson 1989, p17.

<sup>183</sup>Mackay 1949, p318.

<sup>184</sup>Order in Council 4.3.1902 – CT 3D/414. NZ Gazette 1902, p163.

<sup>185</sup>“Site of Gisborne abattoir.” – Chief Veterinarian to Dr. Mason, Health Department, 27.9.1901 (AG 40/1915/2a).

<sup>186</sup>No title. – 27.11.1970 (AG 1971/12/125b).

<sup>187</sup>“Letter.” – Inspector of Health, Gisborne, to Medical Officer of Health, Gisborne, 6.12.1945 (HD 11/1/1).

<sup>188</sup>“Sewage disposal. Borough of Gisborne.” – Auckland Metropolitan Drainage Board, to Secretary for Marine and Director General, Department of Health, 1.10.1951 (MW 48/737/16).

<sup>189</sup>“Brief of evidence of Ingrid Searancke.” – Executive member of the Turanganui Maori Committee, August 1989 (GDC 369-02a).

<sup>190</sup>“re. Sewage disposal ‘Sponge Bay’.” – City Engineer, GBC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2).

suggested that there had been extensive recent and past organic pollution in the vicinity of the abattoir<sup>191</sup>. Yet, the management of the abattoir was somewhat cavalier about the objections to its operation, stating that “for the last 50 years waste from the abattoirs had been discharged out to sea, as it was now, and so far as he knew this had given rise to no complaints. There had been no change in the method of disposal of this waste<sup>192</sup>.”

*Figure 10.6 – The City abattoir at Pacific Street, 1905<sup>193</sup>.*



In the 1950s and 1960s, throughput at the abattoir was increasingly rapidly, so its management decided to upgrade abattoir’s effluent disposal facilities. However, the proposal merely related to a new outfall and one which was only slightly longer than its predecessor: “The pipeline will be under the sand up to half tide mark and thence out to sea eighty feet at a height not more than necessary to give a fall<sup>194</sup>.” The pipeline was never constructed because almost as soon as it was approved, the possibility of connecting the abattoir to the City’s submarine sewerage outfall became a reality<sup>195</sup>. This was not to happen until 1971<sup>196</sup> and, then, only after the threat of prosecution. The connection of the abattoir to the City outfall did not end the matter because it increased the grease loading on that facility leading to even more fat dispersal onto Waikanae Beach and further threats of prosecution.

In 1974, Advanced Meats Ltd. took over the management of the abattoir “when it looked as though it may have to close because throughput was insufficient to carry the expenditure necessary to meet hygiene requirements<sup>197</sup>.” AML improved the visual aspects of the effluent by adding an at-source milliscreening system<sup>198</sup>. This procedure did not limit the bacteriological loading of the waste stream. The AML waste significantly increased the coliform count of the sewage which was discharged from the City outfall. The abattoir was

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<sup>191</sup>DSIR Report AS.2140 – (AG 1971/12/125b).

<sup>192</sup>“Beach polluters face prosecution.” – Poverty Bay Herald, 17.4.1971 (AG 1971/12/125b).

<sup>193</sup>Source: Gisborne Museum and Arts Centre.

<sup>194</sup>Works committee report. – I.J. Quigley, 17.8.1959 (GHB MB).

<sup>195</sup>“Sources of pollution.” – November 1969 (HD 11/1/1).

<sup>196</sup>“Improvements to City Abattoir.” – Poverty Bay Herald, 12.1.1971 (AG 1971/12/125b).

<sup>197</sup>“re. Killing facilities. AML Meats Ltd.” – G.K. Musgrave, Advanced Meats Ltd., to Town Clerk, 29.4.1985 (GCC 00-002-01).

<sup>198</sup>“Midway Beach.” – H.C. Williams, Chief Engineer, GCC, to Secretary, ECCB, 28.9.1981 (GDC 365-04).

closed in 1985, but not before it had contributed to a despoilment of iwi spiritual and resource values along Midway Beach.

### **Watties – at the apex of pollution**

A latter Section of this Chapter comments upon the deliberate and, ultimately, ill-advised zoning of ‘wet’ industries – premises that both consume and discharge a significant amount of water – next to the major waterways of the City. One of the most unfortunate sitings under this zoning scheme was the establishment of J. Wattie Canneries in Gisborne in the early 1950s. The Watties factory was then, as now, bordered by water on three of its four sides – it was at the apex of a triangle formed by the Turanganui River and the Waikanae Creek and with the sea nearby. In fact, the Watties site incorporated a number of factories over the years, including: a cannery, a fish processing plant, a pet food facility which used off-cuts from the GRC freezing works, a tomato processing unit and, of more recent times, a vegetable freezing plant. Today, only the latter plant remains after several site rationalisations.

*Figure 10.7 – The Watties site, straddling Customhouse Street<sup>199</sup>.*



While the principal reason for locating the factory at this particular site was its close proximity to the port, Section 8.2 showed that another reason related to the ease with which land could be reclaimed there. While the ability to discharge effluent into the surrounding water probably was not part of the siting decision, this ability was certainly taken advantage of in later years. In 1951, discharges to water from the Watties site amounted to about 90,000 litres per year<sup>200</sup> – a high proportion of the water supplied to the processing plant.

<sup>199</sup>Source: Gisborne Museum and Arts Centre.

A radial pattern of pipes developed out from the site. Put simply, vegetable waste, plant washings and water used for freezing, boiling and cleaning vegetables was sent out into Poverty Bay on the tide. As a city engineer put it: "The untreated wastes from Watties Canneries discharge directly into the Taruheru River<sup>201</sup>."

The Gisborne Harbour Board gave several permissions in 1959 to the cannery to emit stormwater into the harbour, having been assured that these discharges would include no trade wastes. However, by 1968, it was discovered in an inspection that a variety of trade wastes were being sent to the stormwater pipes, including vegetable matter and over-runs of tomato sauce<sup>202</sup>. This inspection also unveiled that "a considerable quantity of waste from the pet food plant was seen on the mud flats opposite a stormwater drain<sup>203</sup>." Another of the permits issued in 1959 related to a single right to emit water from the boiling house. By 1968 it was discovered that there were an additional eight pipes running from the boiler house to the river without authority, as well as many other pipes of unaccountable origin. It is not surprising that the mudflats from the railway bridge to Waikanae Creek were "in a foul condition with a most offensive smell<sup>204</sup>." These findings were widely published in the local media and evoked a response from the GCC. It wrote to the company quoting local bylaws in its call to "cease disposing water into the Turanganui River which contains free solids<sup>205</sup>." Little more than strongly worded letters were directed at the processor.

These conflicts in 1959 suggested that there was considerable confusion as to what was being discharged from the Watties site. This confusion was to increase as time progressed. The full extent of unauthorised, unpermitted and environmentally detrimental discharge pipes or connections to the stormwater system was only revealed in 1981. The following letter sent to the manager of Watties is quoted in depth because it highlights the magnitude of the pollution problems at the processor's site. The letter relates to 20 pipes that were discovered to radiate out from the Watties plant<sup>206</sup>:

Resulting from water sampling analyses and visual observations of discharge pipes leading to the Turanganui River and Waikanae Creek a combined inspection with Mr G. Menzies of your Company was carried out on the 20th August 1981... The pipes are numbered in sequence from [the] mouth of the Turanganui River upstream.

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<sup>200</sup>re. Sewage disposal. 'Sponge Bay'." – H.C. Williams, Chief Engineer, GCC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2).

<sup>201</sup>"Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/2).

<sup>202</sup>"Gisborne Harbour Board. Pollution of Harbour." – 28.5.1968 (GHB MB).

<sup>203</sup>*Ibid.*

<sup>204</sup>*Ibid.*

<sup>205</sup>"Refuse disposal." – H.C. Williams, Chief Engineer, GCC, to Manager, J. Wattie Canneries Ltd., 26.2.1959 (GCC 33/1).

<sup>206</sup>re: Water rights." – A.W. Punton, Water Rights Officer, ECCB, to G. Menzies, J. Wattie Canneries Ltd., 26.8.1981 (ECCB 30/10).

1. Yard washings from fishmeal plant surrounds. Highly offensive with blood and other liquid waste. Should be piped to sump leading to pump well and not to river outfall...
2. Steam pipe from fishmeal dryer. Extremely offensive waste emanating here and should be eliminated...
7. Water Right 780032. Disposing of continuous blowdown from boilers. At present also carrying yard washings and liable to catch any overflow from surface drains...
10. Two pipes. This pipe has on occasion been suspected of discharge of doubtful quality...
13. Has contained milky substances and also dark brown liquids on occasions...
15. This pipe is a major cause of concern with high temperature, high pH and at times high phosphates. Water Right 780034. This discharge would be better directed to the sewer. The alternative is treatment which may be difficult practically and costly...
17. Only intermittently running. Showed phosphate on one analysis...
19. This is apparently a Gisborne City Council stormwater outlet but has a connection to your Company's premises. This pipe has at times carried large quantities of vegetable matter...
20. This pipe is an overflow pipe from the pumpwell situated by No. 2 Tunnel and crosses Customhouse Street to discharge under the rail bridge over the Waikanae. The pipe was discharging into the Waikanae Creek considerable quantities of waste including fat for several days around 10-13 August. This discharge will need to be given attention and will require a water right application.

GCC and Catchment Board staff were very surprised at the scale of this problem and, from this time, both agencies monitored the plant more closely. Later in the year it was discovered that most of the processor's recording equipment had been turned off for a very long time, meaning that many pollution events had gone unrecorded<sup>207</sup>. The closer attention of the local authorities led to a \$60,000 refit of the factory's effluent system<sup>208</sup>.

Yet, the Catchment Board singularly failed to impose its authority on the company in terms of water rights. In 1985, only five water rights existed for the company's many outfall pipes<sup>209</sup>. Two of these authorised discharges into the Waikanae Creek and three into the Turanganui River<sup>210</sup>. Like the Catchment Board, the GCC's motivation to address the pollution from the Watties site was delimited by its conflation of environmental damage with 'public nuisance.' If the public did not perceive a problem – such that they did not smell it, see it or swim in it – then there was no problem. When the Medical Officer of Health criticised the Council's inaction over the cannery, the City Engineer commented

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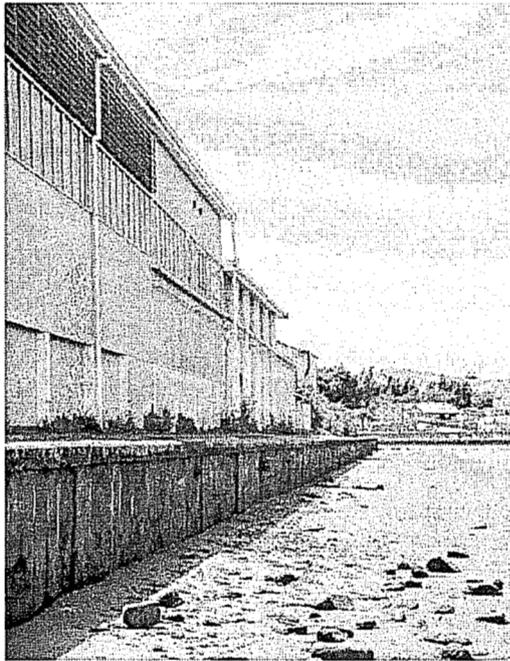
<sup>207</sup>"Waste overflows into Turanganui River." – H.C. Williams, Chief Engineer, GCC, to Manager, J. Wattie Canneries Ltd., 3.9.1981 (ECCB 30/10).

<sup>208</sup>T. Collingwood, Manager, J. Wattie Cannery Ltd., to Town Clerk, GCC, 25.9.1981 (ECCB 30/10).

<sup>209</sup>A.F. Armstrong, Chief Engineer, ECCB, to Manager, J. Wattie Canneries Ltd., 7.8.1985 (ECCB 30/10).

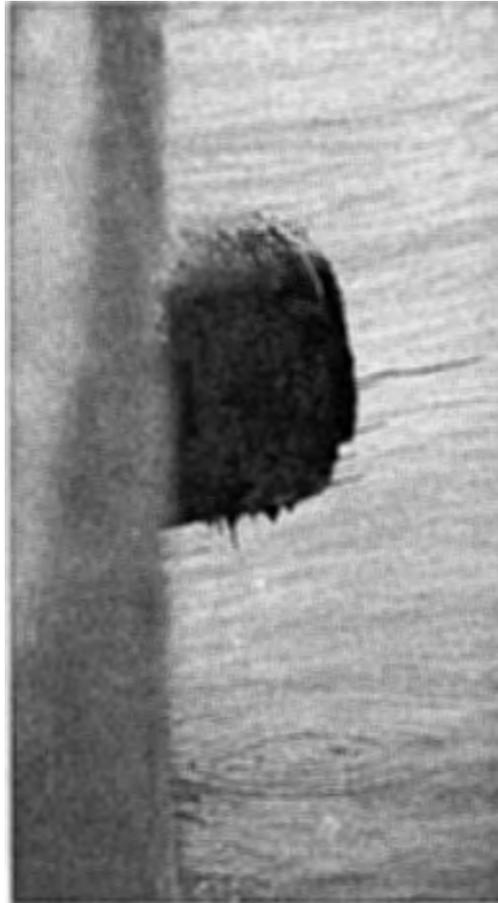
<sup>210</sup>ECCB-RWB 1989, p11.

*Figure 10.8 – Outlets from the Watties site into the Turanganui River.*



*Above: A retaining wall through which several pipes – including the one at right – exited to the river. As is shown, the Watties factory was built very close to the river.*

*Right: One of the twenty pipes enumerated in the letter from the ECCB to Watties' management in 1981.*



that there were no serious problems because “Watties only discharges vegetable waste<sup>211</sup>.” This view underestimated the damage that vegetable waste can impose on the water system through a high BOD. Moreover, it ignored the fact that the Watties’ effluent included a range of noxious components such as ammonia which is a component of freezing water.

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<sup>211</sup>“City Council’s efforts to combat problem of trade waste.” – Poverty Bay Herald, 10.1.1970 (GisMUS VF-Freezing Industry).



*Figure 10.9 – Watties: too close to the Waikanae?*

The problems of the site were attenuated to some degree when the factory was linked to the submarine sewerage outfall in 1971. When the City was in the process of designing this outfall, the Watties waste stream represented something of a dilemma. As with the GRC waste, the Council obviously did not want to account for

the Watties effluent in its plans. This would have required expensive reticulation work in order to link the Watties site with the outfall<sup>212</sup>, but the GCC knew it could recover the money from the company. In the end, the issue required considerable force on the part of the PAC/LALB to ensure that the GCC lived up to the conditions of the submarine sewerage loan of 1960. That loan had stipulated that the submarine outfall should take the cannery's waste. After the remaining Watties' waste was transferred to the City outfall, however, problems still remained. Following a DSIR study which was commissioned by the Catchment Board in 1982, it had been discovered that an unsightly 'oil slick' coming the outfall was actually fish oil coming from Watties' effluent. The City Health Inspector believed that:

This result, added to the information we are getting from the routine daily fat determinations is beginning to produce pretty damning evidence against Watties and their lack of enthusiasm about removing fats and other undesirables from their effluent before it is passed on to GCC for disposal<sup>213</sup>.

In the years since 1971, local authorities have had mixed success at forcing at-source treatment upon the factory which is widely accepted to be antiquated, with inefficient and unpredictable machinery.

The most worrying aspect of the history of the Watties site is that the pollution continued into the 1990s and there remain environmental problems at the plant. For example:

- "...hopper waste [which] overflowed forcing solid matter to build up and over flow into the storm water system<sup>214</sup>."
- Corn waste and ammonia discharges<sup>215</sup>, with the latter tested at 485g/m<sup>3</sup>."

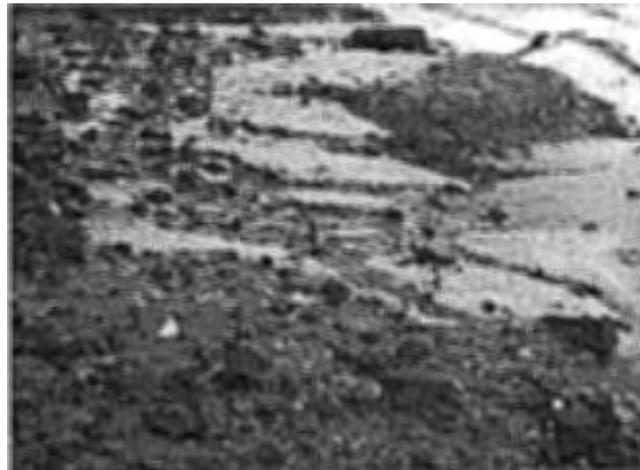
<sup>212</sup>"Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 33/1).

<sup>213</sup>"Black deposit from outfall." – R.C. Hall, City Health Inspector, to H.C. Williams, GCC, 3.12.1982 (GCC 37/4).

<sup>214</sup>"re: Discharge into Turanganui river." – C. Mitchell, Process Manager, Wattie Frozen Foods, to A. Jones, Water Rights Officer, GDC, 12.2.1990 (GDC 366-02).

These are just a few examples of the type of pollution that persists at the site. Although the pollution potential of the processing facility has declined since the closure of the pet foods division in 1997, that potential remains high. The siting of the Watties factory in such close proximity to waters which were traditionally important to local iwi stands as a sad reminder of the ignorance of the history of Maori resource spaces in the district.

*Figure 10.10 – Spill of corn waste into Waikanae Creek ex. Watties, 1995.*



**Above:** Cornwaste like this has a high Biochemical Oxygen Demand (BOD) and is associated with other noxious substances like ammonia from freezing waters.

**Left:** Remnants of an ammonia and cornwaste spillage, with testing bottle on top of pipe.

## The new primary processors

It should also be noted that Watties was not the only vegetable processor in the area with a questionable environmental record. Cedenco – a tomato paste manufacturer – was established alongside the upper reaches of the Waikanae Creek in 1986. Throughout the 1990s, there were a number of pollution events from this site. As it would be repetitious to account for all of these events at this point, only one has been identified for further comment. In December of 1991, a Gisborne resident alerted the Parliamentary Commissioner for the Environment (PCfE) to a spillage into the Waikanae Creek from Cedenco's biogas digester:

The correspondent has raised with the Commissioner the issue of the District Council's attitude to enforcement of environmental standards. The opportunity to enforce standards through prosecution exists through legislation. The opportunity to enforce standards through actions to prevent any further instances of pollution is also a valid

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<sup>215</sup>Complaint 95015 (GDC COM95).

method. From the information supplied, it is clear that the District Council has chosen the latter in this particular instance<sup>216</sup>.

The resident's letter contended that the GDC was failing to enforce environmental standards on industry because of its status as a unitary authority<sup>217</sup>. In the view of the correspondent, there was insufficient separation between environmental enforcement and the other concerns of a territorial authority. This separation is evident elsewhere because environmental enforcement is normally carried out by regional councils – agencies which are not responsible for local development, nor maintaining the economic profile of a district. Essentially, the suggestion was that such unitary authorities as the GDC have an inherent conflict of interests in attempting to regulate the environmental outcomes of industry while simultaneously being responsible for maintaining industrial growth.

In assessing these concerns, the PCfE wrote to the GDC for an explanation. The Council replied that:

...in respect of the Cedenco spill the Planning and Regulatory Committee, after reviewing all the circumstances, resolved that prosecution was not appropriate...Ongoing dialogue with the Company continues in a most cooperative and practical vein in respect of preventative and protective procedures and facilities...Council has not set pre-emptive criteria for prosecution in respect of waterway pollution... Council's approach seeks prevention rather than cure and sees pillory of accidental offenders somewhat counter productive<sup>218</sup>.

This statement reflects the tone of GDC correspondence with the company itself:

Following the accidental discharge of liquid from your biogas generator on Wednesday the 9th October the Gisborne District Council seeks your co-operation to achieve modifications to the gas digester tank surrounds to help avoid any similar spills in the future<sup>219</sup>.

Outwardly, the logic in this 'cooperative' stance appears acceptable. In many cases, prevention of industrial pollution through cooperation with business is more effective than regulatory intervention. However, this type of logic can easily mask the truth of the relationship between the GDC and local industries. As will be shown in Section 10.5, Gisborne industries effectively blackmailed the local authority into accepting higher than acceptable levels of environmental degradation. The Council's uneasiness about environmental enforcement of industry is more closely related to its conflict of interests in this matter. Moreover, there was actually little evidence of cooperation. The PCfE's conclusion that "there appeared to be no fundamental reason why a unitary authority cannot deliver adequate environmental management<sup>220</sup>" was based on insufficient attention to the local

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<sup>216</sup>J.A. Boshier, for Parliamentary Commissioner for the Environment, to CEO, GDC, 29.1.1992 (GDC 366-01).

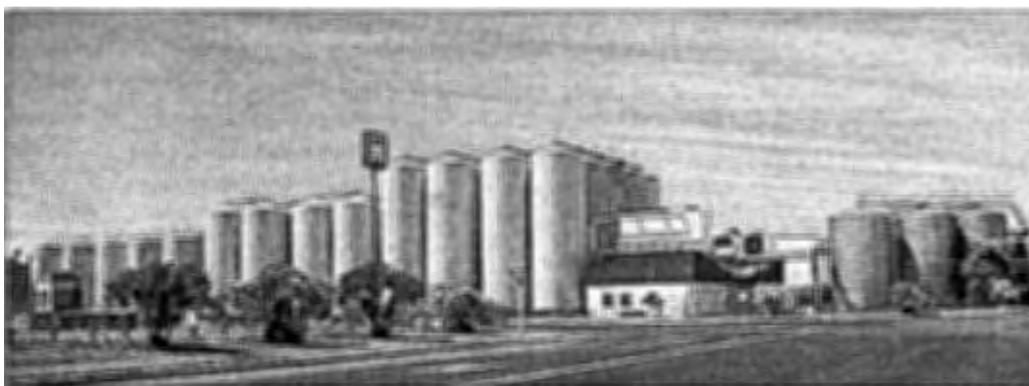
<sup>217</sup>J. Kape, Interim Chair, Tairāwhiti Branch of Maruia Society, to Parliamentary Commissioner for the Environment, 16.12.1991 (GDC 366-01).

<sup>218</sup>R. Elliott, CEO, GDC, to J.A. Boshier, Parliamentary Commissioner for the Environment, 5.2.1992 (GDC 366-01).

<sup>219</sup>R.C. Miller, Regional Conservator, to Manager, Cedenco Foods, 14.10.1991 (GDC 366-01).

political context. More will be said about the ability of a unitary authority to protect *Maori* environmental interests in Section 11.5.

Figure 10.11 – The Montana winery complex



The district's wineries have also contributed to a relatively high number of pollution events in local rivers. Although the stereotypical image of a winery reflects a 'cottage' industry, such wineries as Montana in Lytton Road owe more to an industrial lineage. Montana Wines initially showed an interest in establishing a large-scale winery in Gisborne at the end of the 1960s. Both the Health Department and the CCC questioned the proposed location of the plant which was close to Waikanae Creek:

The County Clerk 8/9/69...makes it clear that there will be effluent...cast into Waikanae Stream by Montana Wines Ltd project. This Council's interest...is not limited to the abatement of the inflow of 'offensive' material but in the abatement of the inflow of any kind of organic material which can consequently call on and use up the oxygen inherently in solution in the natural waters of the Waikanae Stream...The introduction of any decomposable organic material, even in very small quantities, can do permanent harm to the life balance in such water and needs to be prevented before any degree of experimentation is allowed in that respect<sup>221</sup>.

The Medical Officer of Health in his 3/12/69 reply commenting on the information in turn supplied to him by the Cook County Clerk indicates an awareness of the Waikanae Stream's shortcomings as a place to receive industrial effluents<sup>222</sup>...

The concern of the City Engineer is perhaps ironic – downstream of the proposed site, the City was allowing the disposal of organic matter from other processing industries into the Waikanae Creek. Ultimately, the site was permitted and Montana's factory was established in 1971 with only minor alterations to the initial plan. Since that time there have been sev-

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<sup>220</sup>H.R. Hughes, Parliamentary Commissioner for the Environment, to J. Kape, Interim Chair, Tairawhiti Branch of Maruia Society, 2.3.1992 (GDC 366-01).

<sup>221</sup>"Department of Health letter 3/12/69 re. Montana Wines Ltd." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 10.12.1969 (GCC 37/4).

<sup>222</sup>*Ibid.*

eral occasions when effluent has been discharged from vats at the winery, leading to discharges into Waikanae Creek with an extremely high BOD.

During the 1980s and 1990s wine production has accelerated markedly in Gisborne District. Corbans also developed a factory in 1971 and Penfolds followed in 1981. As a result of this expansion, the number of reported discharges from wineries into creeks and rivers of importance to Maori has escalated. One of the most commonly referred to sites of viticultural pollution was Matawhero Wines, which is located alongside the former Matawhero oxbow of the Waipaoa River. The site is historically important to local Maori<sup>223</sup> and is also a wildlife refuge holding some of the last examples of the indigenous fauna of Poverty Bay. In 1990, there was a discharge into the waters of the refuge with a "very high BOD and also high levels of sulphides. The BOD was so high that...it was impossible to obtain a reading<sup>224</sup>." Sulphur, which is used in the production process of wine as a stabiliser and sterilant, is highly toxic to aquatic life. Yet, it appears that the problem at the Matawhero Winery was both ongoing and poorly regulated by the GDC. In a follow-up visit to the site, a Council employee found that the "dissolved oxygen content, 0.3gO/m<sup>3</sup> was just above the point of complete depletion...a situation [which...] would not be conducive to a healthy aquatic environment<sup>225</sup>." The siting of these types of premises near to waterways of significance to Maori reflects the fact that their environmental values were never taken into account in the spatial planning for industrial activity.

## Twilight industries

Watties, Cedenco and Montana are just some of the industrial premises that pollute the Waikanae Creek. Indeed, the walk along Waikanae Creek is punctuated by many facilities and sites which fall into under the heading 'twilight' industry – business which support heavier forms of industry by manufacturing their more noxious inputs, distributing their outputs and processing or otherwise disposing of their waste. The following excerpts indicate the scope and seriousness of the problems within Gisborne's industrial zones:

The New Zealand Railways Corporation has a current Water Right ...to discharge treated wastewater from the Railway Yards Turntable Pit into Waikanae Stream...ME Jukes and Son Limited have a Water Right to discharge vehicle and metal aggregate washing wastewater from ponds into Waikanae Stream...Columbine Hosiery Limited has a water right to discharge industrial cooling water into a drain leading to Waikanae Stream...with a daily limit of 778.0 cubic metres per day<sup>226</sup>.

Discharges...from Oppenheimer's Casing Factory near...Lytton Road; the Gas Company's discharge of ammonical liquor (at 450 g/hr) to the Taruheru River<sup>227</sup>.

<sup>223</sup>See Section 4.3.

<sup>224</sup>"Pollution report." – I. Petty, Investigating Officer, GDC, 16.3.1990 (GDC 366-02).

<sup>225</sup>re: Discharge into Matawhero Wildlife Reserve." – P. Nugent, Scientist, Technical Services, to I. Petty, Water Rights Officer, GDC, 6.5.1990 (GDC 366-02).

<sup>226</sup>ECCB-RWB 1989, p11.

<sup>227</sup>"Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City." – H.C. Williams, City Engineer, GCC, to GCC, 12.11.1958 (GCC 37/2).

...effluent from the Gas Works is killing fish in the Taruheru River<sup>228</sup>.

Figure 10.12 – The legacy of unwise (industrial) zonings



Almost by definition, pipes have to have an origin, a terminus and must travel through some substance. In the industrial corridor, the terminus is usually the Waikanae Creek, the substance is often an old landfill and the origin is frequently close to an abandoned industrial site.

The wool scour at Stanley Road could also be described as a twilight industry. In a “peak month it scoured 500 bales of wool using 15 gallons of Atlas Renox detergent and 1000 lbs of soda<sup>229</sup>.” These chemicals – which are extremely toxic – along with wool grease were initially disposed of through the Stanley Road septic tank, before being sent (untreated) through the City’s submarine sewerage outfall<sup>230</sup>. Other toxic chemicals were directed into City rivers. In 1969, a complaint that hundreds of fish had died in the Waikanae Creek was investigated. This investigation proved that a local bus company had deposited 30 gallons of the highly toxic chemical Tergusol into a drain leading into the Waikanae Creek<sup>231</sup>. Such dumping incidents were not uncommon in the recent history of the Creek and they are the inevitable outcome of the shifting of the City’s industrial focus towards that part of town.

Again, it would be repetitious to outline all of the discharges of this nature. Suffice to say, however, that many of them were directed to a waterway of historic and resource importance for local iwi. In recent years, Gisborne has had to face up to its history of industrial

<sup>228</sup>“Effluent from Gas Works.” – 22.12.1930 (GHB MB).

<sup>229</sup>“REF: Sewerage disposal.” – H.C. Williams, Chief Engineer, GCC, to Manager, Gisborne Wool Scour Company, 6.2.1958 (GCC 37/1).

<sup>230</sup>*Ibid.*

<sup>231</sup>“Pollution of Waikanae Creek.” – Poverty Bay Herald, 18.9.1969 (HD A464/27b).

*Figure 10.13 – Environmental neglect and industrial pollution of Waikanae Creek*



**Above:** hazardous runoff – an inevitable outcome of zoning a water margin as industrial.  
**Right:** an open drain running into Waikanae Creek near the Cedenco site.

pollution. Although many of the worst discharge facilities have been closed down, they remain pollution hazards well after their closure. The Gas Works, mentioned above, is probably one of the worst contaminated sites in the City even though it has been closed for many years. Utilising monies from the Sustainable Management Fund (Ministry for the Environment), the GDC has recently composed a register of all contaminated sites in the District<sup>232</sup>. In total, the research for the register documented a staggering 772 potentially contaminated sites, with 43 identified as requiring special attention. Many of the sites in this latter category – including most of the 21 contaminated landfills<sup>233</sup> – are located alongside the Waikanae Creek.

<sup>232</sup>Ferris, 1997.

<sup>233</sup>Refer to Section 8.3.

## 10.5 Integrated (mis)management

The pollution discharges from the sewage system and those of industrial premises are obviously inter-related. At one level, they often shared the same outlet to waterways – sewage and industrial effluent were discharged simultaneously from sewerage system overflows. At another level, both forms of pollution frequently shared the same environmental management structure. This Section details some of the general features of the local system of environmental management which should have protected the Waikanae Creek, and the Taruheru, Waimata and Turanganui rivers.

### Facilitate industry; weaken environmental regulation

The environmental history of the inquiry district highlights that, in some instances, local authorities were not mandated to protect particular types of environment, nor iwi attachment to specific environments. In these examples, a strong case can be made for a Crown omission. However, in the majority of cases of environmental damage which have affected iwi in Poverty Bay, local authorities had the capacity to intervene but chose not to. The argument is made throughout this report that these cases still stand as Crown omissions: the Crown fails as a Treaty partner if it fails to ensure the fulfilment of its national policies at the local level. If the Crown had fulfilled its national environmental policies, there would have been many fewer iwi grievances at the local level. Likewise, it is the Crown's duty under the Treaty to ensure that local authorities and the planning system do not alienate iwi resource interests. To explicate fully this argument it is necessary to determine *why* the various local authorities decided not to enforce environmental laws to their fullest extent. As will be shown, the principal reason for this relates to the perceived dependence of the City on polluting industries which in turn yielded those industries more power in environmental decision-making than would normally be the case.

In correspondence between City staff and managers of industry, there are many letters relating to the economics of environmental compliance. It is obvious that the Council perceived Gisborne City as an isolated and economically vulnerable town that would lose its industrial base to other centres unless every possible move was made to appease business interests. When the GRC objected to the classification of Poverty Bay waters in the late 1980s, its notice of objection stated that the classification placed “an unduly heavy burden upon it to comply with the proposed classification<sup>234</sup>.” Later, this argument was developed further within the evidence of the GRC at the hearing for the classification:

The long title of the [Water and Soil Conservation] Act makes specific mention that the Act recognises the needs of industry. ‘For ensuring that adequate account is taken of the needs of primary and secondary industry.’ Where an industry is as important to Gisborne as GRC and the industry is in a loss situation the closure of freezing works and the rationalisation which the major companies are making in respect of the large export freezing works it is most important that financial pressure be reasonable. The possibility of capital costs in respect of effluent control being

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<sup>234</sup>“Notice of objection.” – Gisborne Refrigerating Company, 25.8.1989 (GCC 01-233-07).

taken to the extent that other facilities are better propositions commercially than the Kaiti facility cannot be discounted lightly...A system for removal of grease, oil and suspended solids would be subject to large costs. Presently the company would not seem in a position to meet them<sup>235</sup>.

Of itself, this type of argument is not necessarily of concern to the Waitangi Tribunal, nor is it particularly surprising. It becomes important when it can be shown that this type of argument swayed a local authority to the extent that it alienated Maori environmental interests and, indeed, this was the case in Gisborne. Although the GDC was not the agency responsible for the classification, its attitude to industrial interests was shown in its own submission on the water classification:

The SA classification for Kaiti Beach and SD classification for the Gisborne Refrigerating Company (GRC) outfall together with the minimal radius of the GRC SD rating and its proximity to Kaiti Beach, may cause some difficulty for the GRC. This could result in the economics of the GRC operation becoming relatively less favourable or could cause pressure for acceptance of the GRC flow into the City reticulation system. Either of these alternatives of the GRC [could lead to] significant problems for the City<sup>236</sup>.

Earlier, the City Mayor had commented that "closing the meat works would be serious for Gisborne<sup>237</sup>." The repeated overruling of nationally constituted Treaty rights, and environmental legislation that might have protected those rights, by local economic objectives represents failure of national legislation, and a Crown omission in terms of the Treaty.

The argument presented by managers of the Kaiti works was repeated in 1993 during resource consent hearings for the works' outfall. The impact assessment submitted with the application for resource consent was dominated by economic concerns<sup>238</sup>. For example, whereas one might have expected a significant portion of a section entitled 'Socio-economic and cultural effects on the community' to detail impacts upon Maori fisheries at Kaiti, that section was all but silent on the issue. Rather, the section was dominated by the social impacts of closing the meatworks.

If the Company was required to adopt a land based treatment system, some form of chemical treatment, or discharge into the city's sewerage system, this would have a significant additional capital cost. The operation could not financially support such an added capital investment and it is likely that the Company would close the works down<sup>239</sup>.

<sup>235</sup>Evidence presented on behalf of the Gisborne Refrigerating Company at the Preliminary Classification hearings – November, 1993 (GDC 369-03).

<sup>236</sup>"Poverty Bay and coastal waters preliminary classification." – J. Wells and J. Warren, Engineering and Works, GDC, to City Manager, 7.8.1989 (GCC 01-233-07).

<sup>237</sup>"Report of meeting between Mayor, Engineer, Town Clerk (all GCC) and District Commissioner of Works, Napier, Director of Division of Public Health, Wellington, Medical Officer of Health, Gisborne, Senior Health Inspector and Representatives from Mow Public Health, Engineering section." – R.C. Lough, Public Health Engineering Section, Ministry of Works Head Office, Wellington, 22.8.1960 (HD 1/1/1).

<sup>238</sup>"Environmental impact assessment." – Weddel Kaiti Ltd., November 1993 (Submissions on CP92001-93011).

<sup>239</sup>"Environmental impact assessment." – Weddel Kaiti Ltd., November 1993 (Submissions on CP92001-93011).

The economic arguments obviously influenced the hearing committee to a significant degree. In its report to the Minister of Conservation – a report recommending that the works' outfall should continue to operate – the hearing committee was moved to comment at length on the economic importance of the works, stating that it was “the largest employer in Gisborne, [with] annual wages and salary bill about \$20m<sup>240</sup>.” It is important to recognise that this type of industrial blackmail and its impact on the effectiveness of local environmental regulation was not limited to the freezing works. Rather, it was a widespread discourse which affected the outlook of the GCC: protecting the industrial base of Gisborne City was more important to the local authority than was protecting, in general, the environment or, in particular, Maori environmental values.

The perception of Gisborne's economic vulnerability that was accepted by the local authority led it to actively facilitate the conditions for industrial growth. While this is not an uncommon pursuit for a local authority, it was unfortunate that the attempt to facilitate industry should lead to the location of industrial facilities in all the wrong places. In two phases – first during the latter half of the 1950s and, second, during the mid-1970s – the Gisborne City Council shifted the industrial focus of the town to the Awapuni-Waikanae area. The progressive zoning of this corridor as industrial land accounts for most of the pollution problems that were to affect the Waikanae Creek.

The first phase of this re-zoning was an outcome of the commissioning of the submarine sewerage outfall at Stanley Road in 1965. With the new outfall on the southern side of the Turanganui River, it appeared logical to locate the ‘wet’ industries on that side of the river. Thus, a recommendation was made that “water using industries be fostered in Awapuni and Victoria Townships within reach of the Western and Eastern Interceptors and that the Town Plan continue with intention to zone such areas for industrial use<sup>241</sup>.” In turn, this (re)zoning “shifted town growth away from the east [relocating it] westwards. That in turn founded the next secondary school at Lytton Rd instead of Kaiti...and moulded the expansions of the city westwards into Cook County instead of towards Wainui Beach<sup>242</sup>.” Because of its emphasis on primary processing, Gisborne had many ‘wet’ industries. In some ways, it made sense to locate these effluent-producing industries near the outfall. The net environmental benefit of this move was negative, however, because the hydrogeology of the south/west of the City was always going to be more prone to pollution than that of the north/east. Up until the late 1950s, Kaiti had been targeted for industrial growth and there would have been far fewer pollution incidents there because of more satisfactory conditions in its underlying hydrology. The move to the south/west was based on cost: it would have been expensive *in the short-term* to connect industrial premises in Kaiti to

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<sup>240</sup> “In the matter of the Resource Management Act 1991 and in the matter of application by Weddel New Zealand Ltd. for certain resource consents.” – Report and Recommendations of the Special Committee to Minister of Conservation, November 1993 (GCC 01-330-04).

<sup>241</sup> “Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City.” – H.C. Williams, Chief Engineer, GCC, to Council, 12.11.1958 (GCC 37/2).

<sup>242</sup> “Gisborne's submarine sewerage disposal.” – H.C. Williams. Report for interested parties, vested with the Council, 4.5.1988 (GCC 37/6).

the outfall at Stanley Road. Not for the first nor the last time in Gisborne City, long-term environmental interests were prostituted to short-term financial expediency.

The second phase of industrial re-zoning in the Awapuni-Waikanae corridor coincided with the growth of such wet industries as wineries in the early 1970s. By this stage industrial expansion along the Waikanae Creek was a fait accompli: the first phase of industrial expansion inevitably led to a second because it made sense for all processing industries and the associated companies on which they were dependent to be in the same place. Restraints on industrial expansion in the area were lowered, leading to a significant in-filling of the zone with new companies. This phase attracted the attention of the Wildlife Service in 1975:

Waikanae Creek which flows through the city is a habitat of several species of wildlife and fish, particularly in its upper reaches. These values will probably be lost by development of the land zoned industrial... With proper planning, Waikanae Creek could retain existing values, and these could even be improved by simple management; particularly by elimination of reclamations and pollution... My recommendation is therefore, that the planning aspects affecting Waikanae Creek, be reconsidered in the review, with the objective of retaining and enhancing existing values<sup>243</sup>.

These values and the advice of the Wildlife Service were ignored. Moreover, there appears to have been no capacity for local iwi to participate in the decision-making process for the re-zoning of the area. The lack of recognition of the Treaty in the Town and Country Planning Act 1953 can again be attributed to this oversight.

### **The inability of the Catchment Board to protect environmental quality**

The Water and Soil Conservation Act 1967 clarified and augmented the mandate of catchment boards to protect water quality. As has been shown on a number of occasions in this Chapter, however, the local Catchment Board was frustrated in its limited attempts to fulfil this mandate. A principal problem for the Catchment Board was that its responsibilities within the City limits were by no means clearly enunciated in law. In this context, it was possible for the GCC to contest the ECCB-RWB's mandate whenever it attempted to intervene. For example, in 1979 the Board wanted to initiate a monitoring regime for city rivers. This was largely in response to the City's persistent failure to monitor environmental quality in these rivers and its obstinate refusal to share data for those places where monitoring had been completed. In response to a request to begin the testing regime, the City Health Inspector stated that:

Your reference to the responsibility of your Board in relation to water quality and to our 'isolated samples' suggests that there is some misunderstanding of the role of

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<sup>243</sup>"Town and Country Planning Act 1953. Gisborne City District Scheme proposed review." – Secretary for Internal Affairs and Controller of Wildlife, to District Commissioner of Works, Napier. 18.2.1975 (WS 11/21/10).

local authorities in this work and the nature of the City Council's efforts over the past seven years<sup>244</sup>.

The Health Act 1956 encouraged local authorities to monitor water quality, just as the Water and Soil Conservation Act 1967 mandated catchment boards to carry out this activity. Rather than resulting in a task which completed doubly well, the overlapping mandates led to a situation wherein neither agency satisfactorily monitored local waterways.

In effect, the Catchment Board was in competition with the GCC and, especially, the Council's desire to appease local industry. After considerable public scrutiny of polluting industries in 1973, the ECCB-RWB attempted to increase its pressure on the GRC freezing works. The attitude of the GCC to this attention was not conducive to the enhancement of local environmental quality: "The freezing works can resolve the problem if not thwarted by the Regional Water Board when the matter comes before it for appraisal of the objections<sup>245</sup>." Yet, the two agencies attempted at length to portray a unified approach to the public. As was the case for the management of the Paokahu landfill, the ECCB-RWB pursued only a 'realistic' enforcement of its duty *vis-à-vis* the GCC.

This downplaying of tension between the two authorities at the expense of environmental quality is most notable in the case of the sewage overflows:

There is a good argument for the Gisborne City Council and the East Cape Catchment Board being seen to be dealing jointly with overflows rather than individually...The City needs to carry out further work on its sewerage system and needs to ensure that Council and Board are seen to be working together rather than in opposition to each other<sup>246</sup>.

It must also be said that the public's expectations and standards change and the acceptability of any system is related to the acceptability of its cost. No point is served in merely criticizing, [and] there needs to be a pragmatic joint approach to satisfying realistic current standards...There appears little point in the Board's ratepayers supporting a Board prosecution of a City unauthorised discharge and those same ratepayers supporting the City in defending its actions on the grounds that it had no option<sup>247</sup>.

The latter quotation shows that the Catchment Board's motivations were also closely tied to local political circumstances rather than nationally-constructed mandates and legislative responsibilities. While this remained the case, there was little scope to include iwi interests in local environmental management.

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<sup>244</sup>"Water standards city waterways" – R.C. Hall, City Health Inspector to Secretary, PBCB-RWB, 30.3.1979 (GDC 365-04).

<sup>245</sup>"Gisborne Herald newsitem, 24.5.73. Gisborne Conservation Society and sewerage disposal system." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 25.5.1973 (GCC 37/3).

<sup>246</sup>"Minutes of a meeting held with the Catchment Board to discuss sewage overflows." – 31.1.1984 (GDC 365-04).

<sup>247</sup>"City sewerage water rights. Sewage discharges." – A.F. Armstrong, Chief Engineer, ECCB-RWB to Town Clerk, GCC, 19.12.1985 (GDC 365-04).

While Catchment Board archives suggest that it *was* concerned about sewage overflows, in a meeting between it and the GCC to discuss the issue, the ECCB-RWB was eager to prove that “the Board desire the best relationship possible with other local authorities in the region<sup>248</sup>.” The GCC read this to mean that “the Boards’ attitude is cooperative and has softened considerably since discussions commenced” and that “a spirit of cooperation existed rather than one of confrontation<sup>249</sup>.” Eventually, a liaison committee was formed by the two authorities to address the issue – highlighting this desire to work together rather than enforce the law<sup>250</sup>. Outside of the public realm, however, cooperation certainly was not the case. Simple requests by the Board to the Council for information were ignored on several occasions. Eventually, when the GCC were forced to supply information, it did so in a most devious manner, as exemplified in an internal directive to provide the requested information:

Please make some attempt to add an indication of overflow pipework onto the...record sheet ...so that any subsequent witch hunt carried out by the ECCB or anybody else cannot substantiate a general statement that our ignorance of the presence of the overflows in 1983, an ignorance now disclosed by the revelations of 1983, has been deliberately or negligently allowed to continue to escape reference in the ‘Drainage Map’ of the GCC records<sup>251</sup>.

Retrospective adjustments of the records such as these did not successfully hide the environmental negligence of the Council. Plainly, the working relationship between the two authorities was not constructive, resulting in a lack of environmental enforcement of the GCC by the ECCB. At times, the GCC openly defied the agreed protocols of the liaison committee. In 1987, for example, it constructed new reticulation pipes over the Waikanae Creek which were equipped with overflow siphons. It created the work without even informing the ECCB, revealing the failure of the cooperative approach:

Following our amicable discussion and your assurances of honouring the obligation of your Council...I was hopeful that omissions in this regard were a thing of the past. Apparently not so. It would be regrettable and contrary to our agreed goal of mutual understanding and assistance if such a situation were to continue. A feature of the crossing that intrigues me is the inclusion of what appears to be a siphonic overflow. Such a device, whilst hydraulically effective in discharging the sewer, does little to assist ambitions for a controlled Waikanae waterway and recreational amenity.<sup>252</sup>

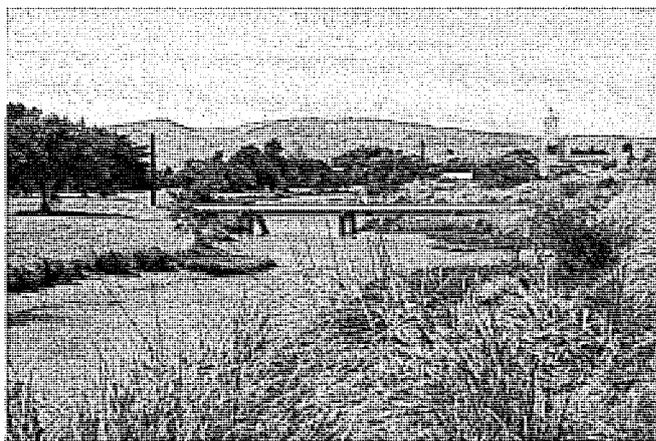
<sup>248</sup>“Minutes of a meeting held with the Catchment Board to discuss sewage overflows.” – 31.1.1984 (GDC 365-04).

<sup>249</sup>“Report of a meeting between the Gisborne City Council and the East Cape Catchment Board Representatives.” – 14.12.1984 (GCC 01-212-03).

<sup>250</sup>“Gisborne City Council sewage discharges.” – A. Armstrong, ECCB, to Chairman of Water Committee, ECCB, Report 6960, n.d. (GDC 365-04).

<sup>251</sup>Marginalised comment on “Received with letter from City Engineer.” – 15.7.1983 (GDC 365-04).

<sup>252</sup>“Waikanae Ck sewer crossing.” – A. Armstrong, ECCB, to General Manager, GCC, 15.5.1987 (GDC 365-04).



*Figure 10.14 – Sewerage crossing Waikanae Creek*

The GCC reply to this letter simply admitted that the Council had not received permission to carry out the work and that it would do so in future<sup>253</sup>. Despite the seriousness of the breach of protocol and the potential for gross pollution episodes from the pipe crossing, the ECCB-RWB let the matter stand.

It is notable that the Health Department was not convinced of the Catchment Board's capacity to protect environmental quality. While it accepted that stormwater pollution control was within the Board's mandate, it noted that "how energetic that might be is in some doubt<sup>254</sup>." There are many examples where Catchment Board staff reveal their sense of helplessness with regard to intervention within the City domain. For example, within a sympathetic letter written by the ECCB-RWB to a Wainui resident who was dismayed by the Wainui Stream sewage overflow, it was stated that:

Unfortunately the Council has decided to take no action until it has completed an overall sewer system study...The Board is not satisfied with this approach but at this stage the only action available is to monitor the water quality of Wainui Stream to gain evidence in the event of a further discharge<sup>255</sup>.

There were alternative courses of action which were available to the Board. Most notably, it could have prosecuted the City under the Water and Soil Conservation Act 1967. Although the "prospect of litigation as the mechanism of encouraging proper preventative works<sup>256</sup>" was not welcomed by the Board, it should have used this mechanism when all other attempts to encourage better performance from the City had failed.

## **The classification of Poverty Bay waters and City-based pollution**

The classification of Poverty Bay waters under the Water and Soil Conservation Act 1967 (WASCA) indicates the inability of local Maori to be heard under environmental legislation prior to the RMA 1991. The preliminary classification of the Bay only transpired in 1989,

<sup>253</sup>W.J. Warren, Chief Engineer, GCC, to A. Armstrong, ECCB, 15.5.1987 (GDC 365-04).

<sup>254</sup>"Report on meeting with Gisborne City Council." – J.H. Feltham, Senior Environmental Health Engineer, Department of Health, 20.9.1983 (HD 32/237).

<sup>255</sup>re. Sewage overflows, Wainui Beach." – J. Roe, ECCB, to F.M. Burt, Wainui resident, 7.8.1987 (GDC 365-04).

<sup>256</sup>"City sewerage water rights. Sewage discharges." – A.F. Armstrong, Chief Engineer, PBCB-RWB, to Town Clerk, GCC, 19.12.1985 (GDC 365-04).

nearly two decades after it first became possible. The PAC had initially begun proceedings to classify Poverty Bay rivers in 1970<sup>257</sup> but, with legislative amendments in 1973, the task of classifying both salt and freshwater environments was devolved to the local Catchment Board. It is notable that the ECCB-RWB did not give the issue any attention until the late 1980s. Under s 26 of the Act, classification served to provide 'minimum standards' of environmental quality. In other words, polluting activities could remain as long as they did not reduce water quality below the classification standard. If a relatively high classification could be obtained for a particular waterway, therefore, there was potential to force a polluting facility to either upgrade or be terminated. While this potential might have given Maori the opportunity to have their preferred waters safeguarded, it will be shown that this was not the case in Gisborne. The classification system was complex and there were no requirements to incorporate Maori environmental values into the process.

By the time the Poverty Bay classification was re-started in the late 1980s, case law had further complicated the process. Appeal hearings on both the Southland and Hawke's Bay classifications had "determined that unusual or spasmodic natural events should generally not be the determinative factor of a classification<sup>258</sup>." This meant that occasional disturbances to water quality – such as the effect of an 'emergency' overflow – should not drive down the classification standard for a particular waterway. However, the City's overflows, along with the submarine outfalls of the GRC and the GCC were threatened by the classification process in that they could have become non-complying discharges within their respective zones. The classification debates surrounding inner-City rivers and nearby coasts are evaluated here, while the relationship between classification and the submarine sewerage outfall is considered in more depth in the subsequent Chapter.

Whereas the Waimata and Turanganui rivers were quickly assigned a relatively high classification of SB<sup>259</sup>, waterways like the Waikanae Creek and the Taruheru River presented something of a classification dilemma to the ECCB-RWB. It recognised the potential ecological value of the Creek and the aquatic life within it, but it also recognised that pollution was so common in the Creek that it might make a high classification unrealistic<sup>260</sup>. A similar situation prevailed in the Taruheru, but while it was initially classified SB, the Waikanae Creek received an SC rating<sup>261</sup>. The principal objector to this classification was the Minister for Conservation. His submission pointed out that a classification should reflect existing water quality, rather than existing use – in this case, industrial use<sup>262</sup>. On this basis, the Minister requested that the Creek be classified SB, but this was not to be the case.

<sup>257</sup>"Pollution." – 13.4.1970 (GCC 37/4); "Control of polluted discharges. PBCB letter 11/9/70." – H.C. Williams, Chief Engineer, GCC, to R.C. Hall, City Health Inspector, 15.9.1970 (GCC 37/4).

<sup>258</sup>"Poverty Bay and coastal waters. Preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01-233-07).

<sup>259</sup>Refer to Table 10.3.

<sup>260</sup>ECCB-RWB 1989, p11.

<sup>261</sup>*Ibid.*

<sup>262</sup>"Submission of behalf of the Minister of Conservation." – J. Irving, Counsel for Ministry of Conservation, August 1989 (GDC 369-03).

*Table 10.3 – Water and Soil Conservation Amendment Act 1971: saline water classification schedules*

<b>Class</b>	<b>Common use</b>	<b>Minimum treatment requirements for discharges</b>
<b>SA</b>	Waters where shellfish are taken for human consumption	Sufficient to maintain a level of faecal coliforms in receiving waters of no higher than 100 per 100ml.
<b>SB</b>	Primary contact recreation (bathing, surfing).	Sufficient to maintain a level of faecal coliforms in receiving waters of no higher than 200 per 100ml.
<b>SC</b>	Enclosed waters, such as harbours, where the coliform limitation for SB waters cannot be maintained	Natural colour and clarity of the water shall not be changed to a conspicuous extent.
<b>SD</b>	Waters into which discharges of treated waste are permitted.	Natural colour and clarity of the water shall not be changed to a conspicuous extent.
<b>SE</b>	Waters into which wastes, with a potential to discolour water and high in suspended solids can be discharged.	Little more than disintegration of solids is required.

Most of the inshore waters of the Bay were classified SB – suitable for swimming – while Wherowhero Lagoon and Kaiti Beach were classified SA in recognition of their use as shellfisheries<sup>263</sup>. In respect of Kaiti, the most significant recognition of iwi interests came from the submission of the Ministry of Agriculture and Fisheries: “The Ministry supports the classification of coastal areas as SA given the importance of amateur and Maori shellfish and kina collecting in these areas<sup>264</sup>.” The local Medical Officer of Health also recognised Maori interests in his submission:

The SA Classification for the area including Kaiti Beach along the coast to Pouawa is supported as this includes traditional shellfish and kina gathering areas. Shellfish, particularly bivalve filter feeders are well known as potential food poisoning sources if their feeding waters are polluted by human or animal waste, and this classification is seen as a public health measure to limit the spread of disease<sup>265</sup>.

This might appear to indicate a strong sentiment of support for Maori environmental values. However, it is notable that the classification debates were not focussed on Maori concerns but rather on recreational values and economic matters.

<sup>263</sup>ECCB-RWB 1989, p22.

<sup>264</sup>“Submission on preliminary classification.” – P.J. Brierley, Regional Manager, MAF, 22.8.1989 (GCC 01-233-07).

<sup>265</sup>“Water and Soil Conservation Act 1967. Submission on preliminary classification.” – P. Armstrong, Medical Officer of Health, Health Development Unit, Tairāwhiti Area Health Board, 31.8.1989 (GCC 01-233-07).

One of the principal debates in the classification hearings was the issue of whether the classification should include 'financially realistic' water ratings. It was the view of the Council's Engineering Division that water classifications should not be so elevated as to require expensive capital works to reduce pollution<sup>266</sup>. This balancing of economic and environmental issues was fully reflective of the logic of the Water and Soil Conservation Act. By the time of the Poverty Bay classification, it was accepted that when classifying water the "public interest requires that the quality of the water should be raised. BUT you must have regard as to whether or not that standard is achievable<sup>267</sup>." In other words, there was a strong momentum towards protecting the *status quo* of water quality, rendering the classification process an almost worthless exercise if waters were not already of high quality. The GDC's attitude to the classification was fully in keeping with its historical attitude to local rivers and coasts. It objected to the SB classification of the Taruheru river, principally because this would have immediately called into question the status of its sewage overflows<sup>268</sup>. Its recommendation of a SD classification<sup>269</sup> would have signalled the final execution of an already polluted river. As indicated elsewhere in this Chapter, the GRC was also a key figure in the classification debates. It suggested that if the Kaiti area was already polluted, then a SA classification could not be justified<sup>270</sup>.

While ECCB-RWB staff did not accept the logic of the freezing works nor the Gisborne District Council, the committee which heard the classification in May of 1990 appeared to be swayed by their arguments<sup>271</sup>. By 1990, when the appeals on the preliminary classification were heard, the GDC had been formed, superseding the former GCC. For reasons of transparency, the Council established a special committee to hear objections on the classification and it proceeded to overturn the SB classification of the Taruheru, reducing it to SC. It also failed to heed the request of the Minister of Conservation to raise the Waikanae Creek classification from SC to SB. The most worrying of its decisions was to overturn the SD classification of the waters immediately above the submarine outfalls belonging to the GDC and the GRC. Whereas the SD level of classification would have had at least required some treatment of the respective effluent streams, SE waters effectively required no treatment. Local Maori would have welcomed the confirmation of an SA classification of the Kaiti foreshore but, only a short distance from Kaiti beach, the waters above the GRC works' outfall were now to be classified SE – the lowest level of classification. The potential for effluent to cross this distance and pollute the Kaiti shore platforms in partic-

<sup>266</sup>"Gisborne District Council. Poverty Bay and coastal waters: preliminary classification." – Nolan and Skeet, Barristers, Solicitors and Notary Public, for Environment and Planning, GDC, to Chrisp Caley and Co., 20.3.1990 (GCC 01-233-07).

<sup>267</sup>Notes relating to legal aspects of classification – 2.4.1990 (GDC 369-02a).

<sup>268</sup>"In the matter of section 26E, Water and Soil Conservation Act 1967, and in the matter of an objection to preliminary classification by Gisborne City Council." – Chrisp and Chrisp, Barristers and Solicitors, for GCC, to ECCB-RWB, 23.8.1989 (GCC 01-233-07).

<sup>269</sup>"Poverty Bay and coastal waters. Preliminary classification." – J. Wells and J. Warren, GCC, to City Manager, 7.8.1989 (GCC 01-233-07).

<sup>270</sup>Evidence of GRC for the Poverty Bay preliminary classification – August 1989 (GDC 369-3).

<sup>271</sup>"Poverty Bay and coastal waters: Preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01-233-07).

ular weather patterns was considerable, highlighting the contradictory nature of the classification process. The reasoning behind this decision indicates once more the power of Gisborne industries to effectively blackmail environmental regulators:

In support of the objection seeking SE, GRC claim that in the absence of secondary treatment, which would cost many millions of dollars, the discharge from the GRC outfall cannot meet...the requirement that the discharge into waters other than SE must be 'substantially free from suspended solids, grease and oil'...

The Company advises that it is committed to continued improvement of the quality of the effluent discharge, but unrealistic expectations could affect the ability of the Company to continue its operation in Gisborne. Severe declines in stock numbers have meant that the Company has recently been running at a substantial loss. The Company is one of the largest employers in Gisborne.

...[A]n SE classification around the diffuser is inevitable if GRC is to continue operating, which is clearly in the public interest<sup>272</sup>.

From these statements, it is clear that an economic argument held considerable effect under the WASCA classification process. Having accepted this type of argument, the special committee drove down several classifications and refused to elevate any of the others.

As will be explained in Section 11.4, the SE classification above the GDC outfall was reverted back to SD after a series of internal conflicts within the Council. The SE classification for the GRC outfall was to survive a Planning Tribunal appeal of the findings of the special committee. This appeal was driven by the Minister of Conservation, who once again reiterated the need to protect the Taruheru River and Waikanae Creek<sup>273</sup>. The Environment and Planning section of the GDC also appealed the preliminary classification<sup>274</sup> as did a number of local environmental groups. Both the Minister for Conservation and Environment and Planning sought a return of the SD status of waters above the outfalls, as well as an elevation of the Taruheru classification to SB. These appeals were not successful: other than the voluntary return of the waters surrounding the GDC outfall to SD, Figure 10.15, shows that even the appeal process under the WASCA could not protect Poverty Bay waters.

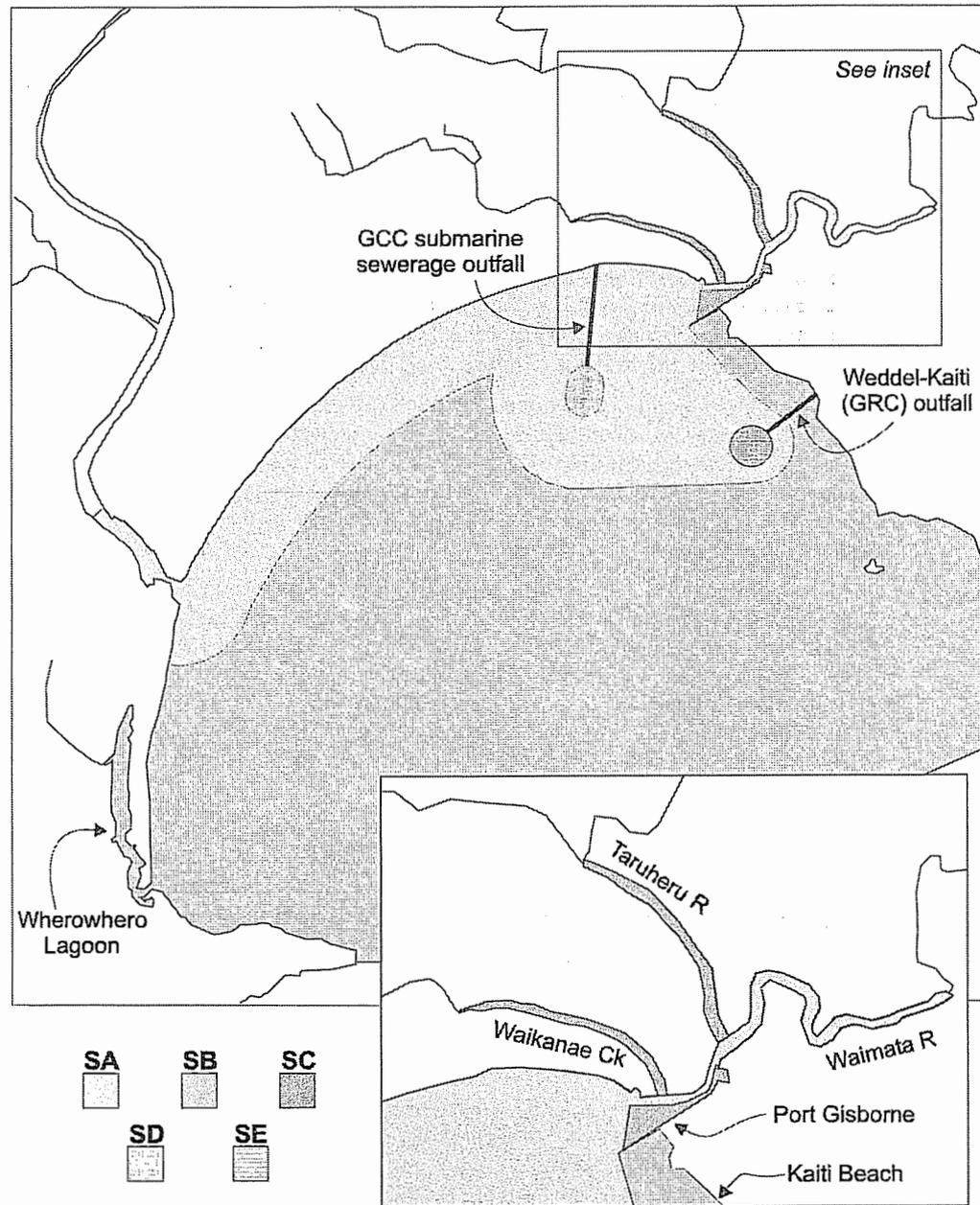
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<sup>272</sup>"Poverty Bay and coastal waters: Preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01-233-07).

<sup>273</sup>"In the matter of the Water and Soil Conservation Act 1967 and in the matter of an appeal under Section 26G of the Act. (Final classification)." – M. Hosking, Department of Conservation, for P. Woollaston, Minister of Conservation, 24.7.1990 (GDC 369-02).

<sup>274</sup>"In the matter of an appeal under Section 26G of the Water and Soil Conservation Act 1967 between GDC Appellan and GDC respondent." – G.R. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, for Environment and Planning, GDC, 12.7.1990 (GDC 369-02); See also: "Classification of Poverty Bay waters." – S.W. Clare, Manager, Corporate Services, GDC, to Manager, Environment and Planning, GDC, 25.6.1990 (GCC 01-233-07).

Figure 10.15 – The final classification of Poverty Bay and coastal waters, 1991.



The debates surrounding classification had taken place within a limited conceptual framework: on the one hand, recreational interests complained about discolouration of the water and the inconvenience of fat and grease in the surf zone; on the other, the GDC and the freezing works concentrated on the cost of compliance with various levels of classification.

Both sides of this argument could find favour within the WASCA, but other interests were not easily incorporated into the logic of the Act. Within this narrowly constructed set of water quality debates, there was no place for the concerns of local iwi. Maori participation in the classification process had been relatively sparse – nobody appeared on behalf of tangata whenua at the hearing. Before that, only Ingrid Searancke of Ngati Oneone objected on behalf of local iwi in the submission phase. Extracts from her evidence are quoted in depth because they provide a telling summary of the alienation of Maori fishing interests by pollution in the area<sup>275</sup>:

I am authorised...to issue permits under the Fisheries Act for the gathering of kaimoana (seafood) for Maori functions. It has been many years since I felt comfortable about any person gathering seafood from the area between Tuahine Point in the East and the area of beach adjacent to the Allied Freezing Works Abattoir. This includes all the foreshore along Kaiti Beach, Sponge Bay, Waikanae and Midway areas.

The Midway Beach used to be a very popular pipi gathering ground...No-one gathers pipis from that bed anymore due to the contamination of the shellfish...I remember as a child through the 1930s and 1940s the Waikanae/Midway Beach area was very popular with Gisborne people for recreation and the gathering of shellfish. I noticed from about the end of the 1950s, the popularity of that beach began to decline as the contamination of the waters increased.

The Maori people and seafood eating peoples of this region have lost a number of valuable seafood gathering grounds in the last forty years. Adjacent to the Marine Restaurant at the meeting of the Taruheru and Turanganui Rivers was a very popular cockle bed. I do not know if there are still cockles there but I believe it would be very unwise to gather those shellfish for eating due to the contamination in those waters...The wharf and breakwater area was traditionally a very good mussel gathering area. I believe it would also be very unwise to gather any mussels from that area due to the contamination of those waters...

I feel very sorry for the local Maori people who do not have transport to take them to more remote shellfish gathering areas as the beds adjacent to town are now not fit for the purpose of gathering shellfish to eat...As kaimoana are part of the staple diet of the Maori people we always serve kaimoana at our hui. We are forced to gather the shellfish that we prepare from areas far away from the Gisborne waters so that we can be sure the shellfish we provide visitors is uncontaminated.

The fact that these well-argued sentiments could not find favour within the classification process is indicative of the legislative shortcomings of the WASCA.

In general, Maori interests were not given any special attention as would be in keeping with their rights to traditional fisheries under Article II of the Treaty. This is not surprising: the WASCA did not incorporate directives to consider the Treaty nor any other interests of Maori. Had it done so, the ECCB-RWB may have had to protect City rivers and coasts at an earlier date. Evidently, there were no deliberate and proactive attempts made to gauge

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<sup>275</sup>“Brief of evidence of Ingrid Searancke.” – Executive member of the Turanganui Maori Committee, August 1989 (GDC 369-02a).

Maori opinion about the need to protect particular waterways. Such attempts were necessary because the classification process was complex and local Maori may not have known the potential significance of it to their needs. Moreover, the lack of an opening for Maori within the legislative preoccupations of the WASCA was inevitably a disincentive to participation. After all, elsewhere in the country Maori have commented that:

The Water and Soil Conservation Act makes no provision whatsoever for our values, and for our people, so we have been on this merry-go-round, this monocultural merry-go-round for four years and we know it is a waste of time, the whole exercise is futile<sup>276</sup>.

Among other omissions, the lack of a directive to pursue Maori input on the classification process reflects a Crown omission in terms of the Treaty principle of *active* protection.

It would also be pertinent to consider some of the Waitangi Tribunal's existing findings about the WASCA in the light of the Gisborne experience. It has already been accepted that the Act focussed on the need to protect fisheries and wildlife habitats irrespective of a requirement to consider the Maori interest in those habitats<sup>277</sup>. On balance, it has been asserted by the Tribunal that the Act gave Maori no rights beyond the general right of public objection<sup>278</sup>. Therefore, the Maori relationship to their fishing grounds was given no more importance than the general public's desire for safe fishing areas. Another problem relates to the fact that there was no obvious way that spiritual and cultural factors which transcended the physical environment could be incorporated into decision-making under the Act<sup>279</sup>. Similar conclusions can legitimately be drawn from the analysis of the Catchment Board's work in Turanganui-a-Kiwa. The ECCB-RWB, and the legislation which enabled it, failed to protect Maori interests under Part II of the Treaty.

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<sup>276</sup>Minhinnick 1984, cited in Roche 1994, p158.

<sup>277</sup>Manukau Harbour Report of the Waitangi Tribunal 1985, p119.

<sup>278</sup>Motonui-Waitara Report of the Waitangi Tribunal 1983, p19.

<sup>279</sup>*Ibid.*

## 10.6 Outcomes of mis-management

In conclusion, despite being only a mid-sized provincial centre, Gisborne's industrial, sewage disposal and sewage reticulation practices have polluted City waterways and fisheries as if Gisborne was one of New Zealand's larger cities. The rivers running through Gisborne as well as the coastline immediately north and south of the City are, historically, some of the most polluted waterways in the country. The most significant example of this neglect is the Waikanae Creek. Sewage overflows, the mixing of industrial effluent with stormwater pipes which exit to the Creek, leachate from landfills<sup>280</sup>, and other sources of pollution have effectively terminated the creek's use as a resource space. The ultimate outcome of the magnitude of this pollution is that it is thoroughly unwise to use the Waikanae Creek as a fishery:

...outbreaks of infectious disease in Gisborne which have been shown to be directly attributable to pollution of watercourses; for example, the typhoid outbreak of 1977 which we traced to polluted shellfish taken from the Waikanae Creek<sup>281</sup>.

1977 is very late in the historical evolution of New Zealand as a colony for the outbreak of such third world diseases as typhoid, highlighting the extremely limited pursuit of public health and environmental quality in and around Gisborne City.

Moreover, the combined outcome has more serious impacts than those of enteric disease – the Waikanae Creek is heavily polluted by hazardous substances as well:

[The national co-ordinator for the toxic campaign] tests show aluminium, nitrates and phosphates. The phosphates and nitrates are probably coming from agricultural runoff or perhaps from wineries for the nitrates...the aluminium we're not sure where that's coming from (possibly the cannery)...Its Gisborne's second dump really<sup>282</sup>.

This general failure of environmental management leads to general environmental outcomes – impacts which affect all users, whether they are Maori or pakeha. These general outcomes, however, have specific implications for local Maori. Section 8.3 discussed the way in which Waikanae Creek was an important food source for local Maori. This Chapter has presented a considerable amount of evidence that these values were ignored in the development of Gisborne's industrial and sewerage infrastructures.

It is perhaps impossible at this stage to account for the cumulative impact of this history of environmental neglect. All sources of pollution in the City's waterways, but especially the vegetable waste, have a high BOD. It is not surprising, therefore, that there are occasional reports of dead fish floating in City rivers, nor that the cause of these deaths should have been attributed to low dissolved oxygen content<sup>283</sup>. At one point, the Waikanae Creek reg-

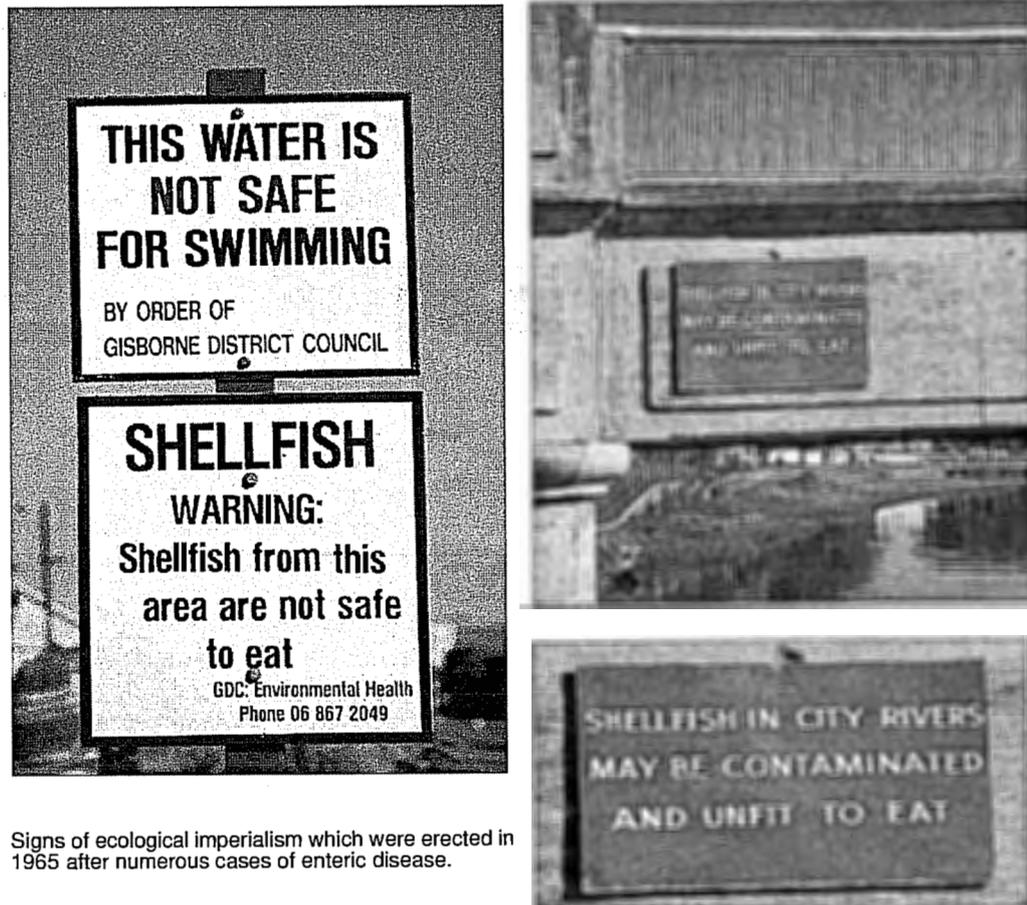
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<sup>280</sup>Refer to Section 8.3.

<sup>281</sup>"Water standards. City waterways." – R.C. Hall, City Health Inspector, to Secretary, ECCB-RWB, 30.3.1979 (GDC 365-04).

<sup>282</sup>"Waikanae stream." – Newspaper article, n.d., no identified source, (GCC 01-212-03).

Figure 10.16 – Culturally offensive information



Signs of ecological imperialism which were erected in 1965 after numerous cases of enteric disease.

ularly recorded a “not distinguishable” dissolved oxygen content<sup>284</sup> – on these occasions it was effectively a dead waterway. The cumulative impact also involves the changing perception of rivers and streams. Reports of enteric fever after the consumption of shellfish gathered from City rivers – which led to the erection of warning signs in 1965<sup>285</sup> (see Figure 10.16) – have a lasting impact in the minds of potential shellfish gatherers. Even if the water quality of the City rivers was to improve, it would be a much longer time before local Maori would return to collecting shellfish from the rivers.

<sup>283</sup>“Dead fish in the Taruheru Stream, down stream of the Harpers Road Bridge.” – Water Conservation Officer, GDC, to Mrs Scott, Resident, 14.12.1995 (GDC COM95).

<sup>284</sup>“Council unsure about the source of pollution.” – Gisborne Herald, 25.3.1999 (GisMUS VF-Water Pollution).

<sup>285</sup>“Public warned about eating shellfish.” – Poverty Bay Herald, 27.4.1965 (GHB CB).

While Waikanae Creek presents the most obvious example of neglect, it is by no means the only site of significance to Maori to have been degraded in this manner. While many Maori still collect shellfish from the Kaiti wave platforms, they do so at considerable risk. Yet, few within Gisborne's planning or industrial hierarchy have been sympathetic to the concerns of iwi for their mahinga kai. The GRC, for example, claimed that from 1977 to 1989 there had been no reported cases of food-poisoning after consumption of Kaiti shellfish, a fact they had gleaned from Health Department records<sup>286</sup>. This was indeed true, but such 'facts' do not account for the decreased utility of the fishery. Anecdotally, there have been many reports of more minor cases of food-poisoning from shellfish gathered at Kaiti Beach<sup>287</sup>. While these cases go unreported to health officials, they are discussed extensively by local Maori, leading to a reduction in use of the area as a fishery. After all, such signs at Kaiti as that depicted in Figure 10.17, point to the danger of collecting shellfish from the area. These signs were first erected in 1987, at a time when people were being warned not to collect shellfish all the way from Pouawa Beach to Midway Beach<sup>288</sup>.

Just as reported cases of food-poisoning do not accurately reflect the cultural perception of a spoiled mahinga kai, bacteriological averages do not present the truth in terms of risk from consuming Kaiti shellfish. While long-term averages meant that Kaiti Beach could reasonably be classified SA in 1989, shellfish from the Beach and its associated reefs have not been fit for consumption in some years. In February and March of 1993, bacteria counts at Kaiti Beach were up to twenty times the long-term average. During that summer, tests at south Kaiti Beach registered 2,500FC/100ml, while the yacht club testing site recorded 1,500FC/100ml – both figures being dramatically higher than the 100FC/100ml permitted for a shellfishery<sup>289</sup>. The optimistic supporter of the GDC or of the works' management might have contended that the 1993 summer provided only one of four test runs during the years 1983 to 1993 in which results went beyond 200FC/100ml<sup>290</sup>. Nonetheless, the psychological damage to the utility of the fishery is not measurable, especially when one considers that Maori are absolutely intolerant of any mixing of shellfish and human effluent.

Put simply, the systems of environmental management in the Gisborne area failed Maori in terms of their Treaty rights. The laws relating to land use zoning (Town and Country Planning Act 1953 and 1977) and the protection of water quality (Water Pollution Act 1953 and Water and Soil Conservation Act 1967) provided no directive to local authorities to take into account Maori values or the Treaty. Moreover, these Acts were not implemented in a way which would have protected the environment in a general sense. The out-

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<sup>286</sup>"Shellfish: Kaiti Beach area." – Philip Armstrong, Principal Health Protection Officer, Tairāwhiti Health Board, to Chief Engineer, Gisborne Refrigerating Co. Ltd., 20.3.1990 (GCC 01-233-07).

<sup>287</sup>See, for example: "Contaminated shellfish." – Poverty Bay Herald. Editorial on pollution, 27.4.1965 (GHB CB).

<sup>288</sup>"People 'in dark' about pollution." – Gisborne Herald, 28.8.1987 (GHB CB).

<sup>289</sup>"Special hearings committee. Weddel-Kaiti coastal permits." – I.K. Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04).

<sup>290</sup>*Ibid.*

comes of these two types of failure led to the systematic destruction of Maori resource spaces in the district.

*Figure 10.17 – Warning signs on Kaiti Beach*



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## The submarine sewerage outfall

**T**he volume of the pollution which was outlined in Chapter 10 has increased, but its impact on the shoreline close to Gisborne has diminished over time. Rather than reducing or adequately treating its industrial and domestic effluent, however, the local authority implemented a means to translocate it: the submarine sewerage outfall which was commissioned in 1965. Effectively, the outfall transfers the untreated effluent of Gisborne deeper (22m) and further out (1.8km) into Poverty Bay, which means that the effluent has a diminished impact on the coastline compared with the septic tanks and their outfalls. Nonetheless, this strategy does little to overcome the spiritual abhorrence of local iwi towards the mixing of natural and wastewater and, moreover, it has extended the potential effects field of the city's sewage pollution. The environmental outcomes of this outfall are, for a variety of reasons which are highlighted in this Chapter, beyond conclusive appraisal. The volume of the sewage discharges, the paucity of pollution monitor-

ing to date and the fact that this type of pollution has long-term, cumulative and subtle influences on aquatic life mean that the full-scale of the facility's impacts will not be known for some time.

However, it is possible to conclusively summarise the decision-making that led to and subsequently maintained the existence of the outfall. These decisions and the internal correspondence of the Council staff involved therein are well documented. This documentation provides a history of ignorance, apathy and even contempt towards the environmental values of local iwi. Of itself this does not form an omission of the Crown. Nevertheless, as with all other examples of pollution highlighted in Part III of this report, the Crown established the framework, agenda and objectives of the system of environmental management which failed to incorporate iwi environmental values. In the case of the submarine sewerage outfall, the cultural bias in the national system of environmental planning is most evident. The outfall has survived three phases of water resources planning, corresponding to: the Water Pollution Act 1953 (WPA) in conjunction with the Local Authority Loans Board (LALB) process; the Water and Soil Conservation Act 1967 (WASCA); and the Resource Management Act (RMA). The values of local Maori have been ignored within all three of these phases because the respective Acts have not provided a directive to *implement* the principles of the Treaty of Waitangi.

## 11.1 GBC/GCC vs LALB: design debates

Investments of such size and significance as a sewage disposal facility are a form of inertia. Their construction is a financial burden for such provincial centres as Gisborne and unwise decisions made at the stage of their design are difficult and prohibitively expensive to resolve at a later date. For this reason, considerable attention is given to the events and debates which led to the construction of the outfall. It is also important to analyse the initial decisions because if iwi views were ever to be incorporated meaningfully into the local strategy for sewage disposal, then it should have occurred at the very outset of planning for the new facility. Likewise, the most logical time for Crown agents to fulfil their Treaty obligations was before the proposal for submarine disposal was accepted. In this latter respect, several departments of the Crown contributed to the decision to implement a submarine sewerage outfall and, moreover, they were apprehensive about many components of its design. Ultimately, however, evasive, and outrightly deceptive, tactics of the local authority circumvented the stipulations of these government departments. The Crown's inability to implement and enforce its own determinations forms a major omission in the case of the submarine outfall.

### False start at Sponge Bay

It was reported in Section 10.1 that the LALB had directed the Gisborne Borough Council (GBC) as early as 1951 to find a new solution to its sewage disposal problems. The insanitary state of the septic tanks and the beaches that they polluted had moved the LALB to call for a more satisfactory form of *treatment* of Gisborne's sewage. The implied emphasis in the initial dialogue between the Board and the Borough was advanced primary or, perhaps, secondary treatment and a plan was soon formulated to construct a treatment station and associated outfall at Sponge Bay, about 5km north of Gisborne. For reasons outside of the control of the GBC, this disposal and treatment option was not constructed. The false start at Sponge Bay remains important to an understanding of the submarine sewerage outfall which was eventually constructed at Stanley Road. It reveals the intention of the LALB for Gisborne to pursue treatment beyond the simple primary level or, at least, an outfall system that could at a later date incorporate readily a more advanced treatment option. It also foreshadows the avoidance mechanisms that the GBC/GCC would later employ to evade the will of the LALB and its constituent government departments.

The LALB directed the GBC to "obtain professional advice on the necessity for new outfalls, or adequate treatment, or both, with the object of elimination of pollution of popular bathing beaches and of compliance with Health Department requirements<sup>1</sup>," resulting in the Porter report. Commissioned in 1952, it evaluated four options for sewage disposal in the Borough, including facilities at Sponge Bay,

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<sup>1</sup> Porter 1952, p1.

Kaiti and a sewage disposal works near the head of the Awapuni Lagoon<sup>2</sup>. Initially, Porter had preferred the latter option because it provided opportunities to create a sedimentation system of treatment within the Lagoon itself. However, he drifted from the idea when it became apparent that the GBC wanted to spend as little as possible on its new facility<sup>3</sup>. The Awapuni option was dismissed altogether when the scope of the plans to drain and develop the Awapuni Lagoon were revealed<sup>4</sup>.

Given the underlying attitudes of advisors to the GBC, this was perhaps fortunate:

The chief merit of the suggestion of using the Awapuni lagoon as an oxidation pond is that it removes the sewerage effluent to the Waipaoa River well away from the bathing beaches<sup>5</sup>.

Even though these advisors were against the level of pollution on the Borough's foreshore, and even though they preferred the installation of treatment options, they were not against the pollution of more distant spaces in order to remove the problem from view<sup>6</sup>. In the political context of the 1950s, a sufficient 'solution' to the local pollution problem could have entailed relocating that problem, even relocating it to somewhere that would have a greater impact on Maori environmental values.

In any case, the GBC's engineers preferred Sponge Bay because it was "unique in satisfying all basic needs," including space for expansion and further treatment, and because "positive standards of purity could never be maintained on the immediate Waikanae foreshore to even the minimum extent possible at Sponge Bay<sup>7</sup>." This indicates that, initially at least, the GBC sought to pursue the logic of the LALB and its design strategy was oriented towards advanced primary or even secondary treatment. The Sponge Bay option would have encompassed an outfall pipe from Papawhariki Point to Tuamotu Island, removing Gisborne City's pollution of Poverty Bay. The Ministry of Works also favoured the Sponge Bay site because it provided space to add a treatment plant at what is today the rifle range<sup>8</sup>. The conclusions of reports from the Ministry of Works highlighted the expected trajectory of development for the local authority:

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<sup>2</sup> Porter 1952, p10; "Sewage disposal. Borough of Gisborne." – J. Porter, to Council, 30.4.1952 (GCC 37/2).

<sup>3</sup> "Sewage disposal. City of Gisborne." – J.P. Porter, Consultant Engineer, Andrew Murray Consultants Ltd., to H.C. Williams, Engineer, GBC, 12.11.1957 (GCC 37/2).

<sup>4</sup> "Memo." – Medical Officer of Health, Gisborne, to Director General of Health, 15.10.1951 (HD 11/1/1).

<sup>5</sup> *Ibid.*

<sup>6</sup> See also: C. Collom, Auckland Metropolitan Drainage Board, to Mayor and Councillors, GBC, 27.11.1957 (GCC 37/2).

<sup>7</sup> "re. Sewage disposal." – N.R. Sanderson, Engineer, GBC, to Town Clerk, 4.3.1955 (GCC 37/2).

<sup>8</sup> "re. Sewage disposal. 'Sponge Bay'" – City Engineer, GBC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2); "Gisborne City Council: sewage disposal." – Ministry of Works, Gisborne, to Commissioner of Works, Wellington, 3.9.1956 (MW 50/316).

The Department of Health should be empowered to require the Gisborne City Council to undertake treatment of sewage effluent if and when in the opinion of the Medical Officer of Health this should become necessary... [I]t is recommended that approval in principle be given subject to final approval being given by the appropriate departments before work is commenced<sup>9</sup>.

Thus, it had been established from the mid-1950s that additional treatment options were to be implemented at the discretion of government departments. If primary treatment in conjunction with a deep-water outfall should have proved insufficient in terms of public health, the Council was obligated to install additional treatment mechanisms. It is also notable at this point that the Sponge Bay scheme was favoured by the Ministry of Works because it had been designed with a view to include the effluent of the Kaiti freezing works<sup>10</sup>.

The plan was forwarded to the Pollution Advisory Council (PAC) in March 1955<sup>11</sup>, the Secretary of Marine approved the proposal in principle in May<sup>12</sup>, while PAC did the same in August of that year<sup>13</sup>. All agencies involved required that more specific plans be evaluated by PAC and the Health Department before final approval<sup>14</sup>. This included a directive that further float tests be carried out to determine prevailing current and wind directions. The conditional nature of approval was to continue when the LALB sanctioned a £200,000 loan in 1956. On this occasion contracts were not to be let nor work commenced until final plans and specifications had been fully approved by the Ministry of Works<sup>15</sup>.

It is interesting that the Borough Council intended to use this money to construct "sea outfall facilities at Tuamotu Is. and [a] treatment plant comprising sedimentation, digestion, and effluent chlorination<sup>16</sup>." This would have yielded a treatment system far in advance of the present system – a combination of submarine outfall and milliscreening which exists at Stanley Road today. It is debatable whether increased treatment of an effluent stream disposed at sea would have met the cultural requirements of local Maori. Not only would the treated effluent have remained offensive when mixed with natural water, the proposal would have further polluted the Kaiti wave platforms and other fisheries north of Gisborne<sup>17</sup>. None-

<sup>9</sup> "re. Sewage disposal. "Sponge Bay" – City Engineer, GBC, to Resident Engineer, Ministry of Works, 20.8.1956 (GCC 37/2); See also: "Float tests." – Medical Officer of Health, Gisborne, to Commissioner of Works, 7.5.1957 (MW 50/316).

<sup>10</sup> "Sewage disposal." – Commissioner of Works, to District Commissioner of Works, Napier, 13.7.1956 (MW 50/316).

<sup>11</sup> 14.3.1955 (GHB MB).

<sup>12</sup> 19.5.1955 (GHB MB).

<sup>13</sup> 13.8.1955 (GHB MB).

<sup>14</sup> "Gisborne sewage system." – Commissioner of Works, to Secretary, LALB, 19.9.1956 (MW 50/316); "Draft memo." – Commissioner of Works, to District Commissioner of Works, Napier, n.d. (MW 50/316).

<sup>15</sup> "Notification of sanction to loan." – LALB sanction #49/117/22 (MW 50/316).

<sup>16</sup> "ref: Sewage disposal, Papawhariki Point." – N.R. Sanderson, City Engineer, GBC, to Town Clerk, 9.1.1956 (GCC 37/2).

theless, the fact that the Borough was prepared to implement a relatively advanced treatment system in the early 1950s reveals what may have been possible had environmental policy of the day required government departments and local authorities to pay heed to the principles of the Treaty.

In any case, the Sponge Bay scheme did not eventuate: the discovery of geological instability along the reef that connects with Tuamotu Island and on the island itself curtailed the proposal just before construction was to begin<sup>18</sup>. The proposal was formally abandoned in October of 1957<sup>19</sup>. Yet, there was still time for a controversy which revealed the attitudes of the Borough Council – attitudes that were to lead to a submarine outfall for *untreated* sewage. This controversy related to the float tests that had been requested in 1956. Porter had carried out a number of float tests himself but, by his own admission these were not extensive, nor conclusive<sup>20</sup>. It was on this basis that further float tests had been ordered, but especially because so few tests had been completed in the southerly or south-westerly winds which would have blown sewage back onto the shoreline<sup>21</sup>.

It appears that, for whatever reason, the Council first attempted to avoid carrying out the float tests at all. Then, when it had completed the tests, it deliberately withheld the information from external agencies. Correspondence of the time from the departments comprising the LALB indicates the frustration of public health authorities and design engineers about what they saw as being a deliberate ploy to disrupt the statutory process<sup>22</sup>. Undoubtedly, the attempt to avoid disclosure of the test results would have been because the results were “not entirely favourable as there is fair evidence that under wind influence sewerage effluent might be carried back into the main bay<sup>23</sup>.” From this point, relations between the local authority and the LALB were to sour – the Council was set on a path of concealing facts from external agencies that it would adhere to for some time to come.

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<sup>17</sup>“Float tests.” – Medical Officer of Health, Gisborne, to Commissioner of Works, 7.5.1957 (MW 50/316); H.C. Williams, Chief Engineer, GBC, to Director of Geological Survey, 16.10.1957 (GCC 37/2).

<sup>18</sup>“Rock of Sponge Bay as foundations for a sewerage pipeline.” – February 1957 (GisMUS 1959.1872); “Letter” – Ministry of Works, Gisborne, to Commissioner of Works, Wellington, 11.11.1957 (MW 50/316).

<sup>19</sup>H.H. Barker, Mayor, GBC, to Councillors, 15.10.1957 (GCC 37/2).

<sup>20</sup>Porter 1952, p10.

<sup>21</sup>“Proposed sewerage outfall at Sponge Bay,” – F.K. Roberts, Resident Engineer, Ministry of Works, to Town Clerk, 28.3.1956 (GCC 37/2); “Float tests.” – Commissioner of Works, Wellington, to District Commissioner of Works, Napier, 12.3.1956 (MW 50/316).

<sup>22</sup>“Loans Board report: Gisborne sewerage outfall, Sponge Bay.” – Medical Officer of Health, Gisborne, to Director General of Health, 24.7.1956 (MW 50/316).

<sup>23</sup>“Sponge Bay sewerage disposal loan.” – District Health Office, Department of Health, Gisborne, to Director General of Health, 17.4.1957 (MW 50/316).

## The science of outfall design within 'financial constraints'

The abandonment of the Sponge Bay proposal sent the local authority – which was soon to be reconstituted as the Gisborne City Council (GCC) – into a state of disarray. Yet, outwardly at least, the Council recovered in remarkably quick time. Between October of 1957 and July of 1958, the GCC engineers were to formulate an entirely new proposal based on an outfall at Stanley Road. In retrospect, this time frame was all too rapid, meaning that alternative proposals were not evaluated as well as they should have been. The science of outfall design had been cut short by this unrealistic time-frame, but – as will be shown – it was also curtailed by the Council's desire to implement a new disposal mechanism at least possible cost. This provides yet another example of the marginalisation of iwi environmental values by the pursuit of parsimony.

Initially, the search for a new proposal resurrected the Awapuni option from the Porter report. According to the City's Mayor the Lagoon was an ideal choice for sewage treatment facilities because "no problem of land ownership would appear to be involved<sup>24</sup>." The Mayor authorised the City Engineer to investigate the Borough's options at Awapuni and "report to the Council at the earliest possible date<sup>25</sup>." The idea that there was no problem of ownership would have been controversial in the light of Section 8.1. Moreover, even in this early statement by the Mayor of Gisborne, the haste of the Council to confirm a new strategy is evident. While Porter had at least provided the groundwork to begin the investigation of an oxidation pond scheme at Awapuni, the GCC had little or no existing information for the submarine sewerage scheme that was to develop nearby at Stanley Road.

Yet, within only two months of the abandonment of Sponge Bay, such a scheme would be firmly entrenched as the option preferred by the GCC engineers. The City Engineer did seek some of the expert advice which had been suggested in the Mayor's declaration. However, an exchange between the newly-appointed City Engineer and that advisor cast considerable doubt on the emerging proposal and, by implication, the aptitude of the City Engineer:

[City Engineer] Without doing more than mental designing it seems possible to float up to 3 miles of steel outfall sewer out across the sandy bottom of Poverty Bay, sink it in place with attached outriggers to prevent sea currents moving it, discharge crude sewage into 10 fathoms of water at a point better in many aspects than the Sponge Bay proposal, all at a price perhaps cheaper initially than any form of treatment<sup>26</sup>.

<sup>24</sup>H.H. Barker, Mayor, GBC, to Councillors, 15.10.1957 (GCC 37/2).

<sup>25</sup>*Ibid*.

<sup>26</sup>H.C. Williams, Chief Engineer, GBC, to C.C. Collom, Chief Engineer, Auckland Metropolitan Drainage Board, 27.11.1957 (GCC 37/2).

[Engineering Advisor] I cannot comment on your proposal for a steel outfall sewer without knowing the probable size of this, and, in my [previous] letter to you, I raised doubts as to the calculations which you were using. In any case, to lay three miles of outfall pipe under marine conditions is a very big job and I do not think you appreciate the difficulties involved<sup>27</sup>.

The first quotation highlights the nature of the outfall design process, which resembled a stream of consciousness approach rather than a coherent strategy. It also highlights the desire of the Council to pursue the “cheaper” option, rather than the option which was best for the environment.

Significantly, the design office of the Ministry of Works only found out about the scheme indirectly when the advisor who wrote the second quotation, above, informed a design engineer at the Ministry. In correspondence between the Ministry and the GCC, the former was obviously exasperated that the latter should have failed to enlist the office for advice<sup>28</sup>. In other words, the GCC was attempting to solve its problems in-house as much as possible. This introduced a number of problems, not the least being that its staff simply did not have the skills for an undertaking of this magnitude. More importantly, the internalised nature of the debate meant that government departments, which were responsible for implementing pollution regulation and which had a duty under the Treaty, only came to scrutinize the proposal for the submarine sewerage outfall at the latest possible stage.

By mid-1958, the plans of the Council had advanced to the stage where treatment options at the landward end of the proposed sewerage outfall were being discussed. As the City Engineer was to admit, however, these discussions were given insufficient attention:

A number of firms...have submitted details and estimates for screen, sedimentation and digester plant. Although the question is my Council's biggest problem, the time it gives to me to work on it is virtually nil. However, at the moment I am still disposed to recommend to it sea disposal, contrary to the evidence of the majority...That is the unhappy state of affairs at the moment. You may wonder how a small village like Gisborne can keep its Engineer in a state where he cannot get at this problem. So do I<sup>29</sup>.

In the meantime, in view of my Council's most unhealthy financial position, I am not quietly settling down to complete sewerage treatment without a struggle on its behalf<sup>30</sup>.

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<sup>27</sup>C.C. Collom, Chief Engineer, Auckland Metropolitan Drainage Board, to H.C. Williams, Chief Engineer, GBC, 5.12.1957 (GCC 37/2).

<sup>28</sup>R. Lough, Design Engineer, Ministry of Works, to H.C. Williams, 13.12.1957 (GCC 37/2).

<sup>29</sup>“Reference: your letter 3rd July, 1958.” – H.C. Williams, Chief Engineer, GCC, to C.C. Collom, Chief Engineer, Auckland Metropolitan Drainage Board, 9.7.1958 (GCC 37/2).

<sup>30</sup>“Sewerage treatment plant.” – H.C. Williams, Chief Engineer, GCC, to R.C. Lough, Design Office, Ministry of Works, 16.12.1957 (GCC 37/1).

There are a number of important facts revealed in these quotations: the GCC had not devoted enough time to designing the outfall; few commentators agreed with the Engineer that disposal at sea of untreated effluent was a satisfactory option; and insufficient funding had been directed to the issue.

By the Chief Engineer's own admission, then, he was not as well versed in the science of sewage disposal as he would have liked. Not only was there uncertainty about the then current state of sewage disposal technology, there was also little knowledge amongst the key decision-makers about the contemporary state of water science:

It is found that raw sea water contains a natural predatory mechanism, as yet undefined and isolated by workers in marine biology, which raises the mortality of sewage bacteria to levels far in excess of fresh water or sterilized sea water. The matter is the subject of intensive present day research but the important fact, as yet not disproved and certainly well authenticated, is that, regardless of dilution, the human pathogens are fated to speedy destruction<sup>31</sup>.

While pathogens are killed by osmotic shock on contact with sea water and by sunlight, this statement represents a gross under-representation of the debates within water science of the time. Even in the 1950s, overseas experience with sewage outfalls had proven controversial and it was at this time that northern hemisphere countries were moving away from this type of disposal. In this regard, it is significant that the type and scope of the literature examined by the engineers prior to finalisation of the proposal was particularly limited<sup>32</sup>.

The base premise of the design of the outfall was to discharge the sewage sufficiently far out to sea so that, if the effluent plume spread back to the foreshore, a bathing standard of water quality – 100 coliforms per 100ml at the beaches – would be maintained<sup>33</sup>. This ideal signifies the cultural bias of a submarine sewerage system: it was a system preoccupied with safe recreation as the ultimate goal for environmental management. Underlying this ideal was the assumption that there was a difference between such near shore outfalls as the septic tank system that Gisborne employed at the time and longer outfalls. This was seen as “the difference between dumping sewage into sea water against being able to assert that the sea will and has

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<sup>31</sup>“Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City.” – H.C. Williams, Chief Engineer, GCC to Council 12.11.1958 (GCC 37/2).

<sup>32</sup>The Chief Engineer of the GCC provided a list of all that he had read on the matter to his counterpart in Melbourne (H.C. Williams, Chief Engineer, GCC, to J. McIntosh, Melbourne and Metropolitan Board of Works, 23.11.1964 (GCC 37/3)). This list was not extensive and was highly biased towards British literature rather than that of North American authors. At that time, North American experts had shunned the use of ocean disposal of sewage.

<sup>33</sup>“Statement of evidence by R. Fullerton.” – 11.10.1993 (GCC 01-330-04). It had been calculated that this target could be maintained if the diffuser section could achieve a primary dilution of 100:1 between the diffuser outlet ports and the surface of the sea (Hudson and Armstrong 1999, p4).

treated it as good as or better than what other treatments can do on dry land<sup>34</sup>.” Two aspects of this assumption need to be called into question:

- Retrospect proves that the sea does not provide a ‘treatment’ for sewage. Over the long-term, the ocean cannot perform the role of an infinite sink for human effluent without significant impacts on its biological values.
- From a Maori perspective there is little or no difference between nearshore and deep water outfalls – both are culturally offensive. Recreation is only one cultural use of the sea for Maori. Moreover, with the sea being personified in Maori spiritual understandings of the environment, there is no reduction in the cultural value of deep water as opposed to nearshore waters.

The submarine sewerage system that was to develop in Gisborne was, from a Maori view, doubly fraught with contradiction.

As has been indicated, the initial intention to construct disposal facilities at Stanley Road related to the possibility of treatment options at Awapuni as much as it did to the possibility of locating an outfall there. It is important to draw attention to the reason for the shift in thinking from outfall *and* treatment to outfall *as* treatment:

The ideal place or method for disposal is the cheapest and most completely effective plan which will remove sewage and all aspects of aesthetic and public health objections which might derive from the process. When the sea is the most economical method of disposal, as it most certainly is in Gisborne, the prime question is the price at which sewerage can be conveyed beyond the point of discrimination and detection<sup>35</sup>.

...the major virtue of sea disposal, next to the initial capital cost, is the limited cost of operation<sup>36</sup>...

You will appreciate the impossibility of [the...] aim to elevate Gisborne to a standard comparable with other fledgling NZ cities. Naturally I must advise my Council, if I can, to look hard at any avenue of escape and the sea and more particularly Poverty Bay itself at least proffers hope<sup>37</sup>.

In these and similar statements, it was clearly articulated that the driving force behind the momentum towards submarine disposal was financial expediency. Moreover, that this motivation was conveyed to a senior official of the Ministry of Works highlights that Crown advisors were aware of local motivations. Given the highly questionable nature of these motivations, Crown advisors should have done more to encourage or compel other strategies. Almost all of these advisors stipulated the need for some form of advanced primary or secondary treatment to be

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<sup>34</sup>“Gisborne’s submarine sewerage disposal.” – H.C. Williams, former City Engineer. Report for interested parties, vested with the Council, p4, 4.5.1988 (GCC 37/6).

<sup>35</sup>“Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City.” – H.C. Williams, Chief Engineer, GCC to Council, 12.11.1958 (GCC 37/2).

<sup>36</sup>*Ibid.*

<sup>37</sup>“Gisborne sewerage disposal.” – H.C. Williams, Chief Engineer, GCC, to R.C. Lough, Design Office, Ministry of Works, 29.1.1958 (GCC 37/1).

added to the Gisborne outfall system<sup>38</sup>. They also knew that the City would not contemplate the additional expenditure without coercion, but they made only subdued attempts to force the issue. At the time, City debt was about £800,000, providing further incentive to find the *cheapest* disposal option<sup>39</sup>.

It is also significant that there was little or no input for public participation on the design and objectives of the submarine sewerage outfall before that design was approved by the LALB. There had been a public controversy fought out in the local media throughout 1959 and 1960 about the outfall<sup>40</sup>. Some of Gisborne's residents believed that all options which had been publicly disclosed were too expensive; the majority, however, believed that the expense of a submarine outfall could not be justified *unless* it included additional treatment. A petition circulated around the City under the banner, "We, the undersigned object to the proposed application to the Local Government Loans Board for its sanction to the raising of a loan to discharge untreated sewage into Poverty Bay<sup>41</sup>." The purpose of this petition highlights the paucity of opportunities for public participation in the environmental management system of the day and the attitude of the local authority to dialogue with its citizens:

[L]ast week the Gisborne Ratepayers Association, a belligerent forthright minority with free access to the local Gisborne Herald organized a petitionary objection to [the] Loan and is soliciting signatories to this loan objection with a view to obtaining 5% of the ratepayers as a formal loan objection [and...] demanding a poll<sup>42</sup>.

Rather than being heard of right, the public could only become involved in the LALB process through a poll on the acceptability of the *loan*, as opposed to the scheme itself. Even then, it had to raise public awareness to the point where a poll could be demanded, something which was not to eventuate in Gisborne. The indirect and ambiguous nature of this process meant that it was no surprise that the poll failed to find adequate support.

As was the case with the Paokahu Landfill, the City Engineer appears to have been responsible for all aspects of design and public relations for the outfall. His reaction to the petition highlights the uni-directional nature of public participation at the time:

<sup>38</sup> See, for example: "Meeting of interdepartmental committee." – 21.10.1958 (MW 48/737/3); "Gisborne sewage disposal." – R Lough, Ministry of Works, to H.C. Williams, Chief Engineer, GCC, 19.3.1958 (GCC 37/2).

<sup>39</sup> "Gisborne sewerage disposal." – H.C. Williams, Chief Engineer, GCC, to R.C. Lough, Design Office, Ministry of Works, 29.1.1958 (GCC 37/1).

<sup>40</sup> "Gisborne sewerage scheme." – H.C. Williams, Chief Engineer, GCC, to R. Lough, Design Office, Ministry of Works, 22.7.1960 (GCC 37/3).

<sup>41</sup> "Petitionary objection to submarine sewerage disposal scheme 1960." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 9.8.1960 (GCC 37/3).

<sup>42</sup> "Gisborne sewerage disposal." – H.C. Williams, Chief Engineer, GCC, to City Engineer, Napier City Council, 8.8.1960 (GCC 37/4).

The objections have been courted in the form of a petition. The organizers of the list have never approached this office for any enlargement of the misleading report published...Public relations have therefore been non-existent<sup>43</sup>.

The obvious implication of this statement is that it was not the role of the Council to explain the system through consultation with the public. Rather, the author was suggesting that it was the role of the public to inform themselves. The accepted meaning of 'public relations' had been turned on its head, with the expectation being that the public should liaise with the Council rather than the reverse. Generally, public participation is only meaningful if it is an *active* process – one which so values the views of the citizenry that attempts are made to inform potentially affected individuals and groups so that they, in turn, can (re)inform the decision-making process. In the particular case of iwi, it is all the more important that this process be bi-directional, for they tend to start from an even more marginalised position both within society and with respect to the resource management framework. The most significant barrier to effective participation is lack of financial resources and, as in other parts of the country, Gisborne Maori have little access to such resources.

During 1959 and 1960, the GCC made no attempt to actively seek out the voice of the public, and nor did it accept the validity of public opinion. Thus, the act of ignoring public opinion – in a way which would today be considered unconscionable – could then be viewed as heroic:

Gisborne City experienced almost overwhelming opposition to its scheme in 1960 from bodies of well meaning but patently uniformed people, many of them professional people of high standing in their own spheres, to the extent that its [sewage] works would not have got under way but for a very searching and courageous stand by the Mayor and Councillors of the 1960 Gisborne City Council<sup>44</sup>.

It was not only the LALB process which assisted the GCC in maintaining its ignorance of the value of public participation. The Water Pollution Act 1953 was entirely silent about the role that the public could play in deciding infrastructural projects that might lead to pollution. While the archives for the submarine sewerage outfall reveal few objections which were raised by local iwi at the time, this is not surprising: there was no mechanism for these objections to be raised with the Council.

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<sup>43</sup>"Petitionary objection to submarine sewerage disposal scheme 1960." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 9.8.1960 (GCC 37/3).

<sup>44</sup>H.C. Williams, Chief Engineer, GCC, to Napier Chamber of Commerce, 31.3.1969 (GCC 37/3).

## LALB vs. GCC #1 – Testing regimes and public health

The LALB process, as applied to this particular sewerage scheme loan, is explained as follows:

[The GCC] propose to raise a loan to execute the works. To do this, the Local Authority must obtain the ratification of its scheme from the Local Authorities Loans Board, which is an organisation set up by the Central Government to scrutinise works proposed by Local Authorities as loan works. In this case, the Local Authorities Loans Board has as its advisor the...Sea Pollution Advisory Council which at the moment seems somewhat sceptical about the principle of the disposal of municipal sewage at sea. I have had preliminary discussions with the Sea Pollution Council and they are prepared to recognise the principle of submarine sewerage disposal in Poverty Bay providing this Council can produce sufficient information to prove that sea pollution and the effect on nearby swimming beaches is not adverse<sup>45</sup>.

Inherent in this process was the Council's need to prove that bathing beaches would be free of pollution, but there was little else that it had to accomplish in order to obtain permission from PAC and, subsequently, the LALB. Much of the responsibility for ascertaining whether these beaches were likely to be safe was devolved, in particular, to the local Medical Officer of Health<sup>46</sup> and, in general, to the Health Department<sup>47</sup>.

Within that Department, it appears that the Director of the Division of Public Hygiene was unimpressed with the initial proposal from Gisborne<sup>48</sup>. The main point of controversy in these initial dealings between advisors representing the LALB/PAC and the GCC was the level of wind and current testing that had been carried out prior to the Council's acceptance of the proposal. The City Engineer had assured the local Medical Officer of Health that the predominant winds were offshore, which would have lead the effluent plume away from City beaches<sup>49</sup>. This particular advisor was sceptical about the extent to which bacteria from the sewage would die in sea water, stating that there was a "likelihood that pollution will still exist in the littoral waters unless preliminary treatment is undertaken<sup>50</sup>." The Officer also commented upon the fact that consumption of shellfish was at risk

<sup>45</sup>"Gisborne sewerage disposal." – H.C. Williams, Chief Engineer, GCC, to Manager, Collins Submarine Pipeline Ltd., 17.8.1959 (GCC 37/1). The Sea Pollution Advisory Council is the earlier name for the Pollution Advisory Council (PAC).

<sup>46</sup>L.S. Davis, Director, Division of Public Hygiene, to B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, 23.6.1960 (HD 1/1/1).

<sup>47</sup>Director, Division of Public Hygiene, to Medical Officer of Health, Gisborne, 31.8.1960 (HD 1/1/1).

<sup>48</sup>L.S. Davis, Director, Division of Public Hygiene, to B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, 23.6.1960 (HD 1/1/1).

<sup>49</sup>"Gisborne City Council sewage disposal." – B.W. Christmas, Medical Officer of Health, Gisborne, to Director General of Health, Wellington 25.8.1958 (HD 11/2/1).

<sup>50</sup>*Ibid.*

from pollution from the proposed outfall and “[f]or these reasons I recommend that shore treatment be seriously considered rather than proceed with the proposed scheme.” However, he recognised that the local authority would avoid implementing treatment *and* disposal options unless costs were reduced to a minimum. As a consequence, he was prepared to accept the outfall as an *initial* step within a wider treatment and disposal programme, but only if further testing was carried out as to where pollution was likely to spread.

In correspondence with LALB advisors, the City Engineer remained steadfast in his belief that the effluent plume would travel offshore on the basis of what he believed to be “considerable...current meter and drogue float tests<sup>51</sup>.” Elsewhere, however, the Engineer admitted that the tests were inconclusive and that he had no idea of whether the driving mechanism for typical currents in the Bay was wind or tide, nor what the combined impact of wind and tide would be<sup>52</sup>. To the City Engineer the purpose of the float tests was to determine the minimum possible length of the outfall pipe<sup>53</sup>. In other words, their purpose was to save the GCC as much money as possible. Therefore, the wrong objective – fiscal pragmatism as opposed to the avoidance of pollution – had driven the testing programme and, as a result, important information had not been collected

An engineering advisor to the Ministry of Works reviewed the Council’s tests, concluding that the wrong type of tests had been employed. Float tests gave too much emphasis to wind and they did not necessarily relate to underlying currents<sup>54</sup>. The critique also found that insufficient testing had been completed in southerly winds as well as in winds above average strength. In the view of the engineering advisor this was significant because it meant that the proposal underestimated the likelihood of a strong wind blowing sewage onshore. He also believed that the proposal had overestimated the level of die-off of bacteria in the water, meaning that bacteria would remain alive long enough to reach the shore even in moderate winds. The City Engineer had used an “invalid formula for dilution with distance from the outfall<sup>55</sup>.” The combination of these two omissions meant that it was “plain that it is not possible to be certain that pollution of the Waikanae beach will not occur in moderate to strong southerly winds with this outfall or even with one of very much greater length.” Thus, there were a number of good reasons for additional tests.

There is no doubt that the Council attempted to avoid the requirement for additional tests. Although it was attempting to implement the outfall within a com-

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<sup>51</sup> “Gisborne sewerage disposal.” – H.C. Williams, Chief Engineer, GCC, to Manager, Collins Submarine Pipeline Ltd., 17.8.1959 (GCC 37/1).

<sup>52</sup> H.C. Williams, Chief Engineer, GCC, to Commander in Charge of Survey, 27.11.1958 (GCC 37/1).

<sup>53</sup> “Report on the collection, treatment and disposal of the sewerage and trade wastes of Gisborne City.” – H.C. Williams, Chief Engineer, GCC to Council, 12.11.1958 (GCC 37/2).

<sup>54</sup> “Gisborne City sewer outfall.” – R.H. Thomas, Engineer, to R.C. Lough, Public Health Engineering Section, Ministry of Works, 12.10.1959 (GCC 37/1).

<sup>55</sup> *Ibid.*

pressed, if not imprudent, time frame, it was particularly slow in starting the new tests. By mid-1959, the Department of Health became exasperated with the state of progress. The Director of the Division of Public Hygiene wrote to the local Medical Officer of Health stating that “[a]s far as I am concerned I am not satisfied with this proposal at all and have not had sufficient information to enable me to report favourably upon it<sup>56</sup>.” This inspired the Medical Officer of Health to write to the GCC:

In December of 1959 the Director, Division of Public Hygiene, wrote to the effect that the proposed outfall had been discussed with the Public Health Engineers who had been in touch with yourself. It was stated that further tests were to be made during southerly conditions and when this information was to hand another conference was to be arranged...Would you please advise if these tests have been carried out and the position now in regard to the City sewage scheme<sup>57</sup>.

The reply from the City’s engineering department reflected the freedom that it believed it possessed to re-interpret LALB/PAC directives:

The further tests of sea movements in Poverty Bay under southerly conditions referred to in yours 23rd May, 1960 have not been considered necessary because the tests carried out and reported upon in mine *The movements and dispersion of sea water in Poverty Bay’ (17th September, 1959)* indicate the information sought. I have no knowledge of any undertaking with the various Ministry of Works, Public Health or marine Authorities concerning proposals to carry out additional tests...

The position now is that detailed design of all the gear associated with a submarine pipe and its launching, the control gear and its operation, and the onshore pumping equipment for wet weather flow are being prepared in this office and have reached an advanced stage of completion<sup>58</sup>.

The implications of these two paragraphs are serious indeed. First, the claim that the City Engineer had no knowledge of the directive for further tests was most certainly a fabrication<sup>59</sup>. Second, a direct order from a government department had been disobeyed, seemingly with no negative consequences for the local authority. Third, and most importantly, by the time that the above explanation was written, the momentum towards a submarine sewerage outfall was such that it was almost impossible to stop it<sup>60</sup>. Indeed, wind and current tests which would have met the

<sup>56</sup>L.S. Davis, Director, Division of Public Hygiene, Department of Health, to B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, 23.6.1960 (HD 1/1/1).

<sup>57</sup>“Gisborne sewerage: proposed submarine outfall.” – J.W. Parker for Medical Officer of Health, to H.C. Williams, Chief Engineer, GCC, 23.5.1960 (GCC 37/3). See also: B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, to City Engineer, GCC, 23.5.1960 (HD 1/1/1).

<sup>58</sup>“Gisborne sewerage. Proposed submarine outfall.” – H.C. Williams, Chief Engineer, GCC, to Medical Officer of Health, District Health Office, Gisborne, 27.5.1960 (GCC 37/3).

<sup>59</sup>He had commented at length about the stupidity of the directive to carry out further tests in many files within GCC 37/2 – that is, before this claim that he had no knowledge of the request.

requirements of the Health Department's directive were carried out only *after* the installation of the outfall<sup>61</sup>. The strategy of the GCC appeared to be one of installing the outfall, *then* attempting to predict its effects. Given the political inertia associated with investments of this size, this was a truly unfortunate strategy. Testing should have been completed before the design had been finalised so that adjustments to, or abandonment of, the design could have taken place. It could be argued forcefully that the submarine sewerage outfall should never have been allowed without these tests.

### **LALB vs. GCC #2 – incorporating effluent from the GRC freezing works**

A second controversy between the public health and loans authorities in Wellington and the local Council emerged soon after the debates about testing. In Section 10.3, it was signalled that there was a significant controversy between the GCC and the LALB/PAC in relation to the waste stream from the Gisborne Refrigerating Company (GRC). The main thrust of the argument was that:

It is pointless to take expensive measures to eliminate beach pollution by the Borough sewage [through implementation of a submarine outfall] and leave such a polluting discharge as that from the freezing works discharging close to the Waikanāe Beach<sup>62</sup>.

This controversy is evaluated more fully in the present Chapter for two reasons. First, as has already been suggested, the gross pollution of Kaiti Beach from the freezing works should have ceased in the mid-1960s. As it happened, however, Kaiti Beach continued to be influenced directly by works effluent for another three decades. Second, this particular controversy further highlights the ineffectiveness of the LALB/PAC and the Water Pollution Act 1953 in combating the practices of a rogue local authority. There can be no doubt that the LALB/PAC both wanted the City to accept GRC waste and believed that the GCC was intending to take that waste. Simple deception and avoidance tactics on the part of the Council were sufficient to detract the LALB/PAC from fulfilling its task in Gisborne.

The need to make provision for the GRC waste had been clearly articulated before the City began to evaluate the Stanley Road option for a submarine outfall. It was

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<sup>60</sup>The Department of Health was in disbelief at the tactics of the GCC, but thought that there was now little else it could do – the septic tanks and nearshore outfalls were still in operation and there was considerable local and governmental pressure to find a 'resolution' for Gisborne's pollution problems. Because of the advanced state of the proposal, the Department simply requested that testing be carried out as soon as possible after the completion of the outfall ("Gisborne sewerage and sewage disposal." – R.H. Thomas, Engineer, Public Health, Engineering Section, Ministry of Works, and Head Office, Department of Health, 18.8.1960 (HD 1/1/1).)

<sup>61</sup>"Sewerage loan 1960." – H.C. Williams, Chief Engineer, GCC, to Medical Officer of Health, Department of Health, 29.11.1965 (GCC 37/3).

<sup>62</sup>"Gisborne sewerage and sewage disposal." – R.H. Thomas, Engineer, Public Health Engineering Section, Ministry of Works and Head Office, Department of Health, 18.8.1960 (HD 1/1/1).

significant in the initial desirability of the Sponge Bay proposal but, after the abandonment of that proposal, the need to accommodate GRC at Stanley Road remained a significant part of the disposal agenda. While the local authority had publicly agreed to this need, in correspondence between it and the GRC, the City was simultaneously attempting to avoid the responsibility of taking the GRC waste. In one letter, the Borough Engineer stated that “[i]t has been my opinion that your company and my council would be best served by plying separate roads in the matter of sewerage disposal<sup>63</sup>.” The logic of this opinion was that it would be too costly for either party to agree with the 1951 determination of the LALB that there should be integrated disposal of City and GRC wastes.

At the end of 1957, an engineering advisor to the GCC had evaluated the potential for incorporating the GRC waste at length<sup>64</sup>. He determined that it would be difficult, but not impractical, to discharge the works’ waste through the submarine outfall. There were two legitimate complications. First, at the height of the killing season the works’ waste was equivalent in strength and volume to that of about 40,000 persons – about twice that of the contemporary population of Gisborne City. At other times of the year, however, it was of a minimal volume, meaning that extra capacity in the outfall and in pipes running from the works to the outfall would be required for only a limited amount of the year. Second, and more significantly, the works’ waste had a high salt water content, the result of using salt water to wash down the company’s machinery, pipes and yards. Not only might this have corroded the City system, it might also have prevented the possibility of adding secondary treatment to the City disposal mechanism thereafter<sup>65</sup>. Notwithstanding these complications, the engineering advisor suggested that limited pre-treatment at the freezing works would be all that was required to safely accept the works’ waste for submarine disposal<sup>66</sup>.

Yet, when corresponding with the Ministry of Works overseer for the project, the City Engineer chose to translate the sentiments of the engineering advisor, suggesting that it was his advice that incorporation of works’ waste was entirely impractical<sup>67</sup>. The real reason for the GCC’s attitude to this matter might also have been revealed in this same letter. Although the Council knew of the potential to use trade waste by-laws to recuperate from the GRC any money which might be spent in adjusting the outfall plan to incorporate the works’ waste, the GCC did not want to explore this possibility. This is fully in keeping with the Council’s general acquiescence to local industry *vis-à-vis* the economics of pollution control, as explained in

<sup>63</sup>H.C. Williams, City Engineer, GBC, to Gisborne Refrigerating Company, 15.10.1956 (HD 11/2/1).

<sup>64</sup>C.C. Collom, Auckland Municipal Drainage Board, to Mayor and Councillors, GBC, 27.11.1957 (GCC 37/2).

<sup>65</sup>Salt water inhibits anaerobic (‘without air’) digestion of sewage, a common mechanism of sewage treatment at the time.

<sup>66</sup>C.C. Collom, Auckland Municipal Drainage Board, to Mayor and Councillors, GBC, 27.11.1957 (GCC 37/2).

<sup>67</sup>“Gisborne sewerage disposal.” – H.C. Williams, Chief Engineer, GCC, to R.C. Lough, Ministry of Works, 17.09.1958 (GCC 37/2).

Section 10.5. The capacity to employ trade waste by-laws to force industry to subsidise sewage disposal had been introduced with the PAC's *Model trade waste by-law (1956)*, pursuant to the Water Pollution Act 1953. This model was never implemented in Gisborne.

The Ministry of Works replied with a sternly written letter of scepticism, stating clearly the need to accept the GRC waste stream within the existing proposal. This letter suggested that it should be possible to incorporate the works' waste within the present scheme and, if this proved not to be the case after additional study, then the GRC should be forced to wash down its plant with fresh water<sup>68</sup>. The engineers and advisors from the Department of Health scoffed at the suggestion that the salt water washings of the GRC would corrode City piping systems<sup>69</sup>. In other letters, they advised the GCC engineers on exactly how this could be achieved within a limited cost range and with no long term effect on the pipes<sup>70</sup>. At the very least, a relatively inexpensive pipe could have been laid direct from the GRC to the outfall, limiting the impact on the City reticulation system<sup>71</sup>. These advisors questioned the motivations of the GCC in this regard, implying that they thought the Council was making deceptive and false claims about the nature of the GRC problem in order to cut costs<sup>72</sup>.

A meeting was held between LALB, PAC and GCC representatives in November of 1958, with the relationship between the GRC waste and the City outfall as the main item on the agenda. The conclusion of that meeting was that there was no legitimate reason for the Council to decline the works' waste. However, the City Engineer reported an entirely different outcome of this meeting to his Council. He admitted that LALB and PAC advisors had rejected the Council's desire to consider GRC waste a separate matter. Yet, he then suggested that he had convinced them of "evidence both economic and technical, that this could prove to be a rational state of affairs in the case of Gisborne"<sup>73</sup>. Around this time, the Health Department had threatened the GRC with prosecution if it did not reduce its pollution of the Kaiti foreshore<sup>74</sup>. While the company was initially opposed to transferring its waste to a

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<sup>68</sup>"Gisborne sewage disposal." – F.M. Hanson, Commissioner of Works, Ministry of Works, to H.C. Williams, Chief Engineer, GCC, 10.10.1958 (GCC 37/2).

<sup>69</sup>"Kaiti Freezing Works effluent." – B.W. Christmas, Medical Officer of Health, Department of Health, Gisborne, to Director General of Health, 21.4.1959 (HD 1/1/1); Director, Division of Public Health, Wellington, to J.M. Holden, Medical Officer of Health, Gisborne, 24.7.1961 (HD 1/1/1).

<sup>70</sup>"Gisborne sewerage and sewage disposal." – R.H. Thomas, Engineer, Public Health, Engineering Section, Ministry of Works and Head Office, Department of Health, 18.8.1960 (HD 1/1/1).

<sup>71</sup>*Ibid.*

<sup>72</sup>Director General of Health, Wellington, to Medical Officer of Health, Napier 24.4.1959 (HD 1/1/1); Commissioner of Works, to District Commissioner of Works, Napier 6.5.1959 (HD 1/1/1).

<sup>73</sup>"Gisborne Refrigerating Company trade wastes. City sewerage." – H.C. Williams, Chief Engineer, GCC, to Town Clerk, 27.11.1958 (GCC 37/2).

<sup>74</sup>Medical Officer of Health, Gisborne, to Director General of Health, Wellington 28.10.1958 (HD 11/2/1); Medical Officer of Health, Gisborne, to Director General of Health, Wellington, 28.10.1958 (HD 11/2/1).

proposed City outfall, after these prosecution threats it began to accept the notion<sup>75</sup>. At this stage, therefore, it appears that the only party which was against the integrated disposal of municipal and works' waste was the GCC.

The PAC secretariat also rejected a counter proposal by the GCC that GRC waste be disposed of through the outfall associated with the Kaiti septic tank<sup>76</sup>. It reiterated that inclusion of the works' effluent in the City outfall was the "most satisfactory, if not the only solution to the problem of the orderly disposal of wastes from the whole area<sup>77</sup>." As will be recalled from the commentary in Section 10.3, despite this PAC resolution, the GCC attempted to convince the GRC of the merit of this scheme for many years thereafter. During most of 1959 and 1960, the PAC was entirely uncertain about the precise nature of the GCC's disposal plans, but it remained convinced that the GRC effluent should be disposed along with the City waste<sup>78</sup>. Yet, the PAC was hampered by the very legislation that had created it. It believed that the Water Pollution Act 1953 gave it little more than advisory powers so it had little ability to force its point of view on the Council. The only power that it had was to make an unfavourable recommendation to the LALB about the GCC proposal. However, "it was generally agreed that, although an unfavourable recommendation could be made to the Loans Board, this would not be a proper action<sup>79</sup>." The Water Pollution Act 1953 had created a fairly weak advocate for environmental quality and it was beyond the PAC to successfully confront the GCC. The GRC waste stream should have been resolved at this point, but it was to be a recurring controversy for many years thereafter. While both PAC and the LALB believed they finally had the agreement of the GCC to take GRC waste, the GCC had no plans to live up to this agreement.

## Permits and conditions

Ultimately, the PAC sent a positive, albeit conditional, recommendation to the LALB about the submarine sewerage proposal. It had come to the decision that unless the GCC was allowed to install its outfall, progress would not be made towards solving Gisborne's pollution for a dangerously long time. Unless at least one component of a satisfactory treatment and disposal system was installed, nothing would be accomplished in the then foreseeable future. Begrudgingly, the LALB followed the same course of action, in part because it recognised that the Council would not move on a more advanced (and more expensive) system of treatment and disposal. The necessity of this first step is a common theme within letters written by PAC and LALB staff at this time. For example,

<sup>75</sup>"Meat trade wastes committee report." – 16.3.1961 (MW 48/737/3).

<sup>76</sup>"Gisborne sewerage disposal." – P.E. Muers, Pollution Advisory Council, to Town Clerk, GCC, 19.10.1960 (GCC 37/4).

<sup>77</sup>"Inclusion of works effluent into City scheme." – Secretary, Pollution Advisory Council, to GRC and GCC, 3.6.1960 (HD 1/1/1).

<sup>78</sup>Report of the inter-departmental committee to the Pollution Advisory Council, 1960/61 – (HD 27396).

<sup>79</sup>"Minutes of the tenth meeting of the Pollution Advisory Council." – 29.4.1960 (MW PW8/0).

...assuming that the engineering aspects are feasible, I recommend approval of this scheme subject to...provisions...In my opinion an improved and adequate sewerage system is an urgent necessity for Gisborne<sup>80</sup>.

In the end, both the PAC and the LALB succumbed to the notion that it would be impossible to force the GCC to spend more money than it wanted to. While the LALB would have approved a loan large enough to incorporate a treatment or oxidation scheme at Awapuni lagoon...

...the City Engineer has produced a scheme which looks like saving the city possibly £100,000. After full consideration we could find no sound grounds for rejecting it, so we should approve the proposal subject to the tags...agreed upon<sup>81</sup>.

It appears, then, that the LALB – like the GCC – was not beyond accepting mediocre environmental performance if money could be saved. The loan was duly sanctioned, but with a number of conditions.

The conditions were as follows:

- (a) Further works being carried out should pollution occur beyond Pollution Advisory Council standards.
- (b) Provision being made in the sea outfall section of the scheme for the inclusion of Kaiti Meat Works wastes.
- (c) No reduction being made in the length of the outfall as specified (i.e. 6,000 feet).
- (d) All roof and yard water system[s which are linked to the City reticulation system] to be discontinued and all forms of infiltration eliminated as far as possible.
- (e) Overflows to be restricted to those at pumping stations and at the final holding and pumping structure. These overflows should only operate at a high level when severe flooding has occurred.
- (f) All other overflows should, as far as possible, be sealed.
- (g) Tenders not to be called or the work commenced until detailed plans and specifications have been approved by the District Commissioner of Works, Napier<sup>82</sup>.

As can be seen, the LALB tied approval for the outfall to improvements within the City's reticulation system, specifically the removal of the sewage overflows that

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<sup>80</sup>"Gisborne City Council sewerage loan 1960. £400,000." – J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, 12.9.1960 (HD 1/1/1).

<sup>81</sup>"Report of meeting between Mayor, Engineer, Town Clerk (all GCC) and District Commissioner of Works, Napier; Director of Division of Public Health, Medical Officer of Health, Gisborne, Senior Health Inspector and Representatives from MoW Public Health Engineering section." – R.C. Lough, Public Health Engineering Section, Ministry of Works, 22.8.1960 (HD 1/1/1)

caused gross pollution of the City's rivers<sup>83</sup>. More will be said about the success, or lack thereof, of the Council's pursuit of these conditions later in this Chapter. Subsequent to the loan sanction, a license for the pipeline's occupation of the sea-bed was issued by the Ministry of Transport<sup>84</sup> – the City now had all the permission it needed to implement its proposal for a submarine outfall.

The City Engineer's reaction to the loan sanction and the conditions associated with it, provides insight into the strategies of the Council up until this stage. The following was written to his counterpart in Napier:

So far so good and the disturbing feature of the apparent success achieved to date is that if there has been any bluffing to date the bluff has been called and now the problem is to get on with the job. Probably a more frightening prospect than the prospect of having to work the Scheme up in the first place<sup>85</sup>.

It is interesting to speculate as to what this 'bluffing' refers to. One can only assume that it relates to the combination of uncompleted current tests and barely concealed deceit over the GRC controversy. Whatever the case, the tactics of the GCC had succeeded: it had gained permission for its submarine sewerage outfall. The way in which it had obtained this permission suggests that local authorities were in a stronger position than such national agencies as PAC and the LALB. In this context, it was very improbable that *national* goals, such as the Crown's pursuit of the principles of the Treaty, would be achieved at the local level. The failure of the Crown to give any real power to such environmental health advocates as the PAC, which was essentially an advisory body with little power of enforcement, meant that Maori attitudes to pollution would never be incorporated into the decision making on the submarine sewerage outfall. In any case, PAC and the LALB did not have as part of its Crown-established mandate a requirement to consider Maori interests. For all these reasons, then, the outfall was authorised with no attempt to gauge Maori opinion about this means of disposal.

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<sup>82</sup> "Sewerage loan 1960. £400,000." – Secretary, Local Authorities Loans Board, Treasury, to Town Clerk, 30.9.1960 (HD 1/1/1 and GCC 37/4). See also: Commissioner of Works, Wellington, to Secretary, Local Authority Loans Board, 21.9.1960 (HD 1/1/1); "Gisborne City Council sewerage loan." – Director, Division of Public Hygiene, Wellington, to Secretary, Local Authority Loans Board, 20.9.1960 (HD 1/1/1).

<sup>83</sup> Refer to Section 10.2.

<sup>84</sup> NZ Gazette, No4, p104, 31.1.1963.

<sup>85</sup> "Sewerage disposal." – H.C. Williams, Chief Engineer, GCC, to City Engineer, Napier City Council, 21.10.1960 (GCC 37/4).

## 11.2 Compliance with LALB conditions

While the loan for the sewerage outfall was sanctioned in 1961, it was not until 1965 that the outfall became operative. In that time, there were additional controversies relating to the incorporation of the GRC waste. After 1965, the conditions of the 1960 loan were breached in a variety of other ways, resulting in contravention of accepted standards of environmental quality. The approach of the GCC in relation to these contraventions was to ignore the problem, pretending that the outfall was functioning in a manner which was safe to public health. This Section briefly evaluates the type of pollution problems that emerged. It also considers the failure of the government departments comprising the LALB/PAC to force the GCC to meet the conditions of the 1960 loan. It is argued that the success of the GCC in evading the will of government agencies is related to the weak mandates of those agencies which were established under public health and environmental legislation.

### Condition (b): GRC and the submarine sewerage outfall

(b) Provision being made in the sea outfall section of the scheme for the inclusion of Kaiti Meat Works wastes.

In the latter months of 1960, it would have appeared that the GCC intended to comply with this particular condition. Immediately after the decision of the LALB to sanction the loan, the City Engineer believed that condition (b)...

...is a thorny problem and can be solved by some judicious juggling of the internal arrangement at the Refrigerating Company's Works to separate all its cooling waters from its meat waste effluents. The condition is an awkward one but which I am confident can be fulfilled<sup>86</sup>.

At this stage, there was nothing to suggest, either in internal or external correspondences, that the GCC had any intention to default on condition (b)<sup>87</sup>. Likewise, the PAC remained certain that the only outstanding question was *how* the submarine sewerage outfall would incorporate the works' waste<sup>88</sup>. There were a number of reticulation options to take the works' effluent to the outfall, but the disposal of GRC effluent through the outfall was not optional.

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<sup>86</sup>"Sewerage disposal." – H.C. Williams, Chief Engineer, GCC, to City Engineer, Napier City Council, 21.10.1960 (GCC 37/4).

<sup>87</sup>See, for example: "Meat trade wastes committee report." – 16.3.1961 (MW 48/737/3).

<sup>88</sup>"Gisborne sewerage scheme. Kaiti meat works wastes." – H.C. Williams, Chief Engineer, GCC, to Resident Engineer, Ministry of Works, 5.12.1960 (GCC 37/4).

Figure 11.1 – H.C. Williams, Chief Engineer, GCC, 1957-1986, pictured during construction of the submarine sewerage outfall.



The GCC began to stray from the logic of the conditions in mid-1961 – well before the City's outfall was commissioned. Initially, this was through the suggestion that even though the 1960 conditions stipulated the integrated disposal of GRC wastes, the loan itself did not provide monies for this purpose<sup>89</sup>. Thus, the Council began to question whether another loan could be raised to transfer freezing works waste to the head of the outfall. The apparent motivation for this departure was the realisation that the submarine sewerage outfall was going to cost more than had initially been expected<sup>90</sup>. The lack of research that contributed to the design of the outfall led to costly financial over-runs for the project. When it became apparent that the LALB would block a loan extension, the City Engineers began to evaluate in private whether the Council could renege on condition (b). Nonetheless, throughout 1961, there was a series of *public* exchanges between representatives of the PAC, the LALB and the GCC which were written as if the incorporation of the GRC waste was inevitable. During 1961, all parties publicly accepted the idea of a separate pipeline running from the works to the head of the outfall<sup>91</sup>. While there was disagreement over whether this should be paid for out of the initial 1960 loan, there was no question that the GRC would be connected to the outfall<sup>92</sup>.

<sup>89</sup> H.C. Williams, Chief Engineer, GCC, to Town Clerk, 21.6.1961 (GCC 37/4).

<sup>90</sup> "Gisborne City Council. Sewerage: additional loan 1966. £110 000." – Ministry of Works, to Local Authorities Loans Board, 3.8.1966 (MW 50/316).

<sup>91</sup> Commissioner of Works, Wellington, to District Commissioner of Works, Napier 13.6.1961 (HD 1/1/1); J.M. Holden, Medical Officer of Health, Gisborne, to Director General of Health, 7.7.1961 (HD 1/1/1); "Gisborne City sewerage. Disposal of meat works waste." – Ministry of Works, to Medical Officer of Health, 24.7.1961 (MW 50/316).

Perhaps the best indication of the true intentions of the GCC was that it did almost nothing more about the GRC issue until the outfall was commissioned. In this time, the government agencies which were supposed to be supervising the project simply assumed that the GCC was implementing the conditions of the loan. However, the GCC could not hide its intentions after the outfall was operative. By February 1966, the Council knew that it was about to face a stern reaction from the PAC/LALB. It wrote to the GRC management that...

...the City Outfall has been put in service and will soon be in a position to receive Works wastes. The question of conforming with the Pollution Advisory Council recommendations is therefore coming to the fore...Before we waste each others time in bringing down a scheme of capital works to that end and establishing a draft for Trades Waste By-Laws to settle the charges which the Company would then find thereafter, it might be as well if the possibilities quoted...[in my earlier letter of 1960] could be investigated. You will recall it reads, 'It gives the City Council and other Authorities the opportunity to observe the effect of temporarily diverting Freezing Works wastes via the City Kaiti outfall [which is soon] to be abandoned'...<sup>93</sup>

The 1960 letter cited in the above quotation was considered in Section 10.3 on page 350 of this report. It proposed a scheme to dispose of GRC waste through the outfall associated with the Kaiti septic tank – a scheme that had earlier been wholeheartedly rejected by the PAC<sup>94</sup>. The GRC was initially sceptical about this option but, when it discovered that it would be less expensive, it began to scope the possibility with the GCC Engineers<sup>95</sup>. This scoping exercise was completed without first having cleared the option with the PAC/LALB.

The controversy surrounding the connection of the GRC to the submarine outfall was precipitated further by another loan application to the LALB in 1966. This loan – for £110,000 – had little to do with sewage disposal and related to the costs of connecting unreticulated suburbs to the City sewerage system<sup>96</sup>. The LALB refused to separate this loan from the Council's non-compliance over GRC waste and made £10,000 of it provisional "until finality is reached over disposal of the meat works' wastes<sup>97</sup>." The GCC considered this act to be "high-handed government interference" which reflects that "someone in the Government employ is of the opinion

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<sup>92</sup>Commissioner of Works, Wellington, to District Commissioner of Works, Napier 5.4.1961 (HD 1/1/1); Commissioner of Works, Wellington, to Secretary, Pollution Advisory Council, 7.7.1961 (HD 1/1/1); "Gisborne City Sewerage scheme. Disposal of meat works waste." – Ministry of Works, to District Commissioner of Works, 16.5.1961 (MW 50/316).

<sup>93</sup>"Gisborne sewerage scheme. Kaiti meat works wastes." – H.C. Williams, Chief Engineer, GCC, to Manager, Gisborne Refrigerating Company, 28.2.1966 (GCC 37/4).

<sup>94</sup>Refer to Section 10.3.

<sup>95</sup>"Gisborne sewerage scheme." – Manager, Gisborne Refrigerating Company, to H.C. Williams, Chief Engineer, GCC, 1.5.1966 (GCC 37/4).

<sup>96</sup>"Local Authorities Loans Board. Gisborne City Council sewerage additional loan 1966." – Ministry of Works, to Commissioner of Works, 26.7.1966 (MW 50/316); "Gisborne City Council sewerage additional loan 1966. £110,000." – J. Overton, Medical Officer of Health, Gisborne, to Director General of Health, 29.7.1966 (HD 1/1/1).

that the Council and the Works are not being honest with the Pollution Advisory Council<sup>98</sup>. Yet, the GCC certainly was not being honest with the PAC. In March of 1967, the PAC wrote to the GCC to enquire about whether it was attempting to depart from the 1960 loan conditions<sup>99</sup>. In reply, the City Engineer wrote that "the City Council has as yet no variation in its policy re sewerage improvement works established at the outset of its programme using loan monies ex the 1960 loan<sup>100</sup>." Despite this assurance, this same letter included a truly ambiguous statement of intent:

The City Council accepted the 'Sewerage Loan 1960 £400,000' condition that provision should be made in the submarine outfall disposal plant for inclusion of Gisborne Refrigerating Company Limited meat wastes mindful that it was reasonable for such provision to be built in...It intends to devote the full attention of its engineering staff to the absorbing commitment of completing its 1960 scheme before diverting to the lesser question of meat works wastes.

The City Engineer has expressed the view to the City Council that he would be failing in his duty to his principal, its townsfolk and its major industries were he to adopt the 1960 notion for provision in case meat wastes were to be pumped to and via the submarine outfall, as a viable proposition for construction now<sup>101</sup>.

This was yet another obvious example of a delaying tactic – one designed to buy the GCC some time while it investigated a Kaiti outfall for the GRC works. Again, the reaction of departments which comprised the PAC and LALB was of complete disdain for this and similar arguments of the Council<sup>102</sup>. The Ministry of Works, in particular, recognised that the Council was attempting to delay the incorporation of the works' waste in the hope that it could outlast the resolve of the PAC and LALB<sup>103</sup>. It believed that the Council should have connected the GRC to the submarine outfall when it connected the Watties factory, as had been agreed in 1961<sup>104</sup>.

In the early 1970s, the issue was revisited one final time after discovery of gross levels of pollution on the Kaiti foreshore. The GCC argued that it had already met

<sup>97</sup>"Proposed sewerage additional loan 1966. £110,000." – Secretary, LALB, to Town Clerk, GCC, 15.8.1966 (HD 1/1/1).

<sup>98</sup>"Plastic marine pipe line." – H.C. Williams, Chief Engineer, GCC, to the Manager, Gisborne Refrigerating Company, 29.8.1966 (GCC 37/4).

<sup>99</sup>Secretary, Pollution Advisory Council, to Town Clerk, 1.3.1967 (HD 1/1/1).

<sup>100</sup>"Gisborne City industrial wastes disposal." – H.C. Williams, Chief Engineer, GCC, to Pollution Advisory Council, 6.3.1967 (GCC 37/4).

<sup>101</sup>*Ibid.*

<sup>102</sup>"Gisborne sewerage." – Department of Health, to Ministry of Works, 29.7.1966 (MW 50/316); "Proposed sewerage additional loan." – Local Authority Loans Board, to Gisborne City Council, 15.8.1966 (MW 50/316); "Gisborne City industrial wastes disposal." – Secretary, Pollution Advisory Council, to Ministry of Works, 5.1.1967 (MW 50/316).

<sup>103</sup>"Gisborne City Council: Additional sewerage loan 1966. £110 000." – Commissioner of Works, to Secretary, Local Authority Loans Board, 25.1.1967 (MW 50/316).

<sup>104</sup>*Ibid.*

condition (b) merely by making *provision* in the pipe specifications for the works' waste<sup>105</sup>. This echoed an earlier argument, which had been rejected by the PAC in 1966, that the requirement was to build sufficient capacity in the outfall to take the Kaiti works' waste, but nothing more<sup>106</sup>. The capacity had been built into the initial design but, apparently, it was exhausted by growth in cannery and fish processing industries and, therefore, the Council believed that it should not be forced to accept the works' waste. Letters between LALB/PAC representatives were incredulous about this new argument. They reiterated that the *logic* of the 1960 conditions related to inclusion rather than simply provision for inclusion and viewed the Council's attempts at avoidance as a cynical manoeuvre and a direct flouting of the Board's conditions<sup>107</sup>.

After this, the GRC attempted to force the City to take its waste. The Council refused, reiterating its 1950s argument about the salinity of the works' waste and introducing a new argument about the long and uneven pumping terrain between the works and the outfall<sup>108</sup>. The local Medical Officer of Health scorned these arguments and summarised the long and drawn out history of the GRC issue "in view of these present objections, that a somewhat cynical provision to include the Refrigeration company was made initially merely to comply with a term of the loan<sup>109</sup>." The GRC was unsuccessful in its bid to force the GCC to take its effluent and, in 1973, it applied for a water right to dispose of its waste through its own submarine sewerage outfall at Kaiti. As was shown in Section 10.3, this proposal ultimately triumphed over the logic of condition (b).

It has been necessary to report the protracted history of condition (b) in considerable detail. The Council's disobedience of the LALB led to 27 years of unnecessary and direct pollution at Kaiti – a traditional food gathering area of considerable importance to many local Maori. However, the level of noncompliance with the initial loan conditions is important for other reasons. Today, *tangata whenua* in Gisborne District frequently suggest that the GDC is not to be trusted in planning for sewage disposal options. In turn, they are often reported as being alarmist or unreasonable in this regard. The outcomes of condition (b), alone, confirm that there is considerable historical backing for the claims of local *iwi* that the local authority is not to be trusted on the matter. Of equal importance, central agencies of the time which were mandated to protect environmental health had little success in combating the rogue attitudes of the local authority – as, perhaps, is true today. While this

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<sup>105</sup>Gisborne Refrigerating Co Ltd. Kaiti Outfall." – H.C. Williams, City Engineer, GCC, to Murray-North Partners, Consulting Engineers, 9.8.1972 (HD 32/237).

<sup>106</sup>"Sewerage. Additional loan, 1966." – Town Clerk GCC, to Secretary, LALB, 13.9.1966 (HD 1/1/1).

<sup>107</sup>L. Thorstenson, Director of Public Health, to Secretary, LALB, 1.5.1973 (HD 32/237).

<sup>108</sup>Gisborne Refrigerating Co Ltd. Kaiti Outfall." – H.C. Williams, City Engineer, GCC, to Murray-North Partners, Consulting Engineers, 9.8.1972 (HD 32/237).

<sup>109</sup>"Gisborne City Council. Sewage disposal Gisborne Refrigeration Company effluent" – P. Hinds, Medical Officer of Health, Department of Health, Gisborne, to Director General of Health, 2.4.1973 (HD 32/237).

was the case, there was almost no capacity for resource spaces of importance to tangata whenua to be protected from pollution.

### Monitoring the effects of the outfall

One of the main failures of the GCC's administration of the submarine sewerage outfall was the lack of monitoring of its environmental performance. It is evident that the GCC was more interested in hiding any data about the environmental performance of the outfall than it was in helping the public to understand the level and type of pollution in the Bay. It is not surprising, therefore, that the Council did not even monitor the volume or the composition of sewage that discharged from the outfall. The pursuit of an inexpensive system meant that it had not installed the correct type of measuring flume at the landward end of the pipe<sup>110</sup>. This problem was not satisfactorily resolved until the 1990s<sup>111</sup>. Without such data, it would have been impossible for the Council to say with any validity that it could not, for example, incorporate the GRC waste stream because of insufficient capacity. Yet, as has been shown, this is precisely what it argued during the early 1970s.

Monitoring of the outcomes of the facility could be considered an integral part of loan condition (a). Without a monitoring programme, the Council would not have known whether it needed additional treatment so, implicitly at least, the GCC was obligated to carry out such work. However, the Council adopted the approach that it would not complete extensive monitoring unless external monies could be found for the purpose and these were not forthcoming:

In 1971 it was decided to conduct a bacteriological survey on Poverty Bay to ascertain the effect of the submarine outfall on the coastal waters. Unfortunately there were no outside funds available for this purpose and the survey had to be conducted on a limited budget<sup>112</sup>.

Likewise, a programme of research to identify the composition of the effluent stream was "[s]ubject to funding being made available<sup>113</sup>." Eventually, the GCC contracted the Catchment Board to carry out monitoring, but it reduced significantly the budget for this activity that the Catchment Board had recommended<sup>114</sup>. As a result, important variables like BOD were removed from the sampling programme.

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<sup>110</sup>"Ecological impact of marine outfalls." – H.C Williams, City Engineer, GCC, to Scientist in Charge, Ministry of Works and Development, Water Quality Centre, Hamilton, 19.1.1984 (GCC 01-233-07); "Sewage treatment and disposal: Waste analysis." – J.D.Wells, Design Engineer, GCC, to A. Armstrong, Chief Engineer, ECCB, 2.9.1986 (GCC 37/5).

<sup>111</sup>"Summary of Regional Water Board involvement with waste discharge to Poverty Bay." – A. Armstrong, ECCB-RWB, June 1993 (GDC 365-04).

<sup>112</sup>"Ecological impact of marine outfalls." – H.C Williams, City Engineer, GCC, to Scientist in Charge, Ministry of Works and Development, Water Quality Centre, Hamilton, 19.1.1984 (GCC 01-233-07).

<sup>113</sup>G.C Swainson, Drainage Engineer, GCC, to Director, National Environmental Chemical and Acoustics Laboratory, Department of Health, Auckland, 29.8.1986 (GCC 37/5).

It was only from 1987 that something approaching a rigorous sampling programme was introduced for analysis of the effect of the outfall on Poverty Bay<sup>115</sup>. Even from this date, however, monitoring was less than satisfactory. Although it was known that not all of the sewage discharged through the outfall rose immediately to the surface – in other words, there was potential for lateral movement at depth<sup>116</sup> – the sampling programme was based on surface waters. Bacteriological impacts have been underestimated because there is considerable stratification of sewage within the water column, with the highest concentrations of sewage at a depth of 14m<sup>117</sup>. Improvements to the monitoring system were made soon after, when the Poverty Bay Catchment Board took over. As will be shown in a following section, however, there was insufficient progress made in this regard. In general, the lack of monitoring from 1965 to 1987 resulted in little being known about the impact of the outfall and it was, consequently, difficult for local residents to find data with which to argue for additional treatment.

### Condition (a): the need for more treatment

(a) Further works being carried out should pollution occur beyond Pollution Advisory Council standards.

Local iwi are absolutely intolerant of the concept of sewage disposal at sea. In some ways, therefore, no amount of treatment prior to oceanic disposal will appease their concerns. During their fight to have the submarine sewerage outfall abandoned, however, tangata whenua undoubtedly wanted that outfall to have as limited an impact on their spiritual, resource, and environmental concerns as possible. It is, therefore, important to analyse the success of the LALB and the PAC in enforcing condition (a), as quoted above. Unfortunately, these organisations were no more successful with condition (a) than they were with condition (b). The GCC did not even obtain full primary treatment status until 1990 and, even from that date, the effluent stream remained all but untreated except the most basic of screening facilities. This lack of treatment continued despite the fact that pollution well in excess of PAC standards has been evident in Poverty Bay since 1965.

One of the first items of evidence that the outfall was having a negative environmental impact on Poverty Bay waters related to the risk of consuming mussels which had been gathered from buoys and their respective cables in the Bay. Tests by Cook Hospital staff in 1968 found that the bacterium *E. coli* was present in the

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<sup>114</sup>“Sewage treatment and disposal: Waste analysis.” – G.C Swainson, Staff Engineer, to E.W. Sinton, Acting City Engineer, 28.7.1986 (GCC 37/5); “Sewage treatment and disposal: Waste analyses. Revised programme.” – G.C. Swainson, Drainage Engineer, 5.11.1986 (GCC 37/5).

<sup>115</sup>“Sewage analysis.” – B. Tumpenny, Water Resources Manager, GCC, to ECCB-RWB, May 1987 (GDC 365-04).

<sup>116</sup>“Mount Maunganui sewage disposal. Subsidiary study. Gisborne city sewage outfall.” – F. Lowe, Steven and Fitzmaurice Consultants, 10.5.1971 (GCC 37/4).

<sup>117</sup>Stephens and Black 1998.

majority of samples taken from the buoys<sup>118</sup>, some of which were only 300-500m offshore<sup>119</sup>. Illnesses relating to *E. coli* are at the less significant end of the spectrum of enteric diseases, but there were also more serious consequences from eating these mussels. In February of 1971, the Harbour Board was asked to erect larger notices on the buoys warning that the shellfish were contaminated. This followed cases of infectious hepatitis which had been caught after consuming the mussels<sup>120</sup>. Despite the erection of the signs, this issue continued to be a public health nuisance for some time<sup>121</sup>. In 1975, it was revealed that shellfish samples from the buoys had an average of 2400 *E. coli* bacteria per 100 grams, which was over ten times the acceptable standard<sup>122</sup>. The contamination of the mussels attracted the attention of the Department of Health to the broader environmental health impacts of the outfall<sup>123</sup>.

The immediate outcome of this increased attention was scrutiny of pollution levels on City beaches. In March of 1969, the Department of Health carried out its first full testing regime after the commissioning of the outfall. It found that bacteriological counts in the Bay and along the beaches had receded little since the construction of the new facility<sup>124</sup>. It requested the GCC to address condition (a), believing that it had sufficient evidence of need<sup>125</sup>. Yet, the Council's interpretation of such information was that the tests "carried out this year by the Health Department show that the method of disposal leaves nothing to be desired<sup>126</sup>." The GCC replied to the Department of Health that the cause of the pollution was the Kaiti outfall and the works' discharges<sup>127</sup>. Given that the Council was directly responsible for the continued existence of inshore pollution from the latter source, this was a highly ironic explanation. Another convenient excuse was that serious pollution events only occurred in "strong, direct onshore wind, the well known local 'southerly'. They occur about 5% of the year and you rarely see swimmers during them<sup>128</sup>." The various excuses employed in these early years were all counteracted by the evidence that was gradually accumulated about the outfall.

<sup>118</sup>"Cook Hospital. Pathology report." – November 1968 (GCC 37/3).

<sup>119</sup>J.R.S. Findon, Medical Officer of Health, Department Health, to H.C. Williams, Chief Engineer, GCC, 27.2.1969 (GCC 37/3).

<sup>120</sup>"Danger from these shellfish, warning." – Poverty Bay Herald, 16.2.1971 (GHB CB); Department of Health to Gisborne Harbour Board – 26.12.1971 (GHB MB).

<sup>121</sup>Department of Health to Gisborne Harbour Board – 27.3.1973 (GHB MB); "Shellfish from buoys." – Department of Health to Gisborne Harbour Board, 16.5.1977 (GHB MB).

<sup>122</sup>Health Department, Gisborne, to Director General of Health, Wellington, 17.10.1975 (HD 126/4/5).

<sup>123</sup>Department of Health to Manager, Gisborne Harbour Board, 27.2.1969 (HD 14/7); "Contaminated shellfish." – Medical Officer of Health to General Manager, Gisborne Harbour Board, 14.3.1969 (HD 14/7).

<sup>124</sup>"Seawater samples." – Medical Officer of Health, Gisborne, to Town Clerk, 1.3.1969 (GCC 37/3).

<sup>125</sup>"Seawater samples." – J.R.S. Findon, Medical Officer of Health, Department Health, to H.C. Williams, Chief Engineer, GCC, 14.3.1969 (GCC 37/3).

<sup>126</sup>H.C. Williams, Chief Engineer, GCC, to Napier Chamber of Commerce, 31.3.1969 (GCC 37/3).

<sup>127</sup>"Seawater samples." – H.C. Williams, Chief Engineer, GCC, to Medical Officer of Health, 4.3.1969 (GCC 37/3).

<sup>128</sup>"Gisborne's submarine sewerage disposal." – H.C. Williams, former City Engineer. Report for interested parties, vested with the Council, p9, 4.5.1988 (GCC 37/6).

The Council also blamed point source discharges into the City rivers<sup>129</sup>. The rivers were heavily polluted and, indeed, this had a negative impact on the beaches nearby which they exited to the sea. However, the conclusion of the only extensive analysis of the effect of the rivers on marine water quality was that the rivers could not be responsible for the level of pollution in the Bay<sup>130</sup>. The report concluded that:

The magnitude of the bacterial input from the outfall discharges is significantly greater than the input from the rivers and, in the case of the city outfall, is a known source of faecal bacteria of human origin...A detailed examination of the bacterial results shows no strong implication of any particular source responsible for the beach levels, although the beach survey oil and grease results...point to the outfalls as a more probable source. The only significant sources of oil and grease discharge are the two outfalls<sup>131</sup>.

[T]he City outfall is estimated to contribute 80-90 percent of the faecal coliforms entering Poverty Bay from all sources including the two outfalls and the two major rivers<sup>132</sup>.

The rivers deposited massive amounts of sediment in the Bay, but their bacteriological impact was minor compared to the outfall<sup>133</sup>.

A 1971 comparison of tests both before and after the commissioning of the outfall showed that there had been "steady improvement<sup>134</sup>." For example, 1963-1966 tests of Waikanae and Midway beaches revealed that 32% of samples had greater than 1000 Faecal coliforms per 100ml (FC/100ml). Tests during 1967-1970 found that only 10% of samples had greater than 1000FC/100ml. While this appears to be an improved situation, the results can be deceiving. The standard for bathing beaches is 200FC/100ml, while the level for safe consumption of shellfish is lower still at 100FC/100ml. 10% is definitely an improvement over 32%, but – at 1000FC/100ml – 10% still represents gross levels of pollution. While the City Health Inspector believed that these results vindicated the decision to build the outfall, the Health Department contended that they remained serious enough to warrant additional treatment<sup>135</sup>.

After 1972, the level of pollution attenuated further<sup>136</sup>, but there was more than sufficient evidence that further treatment was necessary. A water quality study in 1985 found that, while average bacteriological counts were lower than one would expect,

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<sup>129</sup>"Ecological impact of marine outfalls." – H.C. Williams, Chief Engineer, GCC, to Scientist in Charge, Water Quality Centre, Ministry of Works and Development, n.d. (GCC 37/4); "Sea samples. Poverty Bay 15.4.71." – R.C. Hall, City Health Inspector, to F. Lowe, Steven Fitzmaurice Partners, 18.6.1971 (GCC 37/4).

<sup>130</sup>Fitzmaurice and Partners 1988.

<sup>131</sup>*Ibid.*, p54.

<sup>132</sup>*Ibid.*, p99.

<sup>133</sup>Evidence of B. Turnpenny for the Preliminary Classification of Poverty Bay waters – 26.3.1990 (GDC 369-02a).

<sup>134</sup>"Pollution." – No stated author, 13.4.1970 (GCC 37/4).

<sup>135</sup>"Sea samples. Poverty Bay 15.4.71." – R.C. Hall, City Health Inspector, to F. Lowe, Steven Fitzmaurice Consultants, 18.6.1971 (GCC 37/4).

especially given the amount of raw sewage discharged into the Bay, maximum values could at times be very high<sup>137</sup>. The 1985 average for Midway and Waikanae beaches was only 90FC/100ml – well below the 200FC/100ml standard for bathing beaches – but the maximum for that year was 2000FC/100ml. At times, such bacteria counts were associated with frank admissions from Council staff, such as the following from 1988:

The report concludes that the outfall has only a limited effect on sea bottom biology but has a major effect on contamination of Waikanae and Midway Beaches. The report concludes that the Gisborne City outfall is by far the greatest contributor of coliform bacteria to Poverty Bay compared with the GRC outfall and the two river discharges. The report recommends that improved treatment be provided for the Gisborne sewerage flow prior to discharge into Poverty Bay<sup>138</sup>.

While the evidence presented thus far is incomplete, it was ample to invoke condition (a), but this never transpired.

It is doubtful that the GCC engineers ever believed that they would be forced to implement further treatment. At the time of the 1960 loan sanction, the City Engineer had chosen to interpret condition (a) in as limited a set of terms as possible:

...that should pollution occur beyond any accepted standard, the city should undertake to extend the outfall or provide treatment at the shore end. The Mayor and the Engineer both agreed that this was reasonable and the city has provided for primary treatment if ever required in the future<sup>139</sup>.

Likewise, it is also interesting how the GCC Engineer was to subsequently reinterpret condition (a):

A condition of its approval was that site provision be reserved for whatever primary sewage treatment may come to be required in the future over and above the course comminution being installed at the outset<sup>140</sup>.

In both cases the need for additional treatment was interpreted as a *possible* need for *primary* treatment. Yet, the initial directive of the LALB was much more general<sup>141</sup> – the level of additional treatment was left open and was dependent on the level of

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<sup>136</sup>“Ecological impact of marine outfalls.” – H.C. Williams, Chief Engineer, GCC, to Scientist in Charge, Water Quality Centre, Ministry of Works (GCC 37/4).

<sup>137</sup>Cited in Fitzmaurice and Partners Ltd. 1988.

<sup>138</sup>“Outfall survey. Gisborne sewerage system.” – W.J. Warren, Engineer, GCC, to City Manager, 7.11.1988 (GCC 37/7).

<sup>139</sup>“Report of meeting between Mayor, Engineer, Town Clerk (all GCC) and District Commissioner of Works, Napier, Director of Division of Public Health, Wellington, Medical Officer of Health, Gisborne, Senior Health Inspector and representatives from Ministry of Works, Public Health, Engineering section.” – R.C. Lough, Public Health Engineering Section, Ministry of Works, Wellington, 22.8.1960 (HD 1/1/1).

<sup>140</sup>“Gisborne’s submarine sewerage disposal.” – H.C. Williams, former City Engineer. Report for interested parties, vested with the council, 4.5.1988 (GCC 37/6).

pollution. Therefore, the Council was liable to the imposition of secondary treatment if that was considered appropriate. Given that evidence against the submarine outfall is, at the least, sufficient to justify such a level of enforcement, it is bewildering that the present system of treatment remains barely at the primary level.

The prevailing attitudes of the GCC engineers probably explain this situation. The attitude of GCC staff to the need for additional treatment has been cavalier since the commissioning of the outfall in 1965. During the mid-1980s, when aesthetic concerns relating to the impact on bathing beaches were at their highest, several local pressure groups demanded additional treatment. In April 1986, alone, the City faced passionate requests for a reduction in visible pollution from the Harbour Board, the Catchment Board and the Gisborne Surf Life-Saving Association<sup>142</sup>. Around this time, the Gisborne Boardriders Club also commented on serious infections which had been contracted by its members, as well as the relocation of surf competition because of the state of Waikanae Beach<sup>143</sup>.

All of these requests were simply rejected and their authors were directed to read contemporary literature which, apparently, confirmed the environmental benefits of submarine disposal. Moreover, the "City Council is acutely aware of the common misconceptions which go with the expressed abhorrence about disposing of sewage into the ocean common amongst lay people<sup>144</sup>." This was a particularly disingenuous set of comments. At the time, submarine disposal was being criticised the world-over as the cause of serious long-term impacts upon the ocean and its aquatic life. An indication of how far behind the GCC was in terms of the science of sewage disposal comes from a 1990 survey that the Engineering and Works department were asked to complete. The author of the survey had created tick-boxes for primary, secondary and tertiary treatment, obviously believing that there could not possibly be any major towns or cities in New Zealand at a sub-primary level of treatment. The City's Design Engineer drew his own tick-box onto the survey form and labelled it "elementary<sup>145</sup>." Even if condition (a) could have been read as a lim-

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<sup>141</sup>At one point, the Public Health Engineers showed pleasure at the fact that the Mayor and City Engineer would make additional provision for primary treatment. However, even in this case, the level of treatment was not *limited* to primary. ("Report of meeting between Mayor, Engineer, Town Clerk (all GCC) and District Commissioner of Works, Napier, Director of Division of Public Health, Wellington, Medical Officer of Health, Gisborne, Senior Health Inspector and representatives from Ministry of Works, Public Health, Engineering section." – R.C. Lough, Public Health Engineering Section, Ministry of Works, Wellington, 22.8.1960 (HD 1/1/1).)

<sup>142</sup>"Pollution of Poverty Bay?" – H.C. Williams, Chief Engineer, GCC, to Manager, Gisborne Harbour Board, 16.4.1986 (GCC 01-330-05).

<sup>143</sup>"Beaches." – Letter to editor, Poverty Bay Herald, 8.9.1984 (GHB CB).

<sup>144</sup>"Pollution of Poverty Bay?" – H.C. Williams, Chief Engineer, GCC, to Manager, Gisborne Harbour Board, 16.4.1986 (GCC 01-330-05).

<sup>145</sup>"Effluent treatment questionnaire." – J Wells, Design Engineer, GCC, to Manager, Unilever NZ Ltd., 14.8.1990 (GCC 01-284-01).

ited demand for primary treatment, the GCC obviously did not even come up to that standard.

Table 11.1 – Compliance with 1960 Loan conditions

Condition	Compliance
Further works being carried out should pollution occur beyond Pollution Advisory Council standards.	Milliscreeing was added in 1990, many years after pollution was recognised as exceeding PAC standards. Milliscreens were an extremely partial treatment and did nothing to address bacteriological pollution.
Provision being made in the sea outfall section of the scheme for the inclusion of Kaiti Meat Works wastes.	Although the GCC argued that it had included 'provision' for such, it did not comply <i>at all</i> with the <i>logic</i> of the condition.
No reduction being made in the length of the outfall as specified (i.e. 6,000 feet).	Full compliance.
All roof and yard water system to be discontinued and all forms of infiltration eliminated as far as possible.	These were supposed to be eliminated as soon after 1960 as possible. However, this problem was still significant in the 1990s.
Overflows to be restricted to those at pumping stations and at the final holding and pumping structure. These overflows should only operate at a high level when severe flooding has occurred.	As above. Overflows which were not associated with pump stations were eliminated no quicker than those that were <sup>a</sup> .
All other overflows should, as far as possible, be sealed.	As above.
Tenders not to be called or the work commenced until detailed plans and specifications have been approved by the District Commissioner of Works, Napier.	Equipment and product suppliers had been confirmed well in advance of final approval. The momentum towards the outfall was irreversible in Council thinking <i>before</i> the writing of this condition <sup>b</sup> .

a. Refer to Section 10.2

b. There are many signed and unsigned contracts for components of the outfall within GCC 37/2. Several of these were dated prior to even the sanction of the loan itself (August 1960).

### Summary: compliance with the 1960 loan conditions

It is useful to summarise the early history of the outfall in terms of the 1960 loan conditions. From an iwi perspective, those conditions would have been considered inadequate – they failed to direct the local authority to consider iwi and their values

as a special category of concern. Inadequate and weak as the conditions may have been, however, even the low level of environmental protection that they offered was not observed. The two major stipulations of the 1960 loan sanction – conditions (a) and (b) – were effectively ignored by the local authority. However, as Table 11.1, indicates these were not the only conditions that were forsaken by the Council and which remained un-policed by the LALB/PAC.

Only one of the seven conditions had been complied with in full. One had been ignored entirely, while the remaining five conditions had been substantially disregarded. Today, when the Environment and Planning section of the Gisborne District Council and the Environment Court set conditions for Engineering and Works – the section of the Council responsible the outfall – they are surprised when these conditions are ignored. The history of the outfall shows that such administrative disregard was pervasive within GCC staff attitudes from the very start. Indeed, the belief of nga iwi o Turanganui-a-Kiwa that the Council should not be trusted in the case of the submarine sewerage outfall is supported by the historical outcomes of GCC attempts to avoid its responsibilities.

## 11.3 GCC: outfall and environmental administration

In the GCC's lack of compliance with the 1960 loan conditions, it is evident that the Council had at many times come close to outright deceit. Yet, this was not its only shortcoming as an administrator that was responsible for a potentially significant source of pollution of Poverty Bay waters. In this Section, four components of the GCC's administration of the outfall are evaluated:

- The fact that the Council accepted a significant variation in the quantity and quality of industrial effluent to be discharged through the outfall without adopting measures to limit the impact of that variation;
- The failure of the GCC to adopt trade waste by-laws which would have allowed it to update the sewage disposal and treatment system;
- The delays to the improvement of disposal and treatment systems which were to increase the immediate cost of future upgrades and, in turn, decrease the likelihood of system upgrades;
- The failure of the Council to satisfactorily incorporate public opinion into the administration of the outfall and its lack of consultation with affected parties, especially Maori.

These four types of failure provided the context for water quality conflicts that were to emerge between tangata whenua and the GCC in the 1990s.

### An expanding waste stream

As has been shown, loan condition (a) had been transgressed despite sufficient evidence of additional treatment being required. One reason why the need for additional treatment became evident is that the amount of waste discharged through the outfall increased over time. In this respect, there are close parallels between the evolution of the submarine sewerage outfall and the development of the Paokahu landfill. Throughout the 1970s and 1980s, the two facilities held similar paths. At a time when the infilling at Paokahu was rapidly accelerating through both increased and new types of use, so too was output through the submarine outfall expanding. Just as the landfill would come to accept more hazardous substances, so would the outfall. This parallel evolution is not surprising because both facilities were affected by the increase in primary processing that occurred in Gisborne during those decades. The additional waste generated by primary industries had implications for the water quality of the Bay. It also meant that it was even less likely that the GCC would meet the conditions of the 1960 loan. These increases are important because the submarine outfall had never been designed for this amount of expansion.

One form of increase was expected: many suburbs remained unreticulated in 1965 and the connection of these areas to the City sewer system thereafter inevitably meant an increase in throughput for the outfall. In 1987, Peter Keiha of Te Kuri a Tuatai Marae declared through the local newspaper that:

I view with some concern that the Gisborne City Council intends to increase the quantity of effluent discharged into Poverty Bay, via the ocean outfall, by increasing the number of households serviced by the sewerage system<sup>146</sup>.

This represented one of the few occasions up until that time when Maori spoke out publicly about the outfall. This does not mean that they were content with the facility. Many of the kaumatua interviewed for this report argued that there was a feeling of guilt attached to any complaint over the outfall before 1990. As one said, "it's hard to complain when it's your tutae and when there's a lot of Maori tutae going out to sea as well<sup>147</sup>." Others suggested that the Council has deliberately exploited this feeling of guilt in order to deligitimise the rights of local iwi to object to the submarine sewerage outfall.

Whatever the case, human effluent has never been the primary component in the waste stream exiting the outfall. While Maori may represent one third of Gisborne's population, *their* effluent does not represent one third of the sewage disposed of through the outfall. Gisborne City has a reticulation system for 30,000 people, but it produces the equivalent in sewage of a city of about 90,000 people<sup>148</sup>. Given that about one quarter of the sewerage system was connected to commercial or industrial properties<sup>149</sup>, this is not surprising. By 1990 it was estimated that 30% of the average daily load of 24,000m<sup>3</sup> of effluent was industrial food processing waste<sup>150</sup>. The combined waste of Watties, Cedenco and the wineries, alone, accounted for 20% of sewage flow in 1991<sup>151</sup>. In summer months, food processing accounts for half of the flow through the sewerage system<sup>152</sup>.

There were obvious aesthetic outcomes of this increase in waste from the primary processors. The waste from Watties pet food and fish processing plants frequently led to grease and oil slicks on surface waters<sup>153</sup>. Tomato waste from Cedenco's effluent led to discolouration of the Bay<sup>154</sup>. The impacts were also more serious than these aesthetic concerns. An evaluation of the waste stream in 1987 found that, when compared with 'typical' sewage, Gisborne's effluent had twice the volume of

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<sup>146</sup>"Effluent discharge into Poverty Bay." – P. Keiha, Te Kuri a Tuatai Marae: Copy of press release sent to R. Graham, ECCB; 30.7.1987 (GDC 365-04).

<sup>147</sup>Pers. Comm. Darcy Ria.

<sup>148</sup>"Gisborne sewerage treatment and disposal." – W.J. Turner, Engineer, GDC, 20.9.93 (GCC 01-330-01).

<sup>149</sup>"Gisborne city wastewater trade waste bylaws." – B. Apperley, District Design Engineer, GDC, and W. Turner, Manager, Engineering and Works, GDC, to CEO, GDC, 16.9.1992 (GCC 01-284-03).

<sup>150</sup>"Effluent treatment questionnaire." – J. Wells, Design Engineer, GCC, to Manager, Unilever NZ Ltd., 14.8.1990 (GCC 01-284-01).

<sup>151</sup>B. Stacey, Major Projects Group, Audit Office, to Chief Executive, GDC, 8.2.1991 (GCC 01-284-01).

<sup>152</sup>"Facilitator urges fair wastewater lobbying. Two schools of thought are emerging." – Gisborne Herald, p1, 21.10.1998 (GisMUS VF-Local Govt. Facilities).

<sup>153</sup>"Information on sewage and its treatment." – B. Apperley, Engineer, GDC, to K. Bakker, Local student, 7.4.1994 (GCC 01-284-01).

<sup>154</sup>"Industrial waste discharges." – W.J. Turner, Acting Manager, Engineering and Works, GDC, to Manager, Cedenco Food Ltd., 12.10.1990 (GCC 01-284-03).

suspended solids, twice as much oil and grease by volume, six times as much floatable oil and grease and twice the Biochemical Oxygen Demand (BOD)<sup>155</sup>. All these factors have implications for water quality and, in turn, for the long-term health and safety of fisheries which were important to Maori throughout the Bay.

There were other outcomes of this increasing amount of industrial sewage as well. The conclusion that a significant amount of grease and fat returned to the City's beaches was reached in the mid-1980s. Most often the result was an abundance of fine fat particles<sup>156</sup> – small but obviously disconcerting for local bathers – that would congeal with sand on the beach. On other occasions, “lumps of fat sometimes as much as 18 inches by 12 inches” were discovered<sup>157</sup>. This appeared to make locals recognise that, if grease and fat were arriving at the shore, then bacteria and other less benign substances from the waste stream were also probably entering the surf zone<sup>158</sup>. In any case, bacteria counts and fat deposition were related: “fatty froths do occasionally reach the shore when weather conditions produce strong persistent onshore winds. These contain high levels of faecal coliforms<sup>159</sup>.” Initially, at least, the GCC attempted to blame the fat deposits on the Pacific Street Abattoir or the GRC Kaiti works<sup>160</sup>. This stance did not convince the public and during the period 1986 to 1990 there were many complaints from Gisborne citizens about visual evidence of pollution on beaches. As a result of the complaints, the local Catchment Board investigated the source of the fat and grease and determined that “the logical conclusion as to the origin of the material must be the Gisborne City outfall<sup>161</sup>.”

The method of the GCC in dealing with these complaints is again indicative of a Council which was unsupportive of meaningful public participation. For example, when a local environmental activist wrote a letter about the possible long-term effects of the outfall on Poverty Bay, the Mayor of Gisborne wanted to have the letter discussed before one of the Council's management committees. In response to this idea, the staff member who was primarily responsible for the outfall wrote to the Mayor that...

The only qualms I have about his Worship's softness on the idea of having Mr. de Zylva's letter before the Works Committee is that emotions will run

<sup>155</sup>Fitzmaurice and Partners Ltd. 1988, p80.

<sup>156</sup>“Midway Beach. City sewer outfall.” – A.W Punton, Water Rights Officer, ECCB, to Town Clerk, GCC (GDC 365-04).

<sup>157</sup>“Sewage disposal scheme.” – H.C. Williams, Chief Engineer, GCC, to City Engineer, Hastings, 4.6.1974 (GCC 37/4).

<sup>158</sup>Fitzmaurice and Partners Ltd. 1988, p54.

<sup>159</sup>“Ecological impact of marine outfalls.” – H.C. Williams, Chief Engineer, GCC, to Scientist in Charge, Water Quality Centre, Ministry of Works and Development, n.d. (GCC 37/4).

<sup>160</sup>“Midway Beach.” – H.C. Williams, City Engineer, GCC, to Secretary, ECCB, 28.9.1981 (GDC 365-04).

<sup>161</sup>“Submarine outfalls. Poverty Bay.” – B. Turnpenny, Water Resources Scientist, ECCB, to Chairman, ECCB (GDC 365-04).

wild, the public will come to almost panic in the face of the crazy assertions which some pseudo-scientific people make with the net result of a gross waste of City Council monies and nothing concrete to show for it<sup>162</sup>.

This is by no means an isolated case and within the archives pertaining to the outfall there are abundant examples of citizens' views being dismissed outright rather than being the starting point for constructive dialogue<sup>163</sup>. The unwillingness of Council staff to even discuss public concerns with their superiors meant that it was a very long time before Councillors were to place pressure on those staff to alter the system of disposal. This general absence of systems for public participation would have been amplified in the case of local Maori who tended not to enjoy access to other vehicles for complaint. The local press media, for example, was generally unsympathetic to their concerns and the use of lawyers to popularise iwi views through petition would have required a locally unattainable level of expense.

### **Failing to make industry pay**

A common argument of the local authority has been that it could not afford to pay for upgrades to the sewage disposal system. Associated with this argument is the notion that Gisborne has a relatively poor population and, therefore, an inadequate rating base from which to draw funds for capital developments. This could only be a valid argument if ratepayers produced all of the City's sewage but, as has been shown, this is not the case. Industry is responsible for at least half of the effluent discharged through the outfall. Industrial premises, of course, pay rates as well. However, it is typical for a local authority – especially in provincial centres where there is considerable amount of primary processing – to charge industries with an additional levy. These additional payments, which are usually introduced through trade waste by-laws, reflect the fact that the rates on industrial premises seldom recover the true cost of sewerage, treating and discharging industrial effluent. A brief account of the failure of the GCC and, later, the GDC to implement trade waste by-laws is necessary to fully dispel the financial argument that is commonly presented to iwi when they protest the lack of sewage treatment.

Local authorities were empowered to create trade waste by-laws under ss 491 and 494 of the Local Government Act 1974 and, before that, under s 26(L) of the WASCA and various schedules of the Water Pollution Act 1953. The attention of the GCC had been drawn to these possibilities many times<sup>164</sup> and its own staff

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<sup>162</sup>H.C. Williams, Chief Engineer, to A.C.H. Healey, Mayor of City Council, 4.10.1984 (GCC 01-330-01).

<sup>163</sup>See, for example: "Poverty Bay beaches water quality." – H.C. Williams, Chief Engineer, GCC to Secretary, Gisborne Surf Life Saving Association, 3.3.1986 (GCC 37/5); "Submarine sewage disposal." – H.C. Williams, Chief Engineer, GCC, E.R. Revington, Resident, Gisborne, 4.1.1985 (GCC 37/5).

<sup>164</sup>This was, of course, one of the common requests of PAC/LALB representatives to the GCC (See, for example: "City sewerage scheme and Kaiti freezing works wastes." – W. Hudson, Town Clerk, to Resident Engineer, Ministry of Works, 15.5.1961 (GCC 37/4); "Draft matter for inclusion in pamphlet with model set of trade wastes by-laws." – Secretary, LALB, to Town Clerk, GCC, n.d.(GCC 37/2)).

clearly understood the implications of the law. With respect to s 494, a Council researcher informed the engineers that:

The Local Government Act recognises that if a local authority is to comply with probable water right conditions it is not reasonable that the ratepayers as a body be responsible for the cost of treating trade wastes<sup>165</sup>.

In other words, the GCC could have comfortably complied with the conditions of the 1960 loan by imposing a regime of cost recovery on local industry – Local residents could have legitimately sought improvements to the system of sewage disposal without being told that they would have to pay. Other Council staff tried to convince the Council engineers that if they were reticent about using ss 491 and 494 of the Local Government Act, then they could use the more discrete Drainage and Plumbing Regulations 1978 to similar effect<sup>166</sup>. Despite the availability of these provisions, neither approach was favourably considered by the engineers nor, for that matter, other GCC staff.

Not only did the Council have provisions available to it, it also had clear examples of how trade waste by-laws could be used successfully to upgrade sewage disposal and treatment facilities. Nelson (from 1969), Hastings (1981), and New Plymouth (1983) – all centres of primary processing and of a similar size to Gisborne – also used submarine sewerage outfalls, but had implemented additional treatment. In these cases, the respective local authorities had implemented outfall disposal well after Gisborne but, in each case, additional treatment had been added in a relatively short time frame by charging industry for its effluent. This meant that not only did industry receive a full form of sewage processing, the population of each centre benefited from these improvements as well. In 1989, the GDC completed a follow-up survey of similarly sized local authorities with a focus on primary processing and discovered that most had, by this stage, implemented full trade waste by-laws<sup>167</sup>. Perhaps the best model for the GDC was nearby Hastings and Napier. Initially, the Hawke's Bay councils had asked the GDC for advice on how to deal with primary industry, but it was soon to take the lead in this matter. When representatives from the GDC travelled to a meeting of the Hastings and Napier joint sewage treatment working party in 1992, they discovered just how successful the Hawke's Bay by-laws had been in reducing industrial pollution and improving overall sewage treatment<sup>168</sup>. The Hawke's Bay councils had a potentially later start on this matter than the GDC but, by 1992, they were well in advance of the situation in Gisborne.

<sup>165</sup>"re: Gisborne City trade waste bylaw, 1986." – R. Atkinson, Research Officer, GCC, to City Secretary, 28.8.1986 (GCC 01-284-03).

<sup>166</sup>"Fat on beaches report." – R.C. Hall, City Health Inspector, GCC, to H.C. Williams, Chief Engineer, GCC, 1.6.1984 (GCC 37/4); "Fat on beaches." – R.T. Giddens, City Health Inspector, GCC, to H.C. Williams, Chief Engineer, GCC, 31.1.1985 (GCC 37/5).

<sup>167</sup> Report of G.C. Swainson, Operations Engineer, GDC, 13.2.1989 (GCC 01-284-03).

<sup>168</sup>"Hastings/Napier joint sewage treatment working party: GDC attendance." – B.I. Apperley, Design Engineer, GDC, to Manager, Engineering and Works, GDC, 14.9.1992 (GCC 01-284-01).

Although the Council's own research had recommended the need for trade waste by-laws<sup>169</sup>, the GCC was generally hesitant to impose these by-laws until "the impact of such bylaws on those industries should be clearly understood<sup>170</sup>." This hesitancy can be related to a familiar theme throughout Part III of this report: GCC acquiescence in the face of industry:

Council will already be aware of the relatively high cost of servicing our industries compared to those in other regions. Imposing very stringent conditions on discharge from individual premises could well force a number of the city's industries out of business<sup>171</sup>.

The possible implementation of trade waste bylaws could have an adverse effect on local industry<sup>172</sup>.

In GDC archives, there is sufficient evidence that local industries exploited the Council's fear of losing industry as a means to prevent the enforcement of environmental standards. For example, when the Council was to finally draft trade-waste bylaws in 1993, the following response was received from Watties Prepared Foods division:

...the GDC has not previously indicated to industry that this type of by-law was envisaged and the by-law as drafted is extremely demanding compared to the current situation. It is well known that all industries are currently operating in very difficult times as NZ attempts to trade its way out of its recession... This fact must be taken into consideration when Council considers putting extra financial burdens onto industry. The standards imposed see us going from no standard at all, to a very tight standard, which will require considerable capital expenditure to achieve... The costs of operating in Gisborne are considerably higher than in other parts of NZ... The potential costs to WPF are significant and will have a detrimental effect on the viability of our business.<sup>173</sup>

The Council chose to be responsive to these threats and for this reason it was not responsive to the needs of other members of its constituency. It is argued that unless the national objectives of the Treaty are forced upon local authorities of the type in Gisborne, then it is likely that the needs of business will always overshadow the rights of Maori in local affairs.

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<sup>169</sup>Fitzmaurice and Partners Ltd. 1988.

<sup>170</sup>"Outfall survey. Gisborne sewerage system." – W.J. Warren, Engineering and Works, GDC, to City Manager, 7.11.1988 (GCC 37/7).

<sup>171</sup>"Gisborne city wastewater trade waste bylaws." – B. Apperley, District Design Engineer, GDC, and W.J. Turner, Manager, Engineering and Works, GDC, to CEO, GDC, 16.9.1992 (GCC 01-284-03).

<sup>172</sup>"Poverty Bay and coastal waters. Preliminary classification." – J. Wells and W.J. Warren, Engineering and Works, GDC, to City Manager, 7.8.1989 (GCC 01-233-07).

<sup>173</sup>"Re: Draft trade waste by-law." – J. Crocker and Y. Sato, Joint Executive Directors, Wattie Prepared Foods, 4.6.1993 (GCC 01-284-03).

There were other reasons why the Council had delayed implementation of by-laws. The lack of effluent stream monitoring mentioned in Section 11.2 meant that it was unclear as to the exact amounts that each industry discharged through the outfall<sup>174</sup>. Consequently, businesses would not contemplate paying for their discharges until it could be proven what an appropriate level of payment would be. Of course, a simple and legally enforceable solution to the monitoring problem would have been to build the costs for such work into trade waste by-laws. However, local industries would not even accept these costs without a fight<sup>175</sup>. With these kinds of debate, it was not until 1993 that a draft set of trade waste by-laws had been formulated<sup>176</sup> and it was 1995 before they were implemented. Had a cost recovery regime been forced upon industry at a much earlier date, the GDC might have been able to upgrade its plant much sooner. Consequently, it can be argued that present Maori-GDC conflicts about water quality should have been avoided. Moreover, the notion that local iwi will 'bankrupt' Gisborne District in their demands for higher forms of sewage treatment must be rejected.

### Delaying the inevitable

Without trade waste by-laws there was no incentive for industry to reduce the volume and pollution content of its effluent. Consequently, more and more grease and fat were discharged through the outfall, leading to louder and more frequent protests about fat on beaches. These protests eventually forced the Council to take some action: "We now have to do some form of primary treatment of the sewage...<sup>177</sup>" Outwardly, this might appear to be a frank, if rather too late, recognition of the Council's obligation under condition (a) of the loan sanction. However, even this realisation was made within a context of "what's the most durable and cost-effective solution<sup>178</sup>." Rather than the addition of secondary treatment or, even, a sufficient remedy to remove the fat, such as Dissolved Air Flotation (DAF), the Council decided to add a mechanical treatment – milliscreens. These screens involved a fine mesh which would reduce the particulate size of effluent to 1mm. They would not, however, remedy the high bacterial count of the sewage nor, even, adequately address the fat problem. The addition of milliscreens may have been touted as a significant advance, but only confirmed the system as having no more

<sup>174</sup>"re: Gisborne City trade waste bylaw, 1986." – R. Atkinson, Research Officer, GCC, to City Secretary, 28.8.1986 (GCC 01-284-03).

<sup>175</sup>See, for example: "Sewage effluent analysis." – W.J. Warren, Chief Engineer, GCC, to Gisborne companies, 7.11.1986 (GCC 37/5); "Sewage effluent analysis." – W.J. Warren, Chief Engineer, GCC, to Managers of: Corbans Wines Ltd., Montana and Penfold Wineries, J Watties Canneries Ltd., Tomato Developments Ltd., Advanced Meats Ltd., 12.12.1986 (GCC 37/5); "Water quality workshop: Regional coastal environmental plan." – Minutes of a public meeting, 5.5.1994 (GCC 01-330-04);

<sup>176</sup>"Gisborne city wastewater system. Progress report." – B.I. Apperley and W.J. Turner, Engineering and Works, GDC, to Chief Executive, GDC, 11.2.1994 (GCC 01-284-01).

<sup>177</sup>"Beach fat meeting to be held." – Poverty Bay Herald, 26.2.1986 (GHB CB).

<sup>178</sup>*Ibid.*

than primary treatment and, by the Council's own admission, it needed substantial development to upgrade even to 'advanced primary'<sup>179</sup>.

On balance, the addition of milliscreens represented only a minor concession to the increasing call for additional treatment. The Council succeeded in avoiding these concerns by elevating the status of other infrastructural requirements which were less expensive to fix. The principal excuse in this regard related to the priority given to addressing sewage overflows into City rivers. The deprioritising of sewage disposal upgrades in favour of eliminating sewage overflows was most apparent in the GDC submission on the *Preliminary classification* of Poverty Bay waters:

...evidence will be given that the quality of the waters of Poverty Bay in the surf zone are generally within accepted standards for contact recreation, however, sewage overflows occur on private property and into streams and water courses within the city area relatively frequently...[A] greater public health hazard for the community exists as a result of the sewage overflows than due to the discharge of sewage into Poverty Bay by way of the sewerage outfall<sup>180</sup>.

Such views led to a survey of sewerage reticulation and \$500,000 being spent to address deficiencies in the sewerage reticulation system<sup>181</sup>. This expenditure, in turn, was used to justify spending as little as possible on sewage treatment.



Figure 11.2 – Gisborne sewage pumping station with milliscreens at left.

That the facility for Gisborne's sewage 'treatment' – the milliscreens – should be overshadowed by a small building for a pump station indicates the low level of 'treatment.'

<sup>179</sup>“Gisborne outfall. Advanced primary treatment.” – W.J. Turner, Manager, Engineering and Works, to Manager, Andrews Environmental Limited, Wellington, 27.1.1993 (GCC 01-330-05)

<sup>180</sup>“Poverty Bay and coastal waters classification.” – W.J. Warren, Manager, Engineering and Works, to Dr. J. Smith, Tairāwhiti Area Health Board, Gisborne, 26.3.1990 (GCC 01-233-07).

<sup>181</sup>“Submissions on annual plan. Maruia Society.” – W.J. Turner, Engineering and Works, GDC, to Chief Executive, GDC, 7.9.1992 (GCC 01-284-01).

By 1993, a hierarchy of wastewater objectives had become official GDC policy...

“Council’s wastewater objective, in priority order, are:

- (a) To eliminate raw sewage overflows onto private property.
- (b) To reduce overflows of sewage from the sewer system into city rivers and streams to not more than one event (which may include simultaneous overflows at a number of points) per year.”
- (c) To improve the quality of wastewater discharged to the ocean so it is:
  - i. imperceptible at the sea’s surface;
  - ii. safe for contact recreation at the sea surface
- (d) Remove the discharge from the ocean to land<sup>182</sup>.

Interestingly, it was admitted that “these priorities may not be those of the public<sup>183</sup>.” Moreover, these priorities were questioned by the Conservation section of the GDC itself. A planner for that section stated that there had “been no scientifically based medical evidence adduced to show that the sewer overflows on to private property have contributed to any illnesses<sup>184</sup>.” He therefore questioned why the overflows should be considered more important than upgrading the submarine outfall. The truth of the matter was that *both* the overflows and the outfall represented substantial sources of pollution and all haste should have been made to address the two issues simultaneously. Rather, the Council chose the cheaper route of addressing the least expensive of the two problems, delaying the outfall upgrade until a future date. The GDC’s priorities were entirely financial, rather than being a prudent mix of what was affordable and what was essential for the preservation of environmental quality.

At the Gisborne Environmental Summit in January of 1990 a variety of treatment options had been discussed. Although the initial dialogue at this Summit was oriented towards secondary treatment, delegates at that Summit eventually showed strong support for milliscreeing, which was the least advanced treatment option to be discussed. The reason for this apparent turnaround was the evidence of the GDC’s manager of finance. He successfully convinced the Summit that even the most basic of secondary options would have costed \$82,000,000 and would have led to a 100% increase in rates for inhabitants of Gisborne City<sup>185</sup>. There are two important qualifications that need to be made about this mathematics exercise. First, the rapid increase in rates was only necessitated because the local authority

<sup>182</sup>“Gisborne City sewerage study.” – B.I. Apperley, Design Engineer, GDC, to McDermott Miller Group Ltd., 6.7.1993 (GCC 01-284-01).

<sup>183</sup>“Gisborne City sewerage study.” – B.I. Apperley, Design Engineer, GDC, to McDermott Miller Group Ltd., 6.7.1993 (GCC 01-284-01).

<sup>184</sup>Submission by counsel for the Conservation Division of the Gisborne District Council – Preliminary classification of Poverty Bay waters, 1989 (GDC 369-03).

<sup>185</sup>Minutes of the 1990 Gisborne Environmental Summit – 23.1.1990 (GCC 01-330-01).

had completed so little in terms of upgrading the sewage disposal system from 1965. Second, there was apparently no basis for the cost as quoted – very little in the way of research on alternative means of disposal had been completed up to that time. That the quoted cost of system upgrades may have been fictitious is revealed by earlier debates about the cost millscreening. In 1989, the GDC had publicly quoted \$11,000,000 as the likely cost for screening local sewage and removing fat through a DAF system. The local Catchment Board, however, was convinced that the real cost of such installations would have been only \$6,000,000<sup>186</sup>. In any case, *local* financial issues should never be seen to over-ride *national* objectives relating to the Treaty and to the environment.

### Increasing concern from local Maori

It should be mentioned that a number of offensive substances have been discovered to pass through the outfall and into Poverty Bay and that these discharges were only disclosed to the public at a much later date. Many of these discharges are particularly repugnant from a Maori point of view. There was been ongoing concern, for example, about the waste deposited into the sewer by the Cook Hospital. Some of the kaumatua who were interviewed in the research for this report were particularly concerned that mortuary waste may have been discharged through the submarine sewerage outfall. If true, this would entail the mixing of the bodily liquids of koiwi with natural water – perhaps the most culturally offensive form of liquid exchange for Maori. The following quotation provides evidence that these kaumatua were right in their suppositions about mortuary and other hospital wastes:

There is some concern over what happens to health care waste...as to what is incinerated, dumped and disposed of into the sewer and to what pre-treatment. The [hospital's] surveyors could not give any detailed information as it was felt to be confidential but they did say that the Hospital Staff and Management were concerned about what they were actually pushing down the sewer and would appear to want some guidance on the matter...

What happens to the embalming waste? Presumably it is discharged into the sewer. Is there any risk of any infected material being so disposed of and does this cause any health problems<sup>187</sup>?

Alongside these latter two questions, "Yes" had been pencilled in the margins.

Other than the potential for bodily wastes to be discharged with limited treatment through the outfall, the former Hospital and Health boards as well as the Health Department have shown concern about noxious chemicals that they admitted were being passed into the sewerage reticulation system<sup>188</sup>. Hospitals use a wide variety

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<sup>186</sup>Submission by counsel for the Conservation Division of the Gisborne District Council – Preliminary classification of Poverty Bay waters, 1989 (GDC 369-03).

<sup>187</sup>"Regional waste survey." – P. Burrows, Senior Health Inspector, to Chief Health Inspector, n.d. (GCC 01-212-03 HI).

of hazardous substances for sterilisation, treatment and other purposes, so this type of discharge is of particular concern. The hospital was not the only contributor to the disposal of hazardous liquids through the outfall. In 1987, 3.9 tonnes per year, or 2%, of the District's hazardous waste was disposed of by this means<sup>189</sup>. All of these additional outputs reflect gross ignorance of the Maori cultural attitude to natural water. They are part of a wider increase in the range and volume of wastes discharged through the outfall since its construction in 1965.

As has been suggested, the concerns of local Maori about the outfall were not voiced publicly for many years. Unnecessary feelings of guilt probably had a significant role to play in this silence. Perhaps of more importance, there was limited or no attempt by the Council and other agencies to seek the voice of local Maori. Tangata whenua certainly had not been consulted about their views on the construction of the submarine sewerage outfall. Thereafter, their views were only seldom considered in the administration of the facility. The correspondence, commissioned reports, and planning documents relating to the outfall for the period 1965–1990 contain only a few statements about the needs and desires of Gisborne iwi.

Where Maori were considered in studies or correspondence on the outfall, the tone of the analysis was often highly patronising. For example:

The increased awareness of environmental concerns regarding long term effects of ocean discharges and the sensitivity of the Maori culture to sewage disposal has led to pressure for improvement and alternative disposal practices. The technical evidence to justify such an improvement is often minimal and public aspiration is, more often than not, driven by emotion and 'gut feeling'<sup>190</sup>.

To reduce Maori *spiritual* responses to 'emotion' and 'gut feeling' is culturally intolerant. This statement was incorporated into a section on cultural and public aspirations, which comprised less than 1/3 of a page within a 115 page report. The report, which was written in 1988, was of major significance because it was to determine the agenda for sewage disposal in Gisborne for some time. The research for the report included the first example of a Council employee or contractee deliberately seeking the views of local Maori<sup>191</sup>. Within the research, it was ascertained that local Maori held fears for the safety of shellfish consumption and that they would accept modifications to the outfall which "resulted in improved quality and improved ability to gather traditional seafood in the Poverty Bay area<sup>192</sup>." Although

<sup>188</sup>"East Cape United Council. Regional waste survey." – Minutes of the Technical Committee, 12.10.1988 (GCC 01-212-03 HI).

<sup>189</sup>Royds-Garden 1987, p15.

<sup>190</sup>Fitzmaurice and Partners Ltd. 1988, p64.

<sup>191</sup>"Maori tribal interests in the Poverty Bay." – R. Brooking, Councillor, GCC, to J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., n.d. (GCC 37/7); W. J. Warren, City Engineer, GCC, to J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., Auckland, 15.7.1988 (GCC 37/6). Note that a meeting was held at Te Poho-o-Rawiri Marae on the 21st of July 1988.

it was the opinion of the GCC overseer for the research that “[t]he views expressed, as summarised, seem reasonably balanced and will be taken into account in our reporting on sewerage matters<sup>193</sup>”, these views held little status in the report. It covered aesthetic, biological and bacteriological criteria and arrived at the conclusion that the outfall was only failing on aesthetic grounds. Yet, without having assessed *cultural* criteria in the research, it could not legitimately conclude that the only significant impacts were aesthetic.

Within the period in question, the only correspondent to take the views of Maori seriously was a visiting *American* environmental researcher. During his tour of New Zealand he concluded that the City and GRC outfalls represented two of the country’s most significant environmental hazards. He went on to conclude in a perhaps telling way that, he had attempted to evaluate...

...the outfall problems from the Maori perspective, which traditionally favours no discharge near shellfish beds, and suggest[ed] that if Maoris had always been a part of the decision-making process, present day conflicts may not have arisen<sup>194</sup>.

It was 1990 before a member of Council staff recognised iwi values as significant and legitimate concerns. As a consequence, the “Maori cultural concern of discharge of waste into the sea” was made a key focus of a sewage disposal summit of that year<sup>195</sup>. It is more probable that this concession was the result of increased Maori attention to the outfall. While Maori of the 1960s, ‘70s and ‘80s had been hesitant to publicly criticise the outfall, the 1990s were to see an increasingly vociferous protest from local iwi. This protest and the management response of the local authority to it form the major themes of Section 11.5.

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<sup>192</sup>GCC letter to J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., 2.8.1988 (GCC 37/7).

<sup>193</sup>“Maori views.” – J. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., to W.J. Warren, City Engineer, GCC, 5.8.1988 (GCC 37/7).

<sup>194</sup>“City outfalls among prominent problems.” – Gisborne Herald, p4, 18.1.1986 (GCC 37/5).

<sup>195</sup>Minutes of Gisborne sewerage environmental summit – 23.1.1990 (GCC 01-330-01).

## 11.4 ECCB: False management

The loan conditions should not have been the only form of regulation which restrained and guided the thinking of the GCC. It has already been stated elsewhere in Part III that catchment boards gained increased responsibilities with the enactment of the Water and Soil Conservation Act 1967 (WASCA). With these new responsibilities, the Poverty Bay Catchment Board (PBCB) – which was soon after renamed the East Coast Catchment Board (ECCB) and later the East Coast Catchment Board and Regional Water Board (ECCB-RWB) – should have been able to impose additional conditions on the GCC in order to protect water quality. This type of management – through water permits – would have been specific to the outfall, but there were general protective measures available to the PBCB as well. The most important of these was the system of water classification that became available to the PBCB with the 1971 Amendment to the WASCA. As will be shown, neither the specific nor the general protective measures had any effect on the GCC outfall. Moreover, the agenda established by the WASCA was entirely antithetical to the needs and environmental values of Maori.

### The Catchment Board as an environmental regulator

In any assessment of the Catchment Board's performance it is reasonable to admit that the Board's statutory responsibilities and capacity to enforce water quality objectives were not particularly clear. It has been mentioned both in Chapter 9 and 10, that the role of a catchment board in policing the environmental outcomes of city councils was ambiguous. The fact that the submarine sewerage outfall was commissioned before enactment of the WASCA and its amendments in 1971 and 1973 led to additional ambiguities. In effect, the establishment of the WASCA did almost nothing to challenge the status of *existing* facilities which contributed to water pollution. Under s 21(2) of the Act, the GCC was required to merely submit a 'notice of existing use' to the Board in order to gain full authority to keep the outfall in place<sup>196</sup>. It had fulfilled this requirement in September of 1968, meaning that the outfall became at that time a Notified Existing Use (NEU).

No effluent quality standards are specified for NEUs so there were, in effect, no legally enforceable benchmarks with which the ECCB could judge the performance of the outfall<sup>197</sup>. In the absence of such standards, all the ECCB could do was to ask the GCC to voluntarily forfeit the NEU status of the outfall and apply to the ECCB for a water right. If a new water right was issued, then a range of minimum environmental standards would have been introduced and the City would inevitably have had to introduce additional forms of treatment. The GCC, of course, was unwilling

<sup>196</sup>"Sewerage outfall." – N.B. Roe, Secretary, ECCB, to Secretary of GHB, 7.8.1987 (GDC 365-04).

<sup>197</sup>"Summary of Regional Water Board involvement with waste discharge to Poverty Bay." – A. Armstrong, n.d. (GDC 365-04).

to pursue this option. In December of 1982, the Catchment Board had written to the GCC inviting the City apply for a water right for the outfall<sup>198</sup>. However, the GCC stated that unless there was an enforceable reason why it should voluntarily forfeit the NEU status of the facility, then it would prefer to keep that status intact.

It is perhaps indicative of the ECCB's state of organisation that the letter of receipt for the Notification of Existing Use had been lost, providing further ambiguity over the status of the outfall for many years<sup>199</sup>. Without this item of documentation, the Board feared that it might not be able to action other enforcement possibilities which would have circumvented the NEU status of the outfall. These possibilities related to the increase in effluent discharged through the facility. In 1986, the ECCB had sought legal opinion as to whether a significant variation in the operation of the discharge might have required an application for a new water right<sup>200</sup>. As mentioned in Section 11.3, there had been a significant change in both the quantity and quality of the waste stream during the 1970s and 1980s which was a result the increase in industrial discharges through the City outfall. On this basis, it was found there were sufficient grounds to revoke the NEU status of the outfall and request the GCC to apply for a new water right:

...it is suggested that no increase in the volume of discharged effluent, or its composition, is legally permissible without the Board's consent since the commencement of the Act... To suggest that an existing use gives its holder a carte blanche to do as it pleases, both in terms of quality and quantity, is contrary to the intent and spirit of that Act. You have forwarded us a substantial amount of data which tends to suggest that the volume and composition of the discharged effluent has significantly altered in the last 19 years. We believe that this fact should be used in an effort to persuade the City to apply for a new right in respect of the outfall<sup>201</sup>.

It is interesting that Peter Keiha of Te Kuri a Tuatai Marae had also suggested this argument to the ECCB in 1987. He rightfully believed that the GCC's plan to increase reticulation to new suburbs would have increased the discharge through the outfall, requiring an application for a water right<sup>202</sup>.

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<sup>198</sup>"Fat on beaches and current fat investigation with Contra-Shear Developments Limited 10.12.82." – H.C. Williams, Chief Engineer, GCC, to R.C. Hall, City Health Inspector, 3.1.1983 (GCC 37/4).

<sup>199</sup>"Submarine outfalls. Poverty Bay." – B. Turnpenny, Water Resources Scientist, ECCB, to Chairman, ECCB, n.d. (GDC 365-04).

<sup>200</sup>"Gisborne City sewage outfall." – A.F. Armstrong, Engineer, ECCB, to Nolan and Skeet, Barristers and Solicitors, Gisborne, 14.2.1986 (GDC 365-04).

<sup>201</sup>"re. Gisborne City sewage outfall." – Nolan and Skeet, Barristers and Solicitors, Gisborne, to Secretary, ECCB, 18.3.1986 (GDC 365-04).

<sup>202</sup>"Effluent discharge into Poverty Bay." – P. Keiha, Te Kuri a Tuatai Marae, to R. Graham ECCB, 30.7.1987 (GDC 365-04).

By this stage, the GCC also knew of the legal right of the Catchment Board to demand an application for a water right. In an internal memorandum, a City employee wrote that:

The Catchment Board has had legal opinion that by reason of the increased quantity of sewage being disposed of into the Bay compared with quantity at the time of the issuing of the 'authority,' Council is in breach of that authority and therefore should seek a new Water Right. However, no formal approach has been made as far as I can ascertain although there has been dialogue between the ex-City Engineer Councillors and Staff and Members of the Catchment Board to try and establish an acceptable water quality standard<sup>203</sup>.

By the end of 1986, both the ECCB and the GCC knew of the legal capacity to demand that the City apply for a new water right for its outfall. For its part, the GCC was not content with the prospect of being forced to apply for a water right, and it believed that the ECCB was "obviously being of a mind to make a name for itself<sup>204</sup>." However, it accepted that the ECCB would be acting fully within the law to demand a water right application.

In retrospect, what is perhaps most unfortunate about the discovery that the ECCB could demand a water right application was that it took place so late in the history of the outfall. The increase in effluent had been evident from the late 1960s, so the ECCB can be considered to have acted very slowly in this regard. Had the Catchment Board been more attentive to its duties, a water right application could have been forced through as early as 1974. If this had occurred, Gisborne could have been set on a course of action that would have avoided the conflict over water pollution today. It might even have led to a system of land-based disposal which would have been acceptable to local Maori. More importantly, the ECCB was not only slow to discover its legal powers of enforcement: it was also lethargic in the regard of implementing them. As a result, the GCC would never be forced to apply for a water right under the WASCA.

In March of 1986, not long after the ECCB had gained the legal opinion about the implications of an increase in the volume of discharge through the outfall, a meeting was held between representatives of the ECCB and the GCC<sup>205</sup>. At this meeting the Mayor of Gisborne had questioned the Catchment Board's right to intervene over the outfall and the Engineer of the ECCB explained the legal opinion of the Board's solicitor. While the GCC was powerless to do anything other than accept this opinion, the representatives from the ECCB merely invited the City to seek a water right. The Engineer and the Mayor of the GCC refused, but the Catchment

<sup>203</sup>re: Gisborne City trade waste bylaw, 1986." – R. Atkinson, Research Officer, GCC, to City Secretary, 28.8.1986 (GCC 01-284-03).

<sup>204</sup>"Fat on beaches and current fat investigation. Contra-Shear Developments Limited 10.12.82" – H.C. Williams, Chief Engineer, GCC, to R.C. Hall, City Health Inspector, 3.1.1983 (GCC 37/4).

<sup>205</sup>"Gisborne City sewage outfall." – Minutes of a meeting of the Inter-authority Liaison Committee to discuss issues relating to the City sewerage system, 24.3.1986 (GDC 365-04).

Board decided not to make the logical response to this refusal and pursue a prosecution<sup>206</sup>.

The reasoning of the ECCB is revealed in the following quotations:

If ratepayers see that these two authorities [GCC and ECCB] are working well together to solve the problem then water right applications could be easily handled. The public statement should be that the Gisborne City Council and the East Cape Catchment Board are dealing with the technical problems<sup>207</sup>.

To secure conditions to the discharge the clearest way is for the City Council to apply for a water right...If the Council elects otherwise then the Board has the option of pursuing the imposition of controls. Such impositions are subject to appeal. The situation of Board and Council in ratepayer funded argument is the very one that the liaison arrangements have sought to avoid. On the understanding that works would be forthcoming and the authority question resolved the Board has not forced the issue. Lack of progress on either matter is now making the Board's forbearance a matter of public criticism. The Board is therefore anxious to see action<sup>208</sup>.

The ECCB's fear of 'ratepayer funded argument' and its preference for 'liaison arrangements' was also its favoured approach in the case of sewage overflows to rivers and the Paokahu landfill issue<sup>209</sup>. As was the case in those instances, the Catchment Board appeared to unwisely persist with these collaborative approaches when they failed to motivate the City to address the impact of the submarine outfall on water quality. Almost as soon as the ECCB had discovered a means of imposing its will on the GCC, it decided not to implement that means. It is possible to speculate that the ECCB would not have been able to relinquish this possibility if it had been given a legislative directive to protect Maori values towards the water system which it was mandated to protect.

### **Classification of Poverty Bay waters and the submarine sewerage outfall**

The second major form of environmental regulation in which the ECCB had a significant role was the classification of Poverty Bay and coastal waters. The Classification system under the WASCA and the outcomes of that system for City rivers and the Kaiti shoreline were briefly evaluated in Section 10.5. It is also necessary to evaluate the effectiveness of the process in relation to the environmental outcomes of the submarine sewerage outfall and its impact on Maori interests. Up until the

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<sup>206</sup>"Gisborne City Council sewage discharges." – A. Armstrong, Engineer, ECCB, to Chairman of Water Committee, ECCB, Report 6960, ECCB, November 1986 (GDC 365-04).

<sup>207</sup>"Minutes of a meeting held with the Catchment board to discuss sewage overflows." – 31.1.1984 (GDC 365-04).

<sup>208</sup>"Summary of Regional Water Board involvement with waste discharge to Poverty Bay." – A. Armstrong, Engineer, ECCB, n.d. (GDC 365-04).

<sup>209</sup>Refer to Sections 10.5 and 9.3 respectively.

classification of Poverty Bay waters, there were only piecemeal and fragmented attempts to protect the local marine environment. A suitably constructed classification would have forced the managers of polluting facilities to apply for a special water right in all instances. The GCC could have been faced with upgrading its sewage disposal system in order to meet the classification standard for the waters around the outfall. Given the history of planning failure that has been alluded to so far in this report, it is not surprising that this was not to be the case.

In part, this was a direct outcome of the deficiencies in the WASCA itself. In the view of the ECCB-RWB, existing case law and legislation meant that the main requirements for the classification of Poverty Bay were that:

- (a) There should not be a reduction in water quality unless this can be shown to be in the public interest;
- (b) If classification is to be higher than existing quality then it must be achievable by control or abatement of the pollution;
- (c) Classification should reflect the existing high water quality, unless public interest demands a contrary view<sup>210</sup>.

Some of these legislative goals are conflicting and most allow space for weakening of the legislative intent through (re)interpretation. The phrase 'achievable' in (b), above, related to ambiguities in the WASCA itself. The legislation allowed an economic argument to dictate the process such that classifications sometimes reflected what was locally achievable in financial terms rather than relating to environmental needs and aspirations.

Perhaps the most problematic feature of the legislation was that it did not clearly establish the specific objectives of the classification process. In short, the legislation may be seen as favouring strictly neither biocentric, anthropocentric nor economic objectives. As a result, classifications tended to be the outcome of the loudest parochial voices in any particular classification zone. In the case of Gisborne, this voice came from the recreational and business lobbies. Consequently, the *Preliminary classification*<sup>211</sup> for Poverty Bay and coastal waters was framed in terms that could not possibly have incorporated iwi attitudes to the water system. It was generally limited with respect to cultural aspects of the water resource and, in turn, the cultural content of the classification report was reduced entirely to *recreation*. In a section entitled *Aesthetic, scenic and cultural values*, it was stated that:

Many people believe that it is culturally offensive to dispose of sewage into natural water. The Maori people of New Zealand traditionally harvested food from the sea and their traditional rights in this regard have been enunciated

<sup>210</sup>"Submission by counsel for the Conservation Division of the Gisborne District Council." – Preliminary classification of Poverty Bay waters, 1990 (GDC 369-02a).

<sup>211</sup>ECCB-RWB 1989.

in the Treaty of Waitangi. Gathering of food from the sea is carried out by the tangata whenua within the area proposed for classification<sup>212</sup>.

While this would have been an acceptable statement for local Maori, it is notable that this was *all* that was said about Maori concerns.

The focus on recreational interests as a representation of cultural values was also a significant part of the research for the classification. The ECCB-RWB had decided to commission a report on socio-cultural aspects of local water use. The report that ensued had a much more limited focus, as is indicated in its title: *Poverty Bay recreation study*<sup>213</sup>. This report mentioned the gathering of shellfish at Wherowhero Lagoon but singularly failed to consider the fact that it was *Maori* who typically gathered shellfish there. The report fell far short of the type of cultural impact study that was required to truly incorporate other cultural values, especially those of local Maori. Like the *Preliminary classification* itself, the report concentrated on bathing areas, especially Waikanae and Midway beaches. More importantly, the consultation process for the classification was obviously flawed. Although “[m]any interested parties made their views known through these processes,<sup>214</sup>” it appears that Maori played only a small part in the consultative procedures and they did not provide substantial submissions on the classification<sup>215</sup>. Maori had a general capacity to participate in the classification, but there was no specific requirement to proactively ascertain their opinion in the legislation. Consequently, while recreational values were accounted for satisfactorily in the resultant classification, iwi values were not factored into the policy document.

Other than the reduction of recreation to culture – which represents a failure to consider Treaty issues – the *Preliminary classification* had a number of other deficiencies. The purpose of a classification was to characterise the existing water quality and then set protective zones for waters of local and national importance. In places, the approach of the ECCB-RWB, however, was more oriented towards protecting existing *uses* of local waters. For example, in the vicinity of the outfall for the submarine sewerage outfall, the ECCB-RWB recommended an SD classification – a relatively low level of protection – because:

Any higher classification would mean considerable changes to the treatment of the waste before being discharged which realistically could not be achieved within a period of authorisation pursuant to s26(K)(2). Without that authorisation the Dischargers would be operating illegally. The termination of the discharge operation would seriously jeopardise their overall operation which is not seen as being in the public interest<sup>216</sup>.

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<sup>212</sup>ECCB-RWB 1989, p6.

<sup>213</sup>Gregory 1989.

<sup>214</sup>Wells 1993, p33.

<sup>215</sup>“Preliminary classification of Poverty Bay and coastal waters.” – N.B. Roe, Secretary, ECCB-RWB, to CEO, GDC, 31.10.1989 (GCC 01-233-07).

<sup>216</sup>ECCB-RWB 1989, p21.

This was only one possible interpretation of the classification process and was evidently against the logic of case law on classification which had developed to that date<sup>217</sup>. Even though the classification process was not supposed to establish financially unattainable standards, the courts had already determined that the emphasis in the process should be placed on the needs of the marine environment rather than those of the business community.

A related deficiency was that the *Preliminary classification* was weak in determining the biological values of Poverty Bay and nearby coastal waters. As a consequence, the Minister of Conservation submitted that the “classification is rather anthropocentric, being concerned with the human uses of water, and making little reference to the protection of aquatic life<sup>218</sup>.” This was only partially correct. Rather than being truly anthropocentric, the *Preliminary classification* was more Eurocentric in its outlook, especially given its focus on recreation. The Minister was also critical of the lack of monitoring that the ECCB-RWB had carried out prior to the classification process. Because that process was supposed to benchmark existing water quality, it was normally preceded by extensive water quality testing. Whereas the Catchment Board’s ability to intervene over the outfall was shrouded in legal technicalities, it did have a clear mandate to monitor the environmental quality of Poverty Bay. As part of this role, it had a clear duty to report to such higher authorities as the PAC<sup>219</sup> any installation that caused a decline in water quality. Although the Board had initiated several testing programmes of Poverty Bay water quality beginning in the early 1970s, these were always discontinuous. As its Engineer was to admit in the late 1980s, “[t]his work has been stopped by limitations of staff resources<sup>220</sup>.” Without such testing, the Department of Conservation had found it difficult to adequately brief its Minister<sup>221</sup>. This was a problem which all who submitted on the process would have experienced and it made the local classification a speculative rather than scientific exercise<sup>222</sup>.

In the regard of the submarine outfall, the significant findings of the classification process were (as shown in Figure 10.15 on page 383):

- An SB (bathing standard) classification for beaches in the vicinity of the outfall.
- An SD classification for the waters immediately above the outfall diffusers.

<sup>217</sup>The key cases to that date related to the Southland and Hawke’s Bay classifications.

<sup>218</sup>“Water and Soil Conservation Act 1967. ECCB-RWB Poverty Bay Preliminary Classification. Submission from the Minister of Conservation.” – P. Woollaston, Minister of Conservation, 31.8.1989 (GCC 01-233-07).

<sup>219</sup>In 1970, the PAC was replaced by the Water Pollution Control Council, but the functions of the former were carried over into the mandate of the latter.

<sup>220</sup>“Summary of Regional Water Board involvement with waste discharge to Poverty Bay.” – A. Armstrong, Engineer, ECCB, n.d. (GDC 365-04).

<sup>221</sup>“Water and Soil Conservation Act 1967. ECCB-RWB Poverty Bay Preliminary Classification. Submission from the Minister of Conservation.” – P. Woollaston, Minister of Conservation, 31.8.1989 (GCC 01-233-07).

<sup>222</sup>McBride 1990.

While the GCC had expected the SB status of Waikanae and Midway beaches, it was dismayed by the SD classification of the outfall waters, indicating that an SE classification was more appropriate<sup>223</sup>. The bacteriological standards of the two levels of classification were identical and the only crucial difference was the level of fat and grease in the discharge. The City outfall discharged a significant amount of these substances so "if SD classification was accepted, it is totally discretionary to grant water rights...and [these] would be open to all and sundry to object<sup>224</sup>." The Council's view appeared to be that the classification should have gone no further than protecting the existing quality of local waters rather than allow for improvements to that quality<sup>225</sup>. Case law had earlier established that an SE zone could only be contemplated where it was of limited size<sup>226</sup>. Moreover, it had also been established that an SE zone could only be used in unusual or exceptional circumstances and when the water in question was not of public importance<sup>227</sup>. Thus, there was little backing for the GCC position from the stated opinion of the Courts.

By the time of the hearings on the *Preliminary classification*, the GCC and the ECCB were abolished, with staff of both organisations becoming part of the Gisborne District Council (GDC)<sup>228</sup>. Because the position of what had become the Engineering and Works division of the GDC was tenuous with respect to its desire for an SE classification, it targeted most of its evidence at the hearing towards a financial justification<sup>229</sup>. For example:

To require a higher classification than SE will require the removal of suspended solids which will involve some form of secondary treatment. The cost of secondary treatment is in the order of \$24,000,000.00. Because of the cost of secondary treatment and its limited benefit it is submitted that an SD classification is not reasonably needed nor is it reasonably obtainable<sup>230</sup>.

For the reasons given earlier, it is not economically feasible for Council to comply with an SD classification adjacent to the diffuser in the immediate to medium future...[The] establishment of a classification which will result in

<sup>223</sup>"In the matter of section 26E Water and Soil Conservation Act 1967 and in the matter of an objection to preliminary classification by Gisborne City Council." – Chrisp and Chrisp, Barristers and Solicitors, on behalf of GCC, to ECCB-RWB, 23.8.1989 (GCC 01-233-07).

<sup>224</sup>"Poverty Bay Water classification." – T.D. Caley, Chrisp, Caley and Co, Barristers and Solicitors, Gisborne, to R.P. Wolff, Barrister, Napier, 20.3.1990 (GCC 01-233-07).

<sup>225</sup>"Submission by counsel for the Conservation Division of the Gisborne District Council." – Preliminary classification of Poverty Bay and coastal waters, 1990 (GCC 369-03).

<sup>226</sup>"Poverty Bay and coastal waters. Preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01-233-07).

<sup>227</sup>Evidence of B. Turnpenny – Preliminary classification of Poverty Bay waters, 26.3.1990 (GDC 369-02a).

<sup>228</sup>Indeed, the local government reorganisation in association with the introduction of the RMA led to the classification process being both discontinuous and disrupted ("Gisborne District Council water quality classification." – Chrisp, Caley and Co., Barristers and Solicitors, Gisborne, to J. Fitzmaurice, Beca Steven Ltd., Auckland, 12.3.1990 (GCC 01-233-07).

<sup>229</sup>"Opening submission of counsel for Gisborne District Council." – R.P. Wolff, 3.4.1990 (GDC 369-03).

<sup>230</sup>"Summary of submissions for Gisborne District Council objection." – R.P. Wolff, 3.4.1990 (GDC 369-03).

such a requirement is unreasonable since it would direct capital expenditure by the Gisborne District Council towards the construction of a major sewage treatment system of limited benefit while delaying capital expenditure on improvement to the performance of the sanitary sewer system<sup>231</sup>.

The idea that the GDC should limit sewage overflows or add treatment mechanisms to the disposal system, rather than completing both tasks immediately, was a familiar argument. Yet again, there was little in the way of supporting information for the quoted value of \$24m, meaning that it was probably inflated<sup>232</sup>. Immediately after the hearing, this was effectively confirmed by the GDC itself, which emphasised that the cost of "treatment is much less than proposed at the hearing" in its strategy for meeting the classification requirements<sup>233</sup>. Indeed, when the GDC was forced to consider additional treatment, the cost of secondary treatment had suddenly dropped to an absolute maximum of \$10m<sup>234</sup>.

Ultimately, the special committee which heard the classification was to agree with the financial argument of the GCC. It stated that there were...

...claims that the Gisborne City outfall cannot comply with an SD classification because of the suspended solid content of the discharge, and also possibly on account of the colour. GDC argues that an SD classification at the outfall would require the construction of a secondary treatment system at a high cost.

We therefore conclude that there should be an SE zone as small as practicable, surrounding the GDC outfall diffuser<sup>235</sup>.

Neither an SD nor an SE classification would have addressed directly the spiritual and resource concerns of local Maori. The higher the classification, however, the more likely that the GDC would have been set on a course of action which could have alleviated the water quality conflicts between tangata whenua and the GDC during the 1990s.

The initial reaction to the GDC to the classification was to develop a protocol for upgrading the disposal facility so that the outfall waters were of SE standard. Even this small step was to be dependent on "the availability of funds and an economic assessment of options<sup>236</sup>." Surprisingly, the Engineering and Works and the Environment and Planning sections of the GDC were in agreement over the proposed

<sup>231</sup>Evidence of J. Warren – Preliminary classification of Poverty Bay and coastal waters, 24.3.1990 (GDC 369-03).

<sup>232</sup>But not, perhaps, as inflated as the \$82m that was quoted as the likely cost for secondary treatment at the Gisborne Environmental Summit in 1990 (Refer to page 433).

<sup>233</sup>"Gisborne City waste water treatment. Procedure following final classification." B.I. Apperley, Regional Design Engineer, GDC, and W.J. Turner, Acting Manager, Engineering and Work, GDC, to CEO, GDC, 25.5.1990 (GCC 01-233-07).

<sup>234</sup>"Confirmation of waste-water treatment processes to meet SD water classification." – W.J. Turner, Engineering and Works, GDC, to CEO, GDC, Report EW.4441, 4.9.1990 (GCC 01-233-07).

<sup>235</sup>"Poverty Bay and coastal waters. Preliminary classification." – Report and recommendations of a special committee comprising L. Chisholm, I. Gunn, and R. Hayward, 3.5.1990 (GCC 01-233-07).

strategy for meeting the classification. Although they had conflicting philosophies and mandates in the regard of sewage disposal, and although the Environment and Planning section remained convinced that SD was the more appropriate classification, both sections of the GDC believed that a level of treatment in keeping with the SE classification could be completed without substantial expense. Increasingly, strategies for sewage disposal were formulated in-house, with private negotiations between Engineering and Works and Environment and Planning. The hope was that appeals on the classification might be avoided. Both parties wanted to avoid, in particular, the *cost* of an appeal<sup>237</sup> – hardly a satisfactory reasons for avoiding a statutory process that would have involved further public and, perhaps, Maori input. Engineering and Works feared that an appeal would lead to substantial public input and judicial intervention which, in turn, might prejudice the:

...end result of any process which may be agreed between Engineering & Works and Environment & Planning. In this case we would have the tail wagging the dog and Council may be put in a position of funding works which cannot be realistically afforded<sup>238</sup>.

In an atmosphere where the public was regarded as the ‘tail’, there was little hope that Maori interests could be attended within the classification procedures.

These in-house negotiations were, in any case, superseded by appeals on the findings of the special committee which was established to hear the *Preliminary classification*. The Minister of Conservation, among many others, appealed the SE classification of the outfall waters<sup>239</sup>. Perhaps of more significance, the Environment and Planning section of the GDC appealed the findings of the GDC’s own committee to hear the classification<sup>240</sup>. This odd set of circumstances, wherein a council appeals its own decisions, is the reserve of unitary authorities, more about which will be said in the following Section. Eventually, the Engineering and Works department was forced to accept that an appeal would not only be forced through by the public but it would also be successful in elevating the outfall waters from SE to SD<sup>241</sup>. Therefore, “[a]fter careful consideration the Gisborne District Council accepted that a SD classification for its outfall was appropriate<sup>242</sup>.” The Planning

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<sup>236</sup>“Gisborne City waste water treatment. Procedure following final classification.” B.I. Apperley, Regional Design Engineer, GDC, and W.J. Turner, Acting Manager, Engineering and Work, GDC, to CEO, GDC, 25.5.1990 (GCC 01-233-07).

<sup>237</sup>“Receiving waters of Poverty Bay. Classification by consent.” – J. D. Wells, Design Engineer, Urban Services and Projects, GDC, to T. Caley, Chrisp, Caley and Co., Barristers and Solicitors, Gisborne, 27.7.1990 (GCC 01-233-07).

<sup>238</sup>“Poverty Bay receiving waters classification.” – W.J. Turner, Acting Manager, Engineering and Works, GDC, to Chief Executive, GDC, Report EW.1671, 31.8.1990 (GCC 01-233-07).

<sup>239</sup>“Notice of appeal.” – M. Hosking, Department of Conservation, on behalf of P. Woollaston, Minister of Conservation, 24.7.1990 (GCC 01-233-07).

<sup>240</sup>“Classification of Poverty Bay waters.” – S.W. Clare, Manager, Corporate Services, GDC, to Manager, Environment and Planning, GDC, 25.6.1990 (GCC 01-233-07).

<sup>241</sup>“Confirmation of waste-water treatment processes to meet SD water classification.” – W.J. Turner, Engineering and Works, GDC, to Chief Executive, GDC, 4.9.1990 (Submissions on CP92001-93011).

Tribunal was asked to provide a consent order, reverting the classification of water around the outfall to SD<sup>243</sup>.

While this might appear to be a useful victory, the most important point about the broader classification process was that it appeared to be thoroughly incapable of incorporating Maori interests. The key concern for classification in Poverty Bay appeared to be fat and grease which was central in terms of whether the Council should be forced to remove it from view or whether swimmers should have to contend with it. Although local Maori were concerned about fat and grease discharges, these formed a minor, aesthetic issue when compared with the spiritual and resource implications of the submarine outfall. There appeared to be neither an obvious way of incorporating Maori concerns into the process nor any attempt by the Catchment Board to ascertain Maori views. Yet, the Catchment Board should not necessarily be blamed for these problems: it was not required to access Maori understandings of the environment under its governing legislation. The fact that neither the procedures for classification nor the WASCA which determined those procedures incorporated a requirement to consider the Treaty is a significant omission by the Crown.

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<sup>242</sup>"Resource consent application. Wastewater discharge to Poverty Bay." – W.J. Turner, Engineering and Works, GDC, GDC Report 93/424, 16.7.1993 (GDC 369-01).

<sup>243</sup>"Submissions of counsel for the Gisborne District Council." – G.R. Webb, 12.10.1993 (GDC 369-01).

## 11.5 Water quality conflicts and the submarine sewerage outfall under the RMA

The increasing attention of local iwi to the submarine sewerage outfall, which was mentioned at the end of Section 11.3, coincided with the Resource Management Law Reform process (1987-1991). The outcome of that process – the Resource Management Act (RMA) – has already been evaluated in this report. In both the Paokahu landfill case and in the debates surrounding (peri)urban pollution, the RMA scarcely represented a break with the past. With regard to the submarine sewerage outfall, there is no doubt that Maori have been more involved in the debate surrounding that outfall. It is also certain that the GDC has opened the door to that debate and has established processes and mechanisms for iwi participation in the decision-making process. The specific sections of the RMA which might account for this apparent change in direction by the GDC are ss 6e, 7a and 8:

- **s 6e** – Resource managers should ‘recognise and provide for’:  
“The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, wahi tapu and other taonga.”
- **s 7a** – ‘Other matters’ which persons exercising functions and powers under the Act are directed to ‘have particular regard to,’ include ‘(a) Kaitiakitanga’. This is defined in s 2 of the Act:  
“Kaitiakitanga means the exercise of guardianship by the tangata whenua of an area in accordance with tikanga Maori in relation to natural and physical resources; and includes an ethic of stewardship.”
- **s 8** – Persons exercising functions and powers under the Act...  
“...shall take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).”

These provisions – which are incorporated into the all important Part II (‘Purposes and Principles’) of the Act – represent a significant departure from the Water and Soil Conservation Act 1967. The 1967 Act included no specific requirements to address iwi environmental concerns as if they were of specific importance.

The fact remains, however, that after nearly a decade of management under the RMA, the submarine outfall remains in place. This has been entirely against the will of local iwi, who have stated clearly at all possible opportunities that land-based sewage disposal is their favoured option. Two iterations of resource consent and appeal hearings for the outfall have been held under the RMA: in 1993, with appeals in 1994, and in 1999, with appeals in 2000. These cases and the actions of the GDC in the interim provide a telling case study of the real merits of the provisions for Maori inclusion, and the statutory reference to the Treaty, within the new planning legislation. Despite the incorporation of these provisions within the Act, Maori remain alienated from the process of environmental decision-making.

## **Unitary authorities, Maori interests and political accountability**

The RMA was not the only change in the administrative structure for local government to have affected Gisborne's approach to environmental management in the 1990s. Indeed, a change that had occurred in the year before the enactment of the RMA was to have as great an effect. The replacement of the GCC by the GDC represented a significant change for local politics. Not only did it have a much larger territory than before, the Council had a new range of responsibilities. Effectively, the GDC had to simultaneously function as a regional council and a territorial local authority. The potentially conflictual nature of these functions has already been considered in Sections 9.3 and 10.5. The problems brought about by the GDC's unitary status are evaluated as in introduction to this Section, because it had a significant bearing on the ability of local iwi to participate in the resource consent processes which are evaluated this Chapter.

The fraught existence of the unitary authority was to become obvious in one of the first tasks that the GDC was to complete. As was shown in the previous Section, the classification of Poverty Bay waters that had been initiated by the Catchment Board was completed by the GDC. In that regard, it is obvious that there was a general split between Engineering and Works (which desired an SE classification of the waters above the outfall) and Environment and Planning (SD). The Acting Manager of Engineering and Works wrote to the CEO of the Council suggesting that "Council cannot be seen in the public eye to be split<sup>244</sup>." Often, it was this desire to appear unified that was to prevent Environment and Planning from completing the task of regulating the actions of the District's engineers. Moreover, the unitary status of the GDC obviously led to a considerable amount of confusion. The time of the classification hearings was one of frequent correspondence with Council legal advisors and there was even uncertainty as to whether the GDC could legally appeal its own decisions<sup>245</sup>. It is probable that this ongoing confusion impacted upon the quality and fairness of the decision-making.

While the Council attempted to avoid a conflict of interests through the establishment of an independent committee to hear the classification<sup>246</sup>, this level of transparency was difficult to achieve. No matter how unbiased these committees may have been, it is hard to ignore the ridiculous nature of such case titles as the following:

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<sup>244</sup>"Poverty Bay receiving waters classification." – W.J. Turner, Acting Manager, Engineering and Works, Report EW.1671, to CEO, GDC, 31.8.1990 (GCC 01-233-07).

<sup>245</sup>"Gisborne District Council. Water classification." – R.P. Wolff, Barrister, Napier, to Messrs. Chrisp, Caley and Co., Barristers and Solicitors, Gisborne, 6.6.1990 (GCC 01-233-07).

<sup>246</sup>"Appeals against final classification of the waters of Poverty Bay." – R.D. Elliot, CEO, GDC, to Minister of Local Government, 27.8.1990 (GCC 01-233-07)

BETWEEN GISBORNE DISTRICT COUNCIL Appellant.

AND GISBORNE DISTRICT COUNCIL Respondent.

TAKE NOTICE that the Gisborne District Council, a territorial authority constituted under the Local Government Act 1974, at Gisborne hereby appeals against the decision of the Gisborne District Council delivered on 24 May 1990, received by the Appellant on 7 June 1990.

In this case – the hearing on the *Preliminary classification* – as in all other hearings relating to the outfall in the 1990s, the situation was made all the more absurd by the fact that the GDC was also the local consent authority. Although many attempts were made to make the process of resource management for the outfall appear transparent, the public view of the GDC *vis-a-vis* the outfall was one of conflicting interests. As will be shown, there is considerable evidence that this public view was an accurate portrayal.

The negative impact of Gisborne's unitary status on the resource management process was explicit at the first full resource consent hearings for the outfall in 1993. Members of the East Coast Conservation Board were dismayed by the potential for conflicting interests in the granting of these consents<sup>247</sup>. GDC staff members had, for example, initiated a questionnaire to elicit support for preserving the *status quo* disposal option. The Conservation Board contended that, with the Council being both an advocate for the outfall and the consent authority, there was an innate bias in any process of public participation initiated by the Council. The Conservation Board was also concerned that a working group formed by the GDC to evaluate options was drawn from the pool of ratepayers rather than the public at large. This it also associated with the Council's contradictory status as both consent authority and a public body with a duty to respond to ratepayer's fiscal concerns.

Environment and Planning staff were particularly cautious in their actions because of their potential bias. At the time of the 1993 hearings these staff clearly believed that the assessment of effects submitted by the Engineering and Works division along with an application for resource consent was inadequate<sup>248</sup>. They wanted to carry out a detailed in-house evaluation of the assessment but decided against this course of action:

It would be extremely difficult for the Council's position to be defended in this instance, and reinforces my view that such issues should not be attempted to be dealt with in-house. It must be accepted that the wider community is becoming increasingly environmentally aware and the credibility of the Council's position as a unitary authority will come under increasing attack<sup>249</sup>.

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<sup>247</sup>“Questionnaire on the issue of sewage disposal and Mayoral working party to discuss the issue of sewage disposal.” – V. Schollum, East Coast Conservation Board, 4.5.1993 (GCC 01-330-01).

<sup>248</sup>A.F. Armstrong, Manager, Environment and Planning, to A.Green, Brookfields, Barristers and Solicitors, May 1993 (GCC 01-330-04).

Environment and Planning's fear of publicly stating its own opinion meant that it was difficult for that division of the Council to adequately inform the public about the consents for, and the environmental effects of, the outfall. While it admirably sought independent reports on the AEE and other documents, its *passivity* in these cases was against the logic of resource consent procedures as practised elsewhere. Environment and Planning's constant desire to appear to be objective meant that it was seldom able to assist residents with their appeals.

A related complication of the unitary status of the GDC was that it did not provide a context wherein sewage disposal and treatment strategies were adequately staffed. When a territorial authority applies to a regional council for a consent on a sewage issue, its strategy will typically be created by a mix of planners and engineers, as well as other experts. In the case of Gisborne – a relatively small and isolated provincial centre where it is difficult to attract a full complement of such staff – the planners could not contribute meaningfully to the sewage treatment and disposal strategy because they might have later become implicated as respondents in consent appeals. It is typical for engineers to design alternative mechanisms of disposal and planners to manage public participation exercises for those alternatives. In Gisborne, the engineers tended to design alternatives *and* liaise with the public, but it is questionable whether engineers have suitable training for this latter task. In turn, it is not surprising that local Maori would find the participatory mechanisms of Engineering and Works less than satisfactory throughout the 1990s.

This problem was accentuated by the obvious level of inter-sectoral competition between Engineering and Works and Environment and Planning. For example, when the GDC was required to liaise with the public about whether or not to adopt milliscreens, the first time Environment and Planning was to hear about public meetings on the matter was in the local newspaper<sup>249</sup>. If the meetings were ever to be a meaningful exercise in public participation, then the more suitably trained staff from Environment and Planning should have managed them. Another example transpired when the GDC finally started the process of implementing trade waste by-laws, Engineering and works did not want to share the responsibility with Environment and Planning<sup>251</sup>. This was a petty debate and one which must have affected the quality of the by-laws which were eventually drafted. It should be fairly obvious that planners, for whom writing policies is part of their routine duties, could have contributed to the process in many ways that engineers could not. Such intersectoral jealousies as these did not provide an administrative context into which local Maori could adequately position themselves.

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<sup>249</sup>“Resource consent application. GDC sewer outfall discharge permit.” – A. Armstrong, 26.11.1992 (GCC 01-330-04).

<sup>250</sup>Photocopy of “Meetings about sewer planned.” – Gisborne Herald, 14.11.1990, with memorandum attached (GCC 01-330-05).

<sup>251</sup>B.I. Apperley, Regional Design Engineer, GDC, to Acting Manager, Engineering and Works, 29.1.1991 (GCC 01-284-03).

The use of independent commissioners and committees to hear resource consents wherein the GDC was both appellant and respondent was an admirable attempt to avoid bias, but was not without its own problems. Indeed, there were several occasions where the independence of the 'independent' commissioners was called into question. One potentially serious example of this came from the actions of the chair of the special committee which was established to hear the 1993 resource consents. When Te Runanga o Turanganui-a-Kiwa (TROTAK) decided to appeal his committee's decision to grant consents for the outfall, he replied to Environment and Planning that he was<sup>252</sup>:

...surprised (and disappointed) to learn...that Mr. Te Aho [TROTAK] has lodged an 'appeal' to the Planning Tribunal into the committee's recommendation. My personal assessment of the situation is that his crusading zeal for his cause has clouded his judgement...Te Aho's request is unrealistic, [and you are] better to focus on altering the conditions or cooperating to reach a long term solution...Perhaps it would have been better if I had specifically mentioned in the report that it is impossible to give effect to Mr. Te Aho's submissions at the present time. Can this be tactfully brought to his attention? I do not think that you should let the 'appeal' be a significant influence on how you will spend your time in 1994<sup>253</sup>.

While this does not necessarily represent impropriety, some of these comments suggest that the commissioner may not have been entirely objective in his attitude to TROTAK's concerns. Whatever the case, it is difficult to see how this commissioner was acting independently – the post-hearing contact with Environment and Planning, and his advice as to how the GDC should approach the appeal, precluded any sense of transparency. Moreover, the commissioner in question was invited back to Gisborne repeatedly to chair hearings wherein the GDC was both appellant and respondent. This issue of 'independence' provides a further example of the contradictions within a unitary authority. As will be shown, these contradictions were just one form of difficulty for local Maori in their endeavour to have the outfall terminated. Nevertheless, they form an important context for the 1993 and 1999 consent hearings. The Gisborne example appears to suggest that there may not be sufficient checks and balances within unitary authorities for Treaty issues to be given satisfactory attention therein.

### **Preparation for the 1993 coastal permit hearings**

There were a number of reasons why the GDC was required to apply (to itself) for resource consents relating to the outfall in 1993. The introduction of the RMA had changed the authorisation requirements for municipal outfalls. Other than s 14

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<sup>252</sup>"Gisborne District Council. Sewage outfall." – A.R. Turner, to I. Petty, Water Conservation Officer, GDC, 16.2.1994 (GCC 01-330-04).

<sup>253</sup>*Ibid.*

which established a general presumption against discharging wastewater into natural water, there were many other sections of the Act which meant that the submarine sewerage outfall had a potentially tenuous legal existence. Because of the particular circumstances in Gisborne, ss 69 ('Rules relating to water quality') and 107 ('Restriction on grant of certain discharge permits') made the granting of consents for the submarine outfall almost improbable<sup>254</sup>. In particular, as the discharge contained a large volume of processing effluent, clauses from s 107 relating to discharges which cause a change in colour, clarity, odour or adverse effects on aquatic life were difficult for the Council to circumvent<sup>255</sup>. The GDC expected these issues to be controversial and prepared for them, but in other areas it was much less prepared for criticism. The most surprising aspect of 1991-1993 correspondence of GDC staff relating to the legal complexities of the outfall is that s 8 of the RMA – the requirement to take Treaty principles into account – was almost never mentioned. The level of Maori protest against the outfall was to be a surprise for an underprepared local authority.

At the introduction of the RMA in 1991, an existing right to discharge waste was transferred to the GDC but, unlike the Notified Existing Use right granted in 1968<sup>256</sup>, this was temporary. In reality, the existing right had expired on 1 October 1992, meaning that for some months thereafter the submarine outfall was an unlawful facility<sup>257</sup>. Another factor which complicated the need for resource consents was that the classification which had been formalised by 1992 acted as the Regional Coastal Environmental Plan for Gisborne District up until the time that a new Plan was made operative. Under the SD classification, the discharge was not a permitted activity<sup>258</sup>. However, "the existing right was allowed to continue on condition that an application for a new right was made prior to 30 September 1991<sup>259</sup>." The Council had applied as early as October 1991 for the necessary consents but, by its own admission, the application was deficient<sup>260</sup>. Initially, it did not even include an impact assessment, something that was mandatory under the new legislation. Engineering and Works' approach appeared to be one of submitting a 'placeholder' fully in the knowledge that this would be rejected by Environment and Planning. Predictably, the latter requested more information, delaying the consent hearings and providing Engineering and Works with more time to address the defi-

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<sup>254</sup>"Advanced primary wastewater treatment." – J.D. Wells, Design Engineer, Engineering and Works, GDC, to CEO, GDC, 19.2.1993 (GCC 01-284-05).

<sup>255</sup>Report and recommendation of the Special Committee to hear coastal permits to the Minister of Conservation – November, 1993 (GCC 01-330-04).

<sup>256</sup>Refer to Section 11.4.

<sup>257</sup>Hone Kape, Manuā Society, to CEO, GDC, 13.11.1992 (GCC 01-330-04).

<sup>258</sup>"Resource consent application: Wastewater discharge to Poverty Bay." – W.J. Turner, Manager, Engineering and Works, GDC, to CEO, GDC, 16.7.1993 (GCC 01-330-04).

<sup>259</sup>"Submissions of counsel for the Gisborne District Council." – G.R. Webb, 12.10.1993 (GDC 369-01).

<sup>260</sup>"Coastal permit applications. Discharge of municipal waste water into Poverty Bay." – A.F. Armstrong, Manager, Environment and Planning, to A. Gunn, 1993 (GCC 01-330-04).

ciencies in its research. These tactics reflected the GDC's overall lack of preparation to face the statutory process.

With the approaching need to obtain coastal permits and other resource consents under the RMA, the GDC engineers began a process of investigating alternative forms of disposal. At first it merely summarised the conclusions of previous reports, all of which had evaluated forms of primary treatment designed to remove grease and fat. This list was soundly rejected by local Maori:

Representatives of the Maori community yesterday dismissed the District Council's proposals for sewage treatment, strongly condemning any further discharge into the sea. A public meeting called for a six month post-pone-ment of any decisions, to allow for some 'proper' consultation with the community and a look at alternatives offering total land-based disposal.

Those representing the Maori community rejected the options outright, on the grounds that all six options put forward for a final decision this week still involved some disposal at sea after varying degrees of treatment on land<sup>261</sup>.

This report went on to suggest that:

Maori wanted more time to allow consideration of other options which did not involve the sea. It did not have to happen overnight but the tangata whenua wanted sewage out of the sea...The Maori people wanted their traditions and spiritual beliefs to be taken into account, rather than having the entire decision based on engineering reports and scientific data.

There was a general consensus that the Council's approach to public consultation had not been broad enough in this case...It was considered the Council had not made enough information available to support the final six options.

The GDC obviously had to complete many more investigations before it could claim that it had adequately considered its options. That this process was only to begin fully in late 1992<sup>262</sup> represents a token gesture towards the genuine evaluation of alternatives. Simple data which should have been collected years before the investigation of alternatives was not requested until the last moment. For example, wind data was requested as late as September of 1993, not long before the consent hearings and well after the submission of the application<sup>263</sup>. Important studies on the existing impacts of the outfall were commissioned too late to be incorporated into the assessment of effects which accompanied the consent application<sup>264</sup>.

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<sup>261</sup>"Maori condemn sewage in 'foodbasket.'" – M. Spence, Gisborne Herald, p1, 29.1.1991 (GisMUS VF-Local Govt Facilities).

<sup>262</sup>"Advanced primary wastewater treatment." – J.D. Wells, Design Engineer, Engineering and Works, GDC, to CEO, GDC, 19.2.1993 (GCC 01-284-05).

<sup>263</sup>"Gisborne outfall. Airport wind data." – B. Apperley, Engineering and Works, GDC, to K. McGill, NIWA, Wellington, 17.9.1993 (GCC 01-330-04).

The combined result of the limited evaluation of alternatives and the lack of data was that the 1993 consent hearings were limited only to particular pollution discourses. It resulted in a situation where the only satisfactorily evaluated treatments were those in the category of advanced primary<sup>265</sup>. These treatments included such technology as Dissolved Air Flootation (DAF) which were suitable for reducing such aesthetic pollution concerns as fat on the bathing beaches, but little more. None of the treatments would have satisfied the concerns of local iwi. At one level, it seems clear that the GDC had a set goal of spending as little as possible on pre-feasibility studies<sup>266</sup>. At another, it was to become convenient, if not a deliberate strategy, to go into coastal permit hearings with as few alternatives as possible. As will be shown, rather than being admonished for its inadequate search for alternative disposal mechanisms, the Planning Tribunal/Environment Court and committees which heard 1990s resource consents for the outfall were entirely too forgiving of the Council's lack of progress.

There were some genuine difficulties that the GDC would have had to overcome to implement higher forms of treatment. By 1993, there was little in the way of remaining space to erect secondary treatment facilities at Stanley Road<sup>267</sup>. With the encroachment of the motel industry into the area, there was a desire to avoid treatments which were high in visual pollution or which were associated with odours. Many of the land-based treatments would have needed significant areas of land: irrigation, for example, would have required over 500ha; infiltration, 200-500ha; oxidation ponds, 90ha and a wetland system up to 50ha<sup>268</sup>. Much of the land which was available in the vicinity of the outfall but was away from the City was Maori owned, and tangata whenua had already indicated that they did not want the Council to consider their land for land-based treatment. As one group of local Maori were to say "there is a real concern that the options published to date refer to [the] Awapuni-Paohaku area and that other locations have not been explored to the same extent<sup>269</sup>." If these options were going to be controversial the GDC did not help matters by refusing to share information with local iwi. When the Council was asked for copies of pre-feasibility studies that it had commissioned, TROTAK received a reply that:

In December 1993, Council received a pre-feasibility study for the disposal to land of the City's effluent...Council is not prepared to make available the

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<sup>264</sup>"Wastewater treatment. Pilot trial." – B. Apperley, Engineering and Works Department, GDC, to G. MacDonald, Beca Steven Ltd., Auckland, 1.6.1993 (GCC 01-284-05).

<sup>265</sup>W.J. Warren, City Engineer, GCC, to J.R. Fitzmaurice, Steven Fitzmaurice and Partners Ltd., Auckland, 10.7.1987 (GCC 37/6); Hudson and Armstrong 1999.

<sup>266</sup>"Gisborne city wastewater system. Progress report." – B.I. Apperley, Design Engineer, and W.J. Turner, Manager, Engineering and Works, GDC, to CEO, GDC, 11.2.1994 (GCC 01-330-04)

<sup>267</sup>"Gisborne City wastewater treatment: Use of existing outfall pump station site." – B.I. Apperley, Design Engineer, and W.J. Turner, Manager, Engineering and Works, GDC, to CEO, GDC, 9.8.1993 (GCC 01-330-05).

<sup>268</sup>Fitzmaurice and Partners Ltd. 1988, p84.

<sup>269</sup>"Group wants say on sewage disposal options." – J. Gillies, Gisborne Herald, 23.12.1996.

report to you or your client on the ground that it would be likely to unreasonably prejudice the commercial position of the authors<sup>270</sup>.

This appears to be a spurious argument. It is more likely that the information was prejudicial to the Council's political position. This failure to disclose important information reflects the GDC's failure to engage with iwi on fair terms.

While the complications outlined above were undoubtedly real, none of them were insurmountable and they only indicated that the Council should have spent much more time investigating suitable alternatives before the application for coastal permits. In any case, none of these alternatives were ever considered in detail. The objectives of Engineering and Works for the consent process appeared to be rather limited – to prove that it could meet the SD classification with no upgrades to the facility<sup>271</sup>. Engineering and Works attempted to convince the consent authority that the introduction of trade waste by-laws would be sufficient to satisfy the classification<sup>272</sup>. Beyond that, the GDC contended that the Best Practicable Option<sup>273</sup> was to grant a consent for the outfall as is and the Council would endeavour to add further treatment within three to ten years thereafter<sup>274</sup>. Engineering and Works staff had labelled this the “do minimum” option<sup>275</sup>. Even this minor objective was framed within an apparently overwhelming financial constraint:

The current rating requirement for the Gisborne District Council is already high compared to other local authorities, and the ability to fund major capital works (by loan or otherwise) is extremely limited<sup>276</sup>.

The reason why the GDC desired to go no further than meeting the old SD standard was that it perceived the outfall discharge to be “an aesthetic and cultural rather than an environmental or health problem<sup>277</sup>.” This statement seems to suggest that there was only a need to properly upgrade the system if there was an identifiable health problem, suggesting that cultural concerns were undeserving of attention. This was in keeping with the evidence that the GDC was to call at the 1993 hearings which was mainly targeted towards proving that there were few bacteriological concerns from the outfall. The Medical Officer of Health, for example, testified that

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<sup>270</sup>“re: Outfall appeal.” – G.R. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, to Mauria Society, Gisborne and Te Runanga o Turanganui-a-Kiwa, 30.6.1994 (GCC 01-330-04).

<sup>271</sup>Evidence of W.J. Turner for consents CP91001 and CP91002 – November 1993 (Submissions on CP92001-93011). Note that none of these upgrades – not even a DAF system – were ever implemented at the site.

<sup>272</sup>Application for resource consent, CP91001 (GCC 01-330-04)

<sup>273</sup>Or, BPO, as defined in s 2 of the RMA. The particular definition of BPO in the Act has been criticised for smuggling back into the RMA a balancing act between environmental and economic concerns – something which was supposed to have been done away with under the RMA.

<sup>274</sup>Wells 1993, p30.

<sup>275</sup>“Resource consent application. Wastewater discharge to Poverty Bay.” – W.J. Turner, GDC Report 93/424, 16.7.1993 (GDC 369-01).

<sup>276</sup>Evidence of W.J. Turner for consents CP91001 and CP91002 – November 1993 (Submissions on CP92001-93011).

<sup>277</sup>“Sewerage treatment and disposal costs.” – B.J. Apperley, District Design Engineer, GDC, to Manager, Engineering and Works, GDC, n.d. (GCC 01-330-01).

there had been no cases of notified infectious diseases associated with the outfall in the five years to 1993<sup>278</sup>.

While the Council had not prepared a suitable evaluation of alternatives, its preparation was even less satisfactory in the regard of considering public opinion on the outfall: generally, consultation was an afterthought. It was only after members of the public began to criticise in the local media Engineering and Works' lack of vision for the outfall that the GDC envisaged the need for a programme of consultation. For example, it was not until July of 1993 – well after the Council's submission of its application – that it contracted consultants to gauge public opinion<sup>279</sup>. The adopted method was a random survey of households which was conducted as a questionnaire and administered by telephone. This is possibly the most insensitive of methodologies to be employed for such a task and could not possibly have fulfilled Treaty principles of consultation. A *random* survey of householders does not equate with the *deliberate* interaction with tangata whenua to which the GDC was obligated under s 8 of the RMA. In any case, the survey was ill-prepared and would have failed general principles of consultation. Because public liaison was an afterthought, the time-frame for the survey would have been far too short:

The timing of the survey and initial reporting from it is tight. There is a resource consent application for the city outfall scheduled for the week beginning 16 August. We would like the survey to be completed and initial findings reported back to us by the week ending 13 August, if possible. You may consider this unrealistic, so can you please advise your earliest expected completion date and the date of any intermediate findings<sup>280</sup>.

The survey was in many ways misdirected. A local environmental group wrote to the GDC that:

We are concerned the Council may be entering into this with undue haste. The immediate wastewater issue is the Engineering and Works' application to discharge milliscreened municipal wastewater into the water of Poverty Bay. The survey relates more to the Council's medium term strategy of upgrading the city's wastewater reticulation, treatment and disposal system<sup>281</sup>.

There was potential for surveyed residents to misunderstand the nature of the consent. Many could have failed to object to the short-term application because of fear of rates increases in the medium-term.

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<sup>278</sup>“Statement of evidence by Jane Smith.” – Medical Officer of Health, Gisborne Health District, November 1993 (Submissions on CP92001-93011).

<sup>279</sup>“Gisborne City sewerage study.” – B.I. Apperley, Engineering and Works, GDC, to McDermott Miller Group Ltd., 6.7.1993 (GCC 01-284-01).

<sup>280</sup>*Ibid.*

<sup>281</sup>J. Kape, Chair, Tairāwhiti Branch, Maruia Society, to Manager, Engineering and Works, GDC, 20.5.1993 (GCC 01-330-04).

In the end, the survey – a 15 minute exchange with only 600 residents – was not completed until *after* the consent hearings and the GDC's knowledge of public support for its strategy was inadequate. Because of the context-insensitive method of gathering information through a questionnaire, the results should not be trusted. The survey eventually confirmed GDC's claim that overflows to property were the priority for Gisborne ratepayers<sup>282</sup>. However, it is interesting to note that 39% of residents who were surveyed believed that discharging sewage into Poverty Bay should be terminated<sup>283</sup>. In other words, Maori were not alone in their claim that sewage should be disposed of to land.

Another strategy for public consultation that was initiated far too late was a working party on wastewater treatment and disposal. This was established in March of 1993 which was, again, well after the submission of the application. Maori were more directly involved in this consultative strategy, with representatives from TRO-TAK, the Awapuni owners, the Tairawhiti division of the Maori Council and Te Runanga o Paikea all involved<sup>284</sup>. It is important to recognise, however, that this did not necessarily represent consultation with local iwi. The working party also comprised environmental groups, government departments, tourist and other business interests as well as public health agencies<sup>285</sup>. There was, therefore, potential for the views of local iwi to be considerably at odds with the outcomes of working party meetings and the working party could never have been considered part of a consultative process with iwi.

To accompany the working party, there had been five hui at local marae during four days in September of 1993<sup>286</sup>. Local iwi representatives were grateful for the opportunity to have the consents process and the problems of sewage disposal explained to them<sup>287</sup>. However, the way in which iwi reported the outcome of the hui was entirely different to the reporting of Engineering and Works. Iwi contended that the hui had led to a unanimous call for the eradication of the sewage outfall and a concomitant demand for land-based disposal<sup>288</sup>. On the other hand, according to Engineering and Works' interpretation, the outcomes of these hearings were that:

"The responses to the GDC presentation were:

(a) *Cultural*: The discharge is culturally unacceptable. The metaphysical aspect is not being seen to be given due weight. Land disposal is required but there was some recognition that this could not be implemented quickly.

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<sup>282</sup>"Gisborne City wastewater system. Progress report." – B.I. Apperley and W.J. Turner, Engineering and Works, GDC, to CEO, GDC, 11.2.1994 (GCC 01-284-01).

<sup>283</sup>"Topline findings for Gisborne sewerage study" – NRB, to GDC, 15.12.1993 (GCC 01-330-01).

<sup>284</sup>"Minutes of meeting of working party on wastewater treatment and disposal." – 26.3.1993 (GCC 01-330-04).

<sup>285</sup>Evidence of W.J. Turner for consents CP91001 and CP91002 – November 1993 (Submissions on CP92001-93011).

<sup>286</sup>"GDC outfall consent. Consultation second round." – 3.10.1993 (Submissions on CP92001-93011).

<sup>287</sup>"Consultation hui (27-30/10/93). GDC coastal permit application." – W.S Te Aho, General Manager, Te Runanga o Turanganui-a-Kiwa, to Mayor, GDC, 4.10.1993 (GCC 01-330-04).

<sup>288</sup>"Many issues at hui but filthy sea main worry." – Gisborne Herald, 9.3.1993 (GisLIB VF-PBEL).

GDC's response was that the desire for land disposal is recognised and supported, but it will take time and must follow a planned path to make the best use of very limited finances.

*(b) Fishing Grounds:* There was concern over the perceived loss of snapper and tarakihi fishing grounds off Muriwai.

Several meetings covered the reduction in or total loss of traditional shellfish beds. This was balanced by statements at other meetings that the shellfish were still available, but not being harvested because of concerns over contamination. There was some concern over wet fishing and crayfishing going on while shellfishing was not.

GDC answered by noting that the results of viral assays had shown no cause for concern over shellfish although contamination had been identified in samples from Paokahu Beach and the buoys close to the GDC outfall...

There was general acceptance that removing the discharge to land will not happen overnight. GDC's priorities (overflows before outfall) were generally accepted...

GDC was thanked for consulting, even if the people were not in full agreement with GDC's proposals<sup>289</sup>.

The Council's (re)interpretation of the results of these hui was overextended. For example, the above results do not reflect one GDC staff member's interpretation of events:

*Maori cultural values:* realism prevails. Kaumatua recognise that jobs and living standards must be balanced against the desire to remove the discharge from the Bay. The goal is no ocean discharge, the programme is driven by the ability to pay<sup>290</sup>.

Of particular note, it was suggested at the hearing in late 1993 that no discernible impact on shellfisheries could be attributed to the outfall<sup>291</sup>. This claim would directly contradict the evidence, above, that shellfish were 'not being harvested because of concerns over contamination.' The Council might have registered the concern of iwi that the 'metaphysical aspect is not being seen to be given due weight,' but it obviously did not understand that aspect. The implication was that even if shellfish were bacteriologically sound, they could still be considered spoiled by even a minimal interchange with sewage. In total, the concerns listed above were reasonably serious and were clearly stated. Yet, there is little evidence that they were addressed in Council thinking.

The more important point – one which relates to the survey of public opinion, the working party and the hui – is that none of these strategies represents meaningful

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<sup>289</sup>"GDC outfall consent. Consultation second round." – 3.10.1993 (Submissions on CP92001-93011).

<sup>290</sup>B.I. Apperley, Engineering and Works Department, GDC, to D. Glover, Manager of Projects, Forsyte Research, Auckland, 13.7.1993 (GCC 01-284-06).

<sup>291</sup>"Submissions of counsel for the Gisborne District Council." – G.R. Webb, 12.10.1993 (GDC 369-01).

involvement by iwi. At best they were superficial attempts to fulfil the process of consultation under the Act, but not necessarily the logic of that process, nor the established principles of consultation based on the Treaty of Waitangi. A 15 minute telephone exchange based on a pre-arranged list of stimulus-response questions hardly represents an opportunity for the public to engage in the resource management process. It certainly does not represent an opportunity for Maori to participate as special interests in that process. Likewise, the working party was not a specific opportunity for iwi to contribute meaningfully to the outcome. The hui may have fulfilled this requirement for specificity, but these were compressed into only three days – scarcely enough time for the consent applications to be explained. Most importantly, all these strategies occurred too late. For Maori to have meaningfully contributed to the decision-making, they would have had to have done so before Engineering and Works had evaluated alternatives and before it had established a favoured strategy. Given that this was not the case, one can only assume that Engineering and Works employed its consultative methods to appease or co-opt Maori interests, rather than incorporate them. If this was the case, the exercise was a failure – local iwi remained vociferous opponents of the outfall throughout the 1990s.

### **Evidence presented at the 1993 coastal permit hearings**

Given the unsatisfactory level and timing of consultation on the resource consents, it is not surprising that iwi were offended by the application. The application itself was grounded in the logic that the GDC could not afford to carry out works beyond a level which would bring the discharge waters up to an SD classification<sup>292</sup>. While iwi would have been dismayed by this logic, they were particularly dissatisfied by the Assessment of Environmental Effects (AEE) which accompanied the application. However, iwi were not alone in this regard. The manager of Environment and Planning admitted frankly to a Council legal advisor that the AEE was deficient under s 88 and the 4th Schedule of the RMA<sup>293</sup>. Consultants from the National Institute of Water and Atmosphere were asked to critique the AEE. They were scathing of the assessment, its underlying assumptions and, especially, its limited scope<sup>294</sup>. In the latter respect, they questioned why there had been such limited comment on the possible effects of the discharge on shellfish gathering areas and why the evaluation of the outfall's impact on aquatic life, in general, had been such a marginal concern. The consultants' report concluded that the Weddel Kaiti AEE –

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<sup>292</sup>"Resource consent application. Wastewater discharge to Poverty Bay." – W.J.Turner, GDC Report 93/424, 16.7.1993 (GDC 369-01).

<sup>293</sup>A.F. Armstrong, Manager, Environment and Planning, to A. Green, Brookfields, Barristers and Solicitors, 1993 (GCC 01-330-04). These sections of the RMA provide a template for the scope and content of an AEE.

<sup>294</sup>"Review of consent applications for two marine outfall discharges and one dredge spoil dumping into Poverty Bay." – D. Smith, D. Roper, and W. Vant, NIWA Consultancy Report GDC802, Hamilton, August, 1993 (GCC 01-330-04).

which was written for hearings that were simultaneous with those for the GDC outfall – was much better. That a private company could complete the statutory requirements of the RMA more successfully than a local authority suggests that the staff of the GDC had limited capabilities. These types of errors were particularly worrying. If the AEE concluded limited impact and the consent authority accepted the logic of the AEE, then it was unlikely that the GDC would be compelled to upgrade the disposal mechanism.

As has already been intimated, the first submission of the AEE was considered to be entirely inadequate and was rejected by Environment and Planning. One of the main points of concern was the first submission's lack of attention to cultural values. The second AEE was not much better in this regard. In a move which recited anew the failings of the *Preliminary classification*, Maori issues were reduced to a few paragraphs which were crudely admixed with other concerns under the title *Aesthetic, scenic and cultural values*. One of the paragraphs stated that:

The waters of the Bay are a significant source of food for both Maori and pakeha and are an integral part of the Maoritanga of the tribes of the region. Poverty Bay is also a place of national significance being the landfall of the Horouta canoe some 100 years before the Great Migration and a settlement of some of the descendants of the Takitimu canoe after the Great Migration<sup>295</sup>.

This would have been an acceptable statement to local iwi, but there was almost nothing else in the document which reflected their status as kaitiaki. Elsewhere in the document, Maori were mentioned as *one* group who collected seafood at Kaiti Beach, Midway Beach and Muriwai<sup>296</sup>, but their specific rights were not considered.

The weight of evidence in the AEE was of a technical nature and it paid little attention to the spiritual, cultural and resource concerns of local iwi. This is not to suggest, however, that the technical information was convincing. There was nothing novel about the evidence which was provided by Engineering and works. In terms of bacteriological effects, the AEE utilised arguments that had been common since the initial development of the outfall. For example:

- That the anti-clockwise current in Poverty Bay generally carries the discharge off-shore (p12).
- That bacteria levels decreased rapidly as one moved away from the outfall zone (p14).
- That the Waipaoa River is the major source of sediment and coliforms to enter the Bay (p17). (Interestingly, it was admitted elsewhere in the report that the outfall discharged an average of  $5,800 \times 10^{12}$  faecal coliforms per day while the Waipaoa River discharged only  $9.8 \times 10^{12}$  faecal coliforms per day.)

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<sup>295</sup>Wells 1993, p6.

<sup>296</sup>*Ibid.*, p20.

These claims had all been refuted at some time during the evolution of the outfall. While they may have applied in general terms, they did not *always* pertain to the situation at the shoreline. The author of the evidence presented in the EIA was evidently oblivious to the fact that a shellfishery can be spoiled for Maori at the perceptual level by reasonably infrequent pollution events.

In response to the GDC's application and AEE, local Maori submitted more objections than ever before in a resource management setting. The main thrust of the submission of TROTAK on behalf of local iwi was short but clear: "The proposed discharge fails to take into account the provisions contained in Sections 6(e), 7(a) and 8 of the Resource Management Act<sup>297</sup>." This statement was followed up with a request to decline the discharge permits and for the GDC to move towards land-based treatment. Elsewhere, TROTAK made a request for a more meaningful working committee – with more direct involvement from local iwi – to fully resolve the future direction for sewage disposal<sup>298</sup>. At the hearings themselves, the General Manager of TROTAK stated that the outfall was...

...an affront to the culture, traditions physical and cultural relationship that the iwi have with this taonga or prized possession, the Turanganui a Kiwa waters; and [the GDC application d]oes not take into account the principles of the Treaty of Waitangi<sup>299</sup>.

Other submissions and evidence presented to the hearings included "an emotional plea to stop the desecration of Poverty Bay" by the District Council of Maori Elders<sup>300</sup>. In this evidence, Peter Gordon said that the outfall represented...

...a serious violation of Maori values...Maori had traditional rights to the ocean and waterways for over 500 years and the free and uninterrupted rights to fish them. These rights had been grossly limited in the district by pollution...Today the three tribes of Poverty Bay, through their council of elders, say no more...to the defiling and polluting of the mauri of our waters.

The objections of local Maori were fully within the logic of ss 6e, 7a and 8 of the RMA. The question remained, however, as to whether these objections would be taken seriously.

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<sup>297</sup>Submission on resource consent applications CP91001 and CP9002 – W. Te Aho, General Manager, Te Runanga o Turanganui-a-Kiwa, 26.3.1993 (GCC 01-330-04).

<sup>298</sup>"Special hearings committee. GDC outfall." – I.K. Petty, GDC Report 93/643, 6.10.1993 (GDC 365-04).

<sup>299</sup>"Submissions by the General Manager of Te Runanga o Turanganui-a-Kiwa on behalf of the iwi known as Te Aitanga-a-Mahaki, Rongowhakaata and Ngai Tamanuhiri." – Evidence before the special hearings committee for RC CP92002, November 1993 (Submissions on CP92001-93011).

<sup>300</sup>Tairawhiti Conservation Review 21 – Department of Conservation, November 1993 (GDC 369-01).

The most important answer to this question was to come from the special committee which would hear the resource consents in November of 1993. Prior to that, the GDC's submission on its own consent pre-empted the claims of iwi:

[RMA Section] **6e**...relating to the cultural relationship of the Maori people is given special importance by the GDC. Extensive consultation has been carried with Maori groups in this area, both at the time the EIA was being prepared and, more recently, as the hearing drew closer...GDC has a Maori liaison committee and it is envisaged that will be an appropriate forum for further ongoing discussion...Realistically GDC says that while uncontaminated water may be an ideal the Maori people at the consultation meetings accepted that large amounts of money were needed to achieve that goal, and that was unaffordable at present.

[RMA Section] **7a**...While the effluent may be insensitive to cultural concerns the Council has and will continue to address that issue. That must be balanced against the every day sanitary requirements of the residents<sup>301</sup>.

At least some of these claims were far-fetched, especially those relating to 'extensive consultation'. Other claims therein set up an interesting test for the RMA. Clear lines had been drawn: on the one hand, iwi claimed a special status as Treaty partners; on the other, the GDC claimed that financial considerations should prevent them from having to upgrade the outfall.

The hearings themselves were fixated with the same issues that had dominated local hearings under the Water and Soil Conservation Act – 'reasonable mixing' at the SB/SD water interface, aesthetic concerns such as discoloration, levels of fat and grease, and what was an acceptable cost for the GDC to bear to solve these problems<sup>302</sup>. The first three issues are all given importance under s 107 of the RMA, so it is not surprising that they should have received attention in 1993. However, a strong case can be made that matters under ss 6e, 7a and 8 of the RMA should have received equal importance. This was not the case and iwi concerns tended to be diluted by the weight of evidence on other matters. It is not surprising, therefore, that the special committee tended to ignore iwi values in its findings on the hearing. In the regard of 'reasonable mixing', it decided that effluent from the outfall did transgress the SB/SD boundary in contravention of s 107 of the RMA<sup>303</sup>. It also found that the effluent plume was conspicuous outside of the area of reasonable mixing, which was also in contravention of s 107. However, the conclusion was that exceptional circumstances were responsible for these contraventions and that the

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<sup>301</sup>"Submissions of counsel for the Gisborne District Council." – G.R. Webb, 12.10.1993 (GDC 369-01).

<sup>302</sup>Evidence of W.J. Turner at the hearings on coastal permits 92001 and 92002 – November 1993 (Submissions on CP92001-93011).

<sup>303</sup>"In the matter of the Resource Management Act 1991 and in the matter of an application by Gisborne District Council for a resource consent (restricted coastal activity)." – Report and recommendation of the Special Committee constituted under Section 117 (5), to Minister of Conservation, November 1993 (GCC 01-330-04).

coastal permits should be issued for six years, subject to standard conditions for levels of grease, fat and suspended solids.

The period of six years was recommended so that there was time for further evaluation of alternatives and more time for consultation. The logic of the finding from the special committee was that the outfall represented "a major existing discharge and could not be terminated overnight<sup>304</sup>." Perhaps, this was a logical finding, but it is the type of finding that could only be considered logical if made *once* and once only. As will be shown later in this Section, the Council would effectively ignore the requirements set for it in the six year period and history would be repeated at the 1999 hearings. It is doubtful that local iwi expected or even desired the outfall to be terminated immediately: this would have been as impractical and insanitary for them as for all other Gisborne residents. The motivation of tangata whenua at the 1993 hearings was to obtain from the special committee a strong statement of direction for the GDC. Their objective was to receive an assurance, in the first instance, that the GDC would have to implement an upgrade programme on a specified timetable. In the second instance, iwi desired a stipulation that land-based disposal be the future mechanism of treatment. While the committee's finding did set a time requirement for the GDC, the progress date for each stage of implementation was left open (to abuse). Land-based disposal was not stipulated by the committee. Given that the 1993 hearings represented a simple 'test' for the RMA, as mentioned above, it can be concluded that the RMA failed this test. The concerns of iwi under Part II of the Act had not only been rejected, it seems apparent that they were not even considered in the findings of the committee. Moreover, the financial position of the Council appeared to be given more weight than either the environment, in general, or Maori environmental values, in particular.

### The 1994 appeal

Not long after the November 1993 decision of the special committee, TROTAK appealed the decision to the Planning Tribunal. The base premises of the appeal were that:

The Special Hearings Committee did not take into account the submissions made by the Appellant at the hearing...

The recommendation of the Special Hearings Committee is contrary to the purpose and principles of the Resource Management Act 1991, in particular Sections 5, 6(e), 7(a) and 8 of the Resource Management Act 1991.

The recommendation of the Special Hearings Committee is contrary to the purpose and principles of the Bill of Rights Act<sup>305</sup>.

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<sup>304</sup> "Decision gives consent to two bay discharges." – Gisborne Herald, p1, 4.12.1993 (GisMUS VF-Freezing Industry).

<sup>305</sup> "re: Te Runanga o Turanganui-a-Kiwa. Outfall appeal." – G.R. Webb, Nolan and Skeet, Barristers, Solicitors and Notary Public, Gisborne, to W.J. Turner, GDC, 25.2.1994 (GCC 01-330-04).

The seriousness of the first premise was lost on GDC staff members. The representative from Environment and Planning who processed the coastal permits suggested that, "It seems to all of us that the basis of the appeal is that they were not 'mentioned in dispatches'<sup>306</sup>." This view asserted that TROTAK's appeal was petty, but the real basis of the appeal was that there was no evidence that the Special Committee had incorporated iwi views into the decision making. With such statements written into the mandate of consent authorities as 'recognise and provide for' (s 6e), 'have particular regard to' (7a) and 'take into account' (s 8), it was not a petty nor unrealistic assumption that the special committee should have provided evidence of this. Indeed, it was the case that the special committee could not provide such evidence because it had not made an attempt to incorporate Treaty issues. In private, GDC staff admitted freely that the special committee had avoided these responsibilities in formulating its decision:

Because Arnold [Turner, the chair of the special committee] was busy with the National Coastal Policy Statement he glossed over the submissions. He did not address any particular group of people in detail. This is the grounds for the Runanga Appeal<sup>307</sup>.

This is a very serious omission and if it was an accurate reflection of the attention given to iwi concerns at the 1993 hearings, then there were more than sufficient grounds for appeal.

Initially, TROTAK considered limiting its appeal to only "the 'Maori' issue"<sup>308</sup>. This was not possible, however, because other appellants, with alternative objections, were likely to come forward. It appears that both within the consent authority processes and within the Planning Tribunal setting, it is difficult to give Treaty issues the *specific* hearing that they deserved. Rather, it is fully in keeping with the logic of the RMA to dilute the relevance of these concerns by setting them against recreational, biophysical and other concerns. The importance of this point is only made clear when one considers the underlying philosophy and purpose of TROTAK's appeal:

The resource that is affected by this application is the seawater of the Poverty Bay, the kaimoana of the tangata whenua of Poverty Bay; and the cultural, spiritual and physical relationship that the tangata whenua have with Poverty Bay and the waters<sup>309</sup>.

<sup>306</sup>"GDC sewage outfall." – I. Petty, Environment and Planning, GDC, to A. Turner, Chair of Special Committee to hear CP91002, 15.2.1994 (GDC CP91002 Appeals).

<sup>307</sup>Statement by I.K. Petty, "Water quality workshop: Regional Coastal Environmental Plan." – Minutes, 5.5.1994 (GCC 01-330-04).

<sup>308</sup>"re: Te Runanga o Turanganui-a-Kiwa. Outfall appeal." – G.R. Webb, Nolan and Skeet, Barristers, Solicitors and Notary Public, Gisborne, to W.J. Turner, GDC, 25.2.1994 (GCC 01-330-04).

<sup>309</sup>"Note of appeal or inquiry under Section 121 of the Resource Management Act 1991." – W. Te Aho, Te Runanga o Turanganui-a-Kiwa, to Registrar, Planning Tribunal, 25.1.1994 (GCC 01-330-04).

The 'cultural, spiritual and physical relationship' of local iwi to the water/fishery resource is inherently *specific* to iwi. It is, therefore, relatively easy to sideline such relationships in resource management procedures if those procedures are preoccupied with issues which are of concern to the *general/public*. One reading of RMA ss 6e, 7a and 8 was that they were attempts to grant iwi rights beyond general public objection, but the reality of the outcome does not reflect this intent. Another important point revealed in the quotation, above, was that local Maori were not solely interested in the resource *per se*. Rather, they sought protection of both the resource *and* their cultural relationship with that resource. The bacteriological implications of the submarine sewerage outfall may not have been significant enough to impact upon the strictly instrumental notion of the *safety* of consuming Poverty Bay shellfish. Nonetheless, TROTAK's appeal was significant in the second respect: that the outfall impacted on the cultural relationship of iwi to Poverty Bay and of iwi to the resources therein. The RMA's effects-based orientation<sup>310</sup> means that it is biased towards the measurable: it might be useful for protecting the measurable concerns of consumption safety, but it is unlikely to protect spiritual bonds to particular resource spaces. These bonds are beyond measurement.

The GDC's attitude to the appeal revealed that it did not take Treaty issues seriously. The Council quickly moved to discredit the concerns of TROTAK saying that it "denies each and every allegation contained therein and further says the weight of evidence presented to the committee does not support the grounds set out therein<sup>311</sup>." The manager of Engineering and Works believed that the appeal was unlikely to succeed and almost disregarded entirely its significance<sup>312</sup>. This was an odd approach because the hearing would have been *de novo*, meaning that the GDC would have to start afresh and satisfy the Planning Tribunal that coastal permits should have been issued<sup>313</sup>. By mid-1994, it appears that the GDC began to recognise the threat of the appeal and it began to negotiate with iwi in an attempt to appease local Maori and have the appeal terminated.

Eventually, these private negotiations between TROTAK and the GDC led to the appeal being terminated and a coastal permit was issued by the Minister of Conser-

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<sup>310</sup>A useful explanation is provided by Milne 1992, p34: "A key feature of the legal regime established by the RM Act is the focus placed upon the effects of activities rather than upon the activities themselves. Particular activities...are not treated differently from any other activities...As a corollary, all the environmental effects of undertaking an activity should be assessed and, as far as possible, borne by the developer ('internalised')." The Act assumes that all environmental effects are measurable but biophysical impacts are more likely to be measured and, therefore, given priority than the cultural impacts of environmental change.

<sup>311</sup>"Reply to notice of inquiry under Section 121 of the Resource Management Act 1991." – G.R. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, on behalf of GDC, to Registrar, Planning Tribunal, 21.2.1994 (GCC 01-330-04).

<sup>312</sup>"GDC submarine outfall." – W.J. Turner, Manager, Engineering and Works, GDC, to N. West, District Urban Engineer, GDC, 20.12.1993 (GCC 01-330-04).

<sup>313</sup>"Outfall appeal." – G. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, to I.K. Petty, GDC, 8.11.1994 (GDC CP91002 Appeals).

vation at the end of 1996<sup>314</sup>. This took place because during November of 1994, the appeal was withdrawn by consent of all parties<sup>315</sup>. In a legal declaration about this agreement it was stated that:

THE position is that the parties are agreed that the Appeal may be disposed of provided an appropriate process of consultation is established as between the Runanga and the Council in respect of the new method of effluent disposal which must be adopted at the expiry of the water right subject of this appeal<sup>316</sup>.

The consultation process that had been agreed upon was two-fold: first, a representative of the Runanga was to participate in the project team which was developing an alternative list of disposal mechanisms; second, "key 'trigger points' in the project's critical path will be identified at which points full consultation hui will be held with tangata whenua<sup>317</sup>." These trigger points included such times as when all feasibility reports were to hand and prior to the point when the GDC decided its preferred option. The agreement also provided for iwi costs of participation to be paid for by the GDC<sup>318</sup>. More will be mentioned about the outcomes of this consultation process later in this Chapter. For now, it is useful to comment that at the very start TROTAK made it clear to the GDC that this was a very specific form of consultation and that it would not satisfy the requirements for broader consultation on future resource consents<sup>319</sup>. This notion that the two-fold consultation strategy was above and beyond the standard requirements for consultation would later be denied by the GDC.

## Interim developments

There were a number of other important developments which took place between the 1993 and 1999 hearings. The revelation that the special committee chair had glossed over iwi concerns at the coastal permit hearings was made in a meeting wherein there were a number of frank admissions by GDC staff. These provide a telling summary of the disorganised state of local politics in regard of water quality planning. While the main purpose of the meeting was to discuss progress on the Regional Coastal Environment Plan (RCEP) for the Gisborne District<sup>320</sup>, sewage

<sup>314</sup>Hon. S. Upton, Minister of Conservation, to W.J. Turner, Manager, Engineering and Works, GDC, 18.11.1996 (GDC CP91002 Appeals).

<sup>315</sup>Decision No. W.157/95, *Te Runanga o Turanganui-a-Kiwa v GDC for Appeal No. 28/94* (GDC 365-04).

<sup>316</sup>"Consent memorandum as to adjournment of fixture." – *Te Runanga o Turanganui-a-Kiwa and GDC*, signed 25.11.1994 (GDC 365-04).

<sup>317</sup>"Gisborne District Council. Outfall appeal." – G.R. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, to: Tunncliffe Walters Williams, Solicitors, Auckland, 25.11.1994 (GDC 365-04).

<sup>318</sup>W.J. Turner, Engineering and Works, GDC, to Tunncliffe Walters and Williams, Barristers and Solicitors, Auckland, 24.11.1994 (GDC CP91002 Appeals).

<sup>319</sup>"Planning Tribunal appeal." – W.J. Turner, Engineering and Works, GDC, to G. Webb, Nolan and Skeet, Barristers and Solicitors, Gisborne, 24.11.1994 (GDC CP91002 Appeals).

<sup>320</sup>"Water quality workshop: Regional Coastal Environmental Plan." – Minutes, 5.5.1994 (GCC 01-330-04).

disposal was a significant item on the agenda and the coastal plan would have had a significant bearing on sewage disposal strategies for some years to come. Some notable excerpts from the minutes of this meeting include:

*In the respect of the RCEP:* "We have not had the consultation with the tangata whenua and the community in terms of 5.1.2 [New Zealand Coastal Policy Statement]."

*With regard to a policy to implement a new treatment option within the six year time-frame allotted by the special committee:* "...I am not sure in the case of Engineering's timetable whether Council adopted [a strategy for the outfall] or just received the report." *And, in reply,* "What you are saying at the moment is that Council does not have a policy."

*To a request to:* "...examine and explain why you didn't adopt the option of phasing out the [submarine sewerage outfall]," *a reply that the relevant staff* "Need a draft of the options considered and your reasons for and against adopting them..."

Respectively, these three excerpts confirm that: the Council was not following mandatory process of consultation; the GDC had not considered options nor adopted a strategy for sewage disposal in the first six months of the six year period of the consent; and the local authority had not adequately considered alternatives before the 1993 hearings. Therefore, there was no justification for its steadfast views about phasing out the outfall.

If it had been satisfactorily constructed, the establishment of the RCEP could have pushed the GDC further towards alternative sewage disposal mechanisms. For example, the water standards set in the Poverty Bay classification could have been elevated under the RCEP, requiring the GDC to seek a much higher level of treatment at the next round of consents. It is very obvious, however, that Environment and Planning did not want to force the issue with respect to the outfall. It eventually outlined a "non-committal approach" which was "likely to be controversial"<sup>321</sup>. As a result, the general approach of the plan was to set "generalised objectives and policies that state an aim to improve water quality without making any specific commitments"<sup>322</sup>. There were two reasons for this strategy. First, Environment and Planning had discovered that Engineering and Works was making no progress in developing alternative disposal and treatment options. If it had established a firm set of water quality standards, then the GDC would have found itself in the embarrassing situation of possessing unlawful facilities because of a delay in implementing a new treatment mechanism. Second, it had been discovered that the impact of the outfall was such that the GDC was not even maintaining the SD standard of the earlier classification – the standard to which it was committed under the 1993 conditions of the special committee:

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<sup>321</sup>re: Coastal water quality." – C. Turbott, Environment and Planning, GDC, to B Apperley, Engineering and Works, GDC, 17.5.1994 (GCC 01-284-01).

<sup>322</sup>*Ibid.*

After making further inquiries with our consents and monitoring staff, it has become abundantly clear that existing coastal waters often do not meet the existing water classification (established under the Water and Soil Conservation Act. e.g., monitoring suggests a 50% failure rate in some areas...)<sup>323</sup>.

The Council would have been liable to public prosecution if it had set water standards for bathing along Waikanae and Midway Beaches only to find that it could not meet that level<sup>324</sup>. Therefore, the GDC simply avoided setting meaningful and enforceable standards, making a mockery of the statutory process for coastal planning. This almost certainly would not have occurred in any situation other than a unitary authority. Elsewhere, coastal plan authors – who would normally reside in a regional council – would not have to fear their own council being prosecuted if they carried out their tasks satisfactorily.

What appears to be obvious from these debates was that the condition of the outfall was determining the development of important provisions within the RCEP. There is no doubt that this situation reversed the logic of the RMA process for establishing coastal plans. More importantly, coastal plans are not supposed to be inconsistent with the New Zealand National Coastal Policy Statement. This latter statement includes many provisions to incorporate Maori into the environmental decision-making on the coastal zone. The Gisborne example suggests that it is relatively easy for councils to avoid the logic of these relationships between plans and policy statements. In fact, the GDC used the development of the RCEP as an excuse to delay progressing the research on a new disposal mechanism<sup>325</sup>. It claimed that previous consent conditions had not taken into account the need to create a coastal plan and, because the coastal plan had to come first, it believed that there was no point advancing a strategy for the outfall before the Plan's completion.

This excuse for delaying the timetable for development of a new disposal strategy was only one of many. In the first few years after the 1993 consent hearings, the GDC rapidly turned around a requirement to find a new treatment mechanism into a belief that at-source treatment could meet all of its responsibilities. Useful progress was made towards forcing industry to treat its own effluent<sup>326</sup>, and trade waste by-laws were implemented in 1995<sup>327</sup>. In addition, research was conducted to confirm that a standard of water quality which was suitable for bathing at local beaches and shellfish collection at Kaiti and Browns Beach could indeed be obtained<sup>328</sup>. However, these improvements were only part of what the GDC should

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<sup>323</sup>C. Turbott, Coastal Regional Planner, GDC, to A. Green, Brookfields, Auckland, 7.3.1994 (GDC 365-03).

<sup>324</sup>"Classification of coastal waters" – A. Green, Brookfields, to CEO, GDC, 14.3.1994 (GDC 365-03); "re. Coastal water quality." – C. Turbott, GDC, to B. Apperley, J. Wells, P. Dawson, I. Petty, P. Burrows, D. Mountfort, GDC, 28.3.1994 (GDC 365-03)

<sup>325</sup>"Resource consent application. Wastewater discharge to Poverty Bay." – W.J. Turner, GDC Report 93/424, 16.7.1993 (GDC 369-01).

<sup>326</sup>"Trade waste bylaws. Progress with on-site treatment etc." – B. Apperley, District Design Engineer, GDC, to Manager, Montana Wines Limited, Gisborne, 29.4.1994 (GCC 01-284-03).

<sup>327</sup>Wells 1995.

have been accomplishing in this time. Generally, there was only limited evidence of a concerted attempt to develop a preferred alternative arrangement for sewage disposal. Rather, Engineering and Works staff devoted themselves to addressing the priorities that they had set for themselves in the early 1990s. In particular, the Council was to spend what money it had on addressing deficiencies in the reticulation scheme. This deprioritising of the search for alternative sewage disposal mechanisms was a conscious choice:

I understand the desire to improve wastewater management, but we need to be careful not to sink too much into it to the detriment of a few more pressing (in my view) priorities<sup>329</sup>.

In other words, the GDC simply defaulted on the logic of the findings of the 1993 special committee and, in turn, on the conditions of the coastal permits which had been finally granted in 1996.

There were only two reports of substance relating to alternative treatment and disposal options commissioned between 1993 and 1999<sup>330</sup>. In many respects, neither of these reports provided new insights into the state of technology, land requirements or relative expense of treatment options and the GDC did not really increase its existing knowledge base on alternatives throughout the 1990s<sup>331</sup>. The approach appeared to be one of contracting out the investigations, leaving the Engineering and Works staff to concentrate on Council 'priorities'. The methods which attracted the most attention included stabilisation ponds, activated sludge treatment and irrigation<sup>332</sup>. Perhaps significantly, systems which were limited entirely to land based treatment were given no more research priority than systems which might continue to utilise the outfall<sup>333</sup>. In other words, the research process gave no priority to Maori wastewater concerns. Overall, neither of the two studies could be said to have progressed beyond the pre-feasibility stage – there was no ability to provide the sort of detail that had been promised in 1993 for selection of a new system by 1996 and implementation by 1999.

On balance, the two studies were ignored by GDC staff in the years 1996-1999. The reason for this lack of attention was revealed in the 1999 resource consent hearings:

Consideration of the costs to date had led to a review of direction by Council. It considered that the costs associated with the development of full treat-

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<sup>328</sup>“re: Coastal water quality.” – C. Turbott, Environment and Planning, GDC, to B Apperley, Engineering and Works, GDC, 17.5.1994 (GCC 01-284-01).

<sup>329</sup>“re: Wastewater treatment. Opportunity costs.” – B. Apperley, District Design Engineer, GDC, to W.J. Turner, Manager, Engineering and Works, 24.3.1994 (GCC 01-284-01).

<sup>330</sup>Bruce Henderson Consultants Ltd. 1994; Freeman *et al* 1996.

<sup>331</sup>Many of the findings simply echoed the conclusions of Fitzmaurice and Partners Ltd. 1988.

<sup>332</sup>Opus 1999, p23.

<sup>333</sup>Freeman *et al* 1996.

ment would impose a significant economic burden on the community and produce hardship for ratepayers and industry alike<sup>334</sup>.

By abandoning the search for alternatives on account of the likely cost of those alternatives, the GDC was not following the logic of its 1993 consent conditions. Without this research into alternatives, the 1999 hearings were destined to be a repeat of the 1993 outcome.

There were other ways in which the Council ignored the six year time-frame for deriving a satisfactory solution. Perhaps the most important of these was its lack of water quality monitoring during the 1990s. At the 1993 consent hearings the GDC admitted that insufficient resources had been targeted towards monitoring in the time since the establishment of the classification of Poverty Bay and coastal waters<sup>335</sup>. Soon after the 1993 consents, it was freely admitted that the "existing water quality database may not be sufficient to determine what are the reasonable standards for the coastal waters<sup>336</sup>." While this statement was made in respect of the RCEP, it also applied to the direction for the outfall. Without sufficient information about the existing impacts of the outfall, it would have been impossible to deliver a satisfactory alternative mechanism of disposal.

Where monitoring was completed in the 1990s, it was not completed satisfactorily. Particular problems included:

- *Misplaced objectives:* Monitoring of Poverty Bay had focused too much on the issue of transgression at the border between the SB and SD classified waters<sup>337</sup>. In other words, it focused on the immediate waters around the outfall and gave insufficient attention to the need to assess water quality in other parts of Poverty Bay. A GDC staff member confessed that "Not enough monitoring done at the end of the day. There is no alarm systems.<sup>338</sup>"
- *Eurocentric objectives:* Beyond assessing the SB-SD issue, the monitoring programme was targeted towards pollution of city-side bathing areas – principally the Waikanae and Midway Beaches. Ngai Tamanuhiri iwi have been concerned for a long time about the potential impact of the outfall on the Muriwai end of Poverty Bay, but little in the way of water quality monitoring has been carried out there.
- *Insufficient attention to monitoring of water quality in rivers:* It had been assumed by local authority staff for many years that local rivers contributed the major part of Poverty Bay pollution. Without an extensive monitoring programme established for those rivers, however, this was impossible to confirm with any certainty<sup>339</sup>. GDC

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<sup>334</sup>Opus 1999, p23.

<sup>335</sup>"Special hearings committee. Weddel-Kaiti coastal permits." – I.K. Petty, GDC Report 93/635, 6.10.1993 (GDC 365-04).

<sup>336</sup>"re: Coastal water quality." – C. Turbott, Environment and Planning, GDC, to B Apperley, Engineering and Works, GDC, 17.5.1994 (GCC 01-284-01).

<sup>337</sup>"Water quality workshop: Regional Coastal Environmental Plan." – Minutes, 5.5.1994 (GCC 01-330-04).

<sup>338</sup>*Ibid.*

<sup>339</sup>Egis 1999, pVII.

planners did not even know that other Council staff monitored the rivers. When one asked, "Who instigates that monitoring," the reply was that "We fill in the gaps... [for] recreational purposes but the gaps are quite big<sup>340</sup>." A particular problem in this regard was that where rivers were monitored for levels of faecal coliforms, they were not monitored at the same time as the Bay. Sufficient information about the impact of rivers had not even been obtained by the 1999 consents<sup>341</sup>.

- *Outdated standards:* The local authority had always used monitoring techniques that reported results in terms of faecal coliforms per 100ml. Faecal coliforms are only indicative of water safety; they in no ways assess directly the risk of, for example, eating shellfish<sup>342</sup>. From the mid-1980s, most local authorities altered their monitoring programmes towards the more direct measure of enterococci per 100ml. It is interesting to note that bathing beaches near Gisborne City were more frequently above the accepted standard for bathing of 100 enterococci per 100ml, than they were above the old standard for bathing of 200 faecal coliforms per 100ml<sup>343</sup>.

In summary, the GDC had ignored the six year time-frame set down by the special committee in 1993. In went into the 1999 consent process thoroughly unprepared. On the one hand, it did not know enough about the existing impacts of the outfall. On the other, it had paid scant regard to the need to research alternative sewage disposal methods.

## The 1999 consents

The 1993 consent (which had only been finalised in 1996) was due to expire in November of 1999. Under both proposed and transitional regional plans the discharge was still considered a non-complying activity<sup>344</sup> and without a suitably researched alternative, the GDC was soon to require a new authorisation for the existing discharge parameters. At the end of June, 1999, Engineering and Works submitted to Environment and Planning a new application for coastal permits and other consents<sup>345</sup>. The term sought for the consents was a further seven years, up until December 31, 2006. This term was "required to allow Council sufficient time to complete investigations and consultation required for the wastewater treatment strategy<sup>346</sup>." It can, of course, be suggested that both these targets should have been satisfactorily completed in the period 1993 to 1999. Only one of the tasks that the GDC had set for itself in 1993 had been completed. Trade waste by-laws were in place, but elimination of sewage overflows to private property and waterways and the selection of sewage disposal system had not been completed. Indeed, other

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<sup>340</sup>"Water quality workshop: Regional Coastal Environmental Plan." – Minutes, 5.5.1994 (GCC 01-330-04).

<sup>341</sup>Hudson and Armstrong 1999, p23.

<sup>342</sup>I.K. Petty, Water Conservation Officer, GDC, to J. Kape, Maruia Society, Nelson, 11.2.1994 (GDC CP91002 Appeals).

<sup>343</sup>"Special hearings committee. GDC outfall." – I.K. Petty, GDC Report 93/643, 6.10.1993 (GDC 365-04).

<sup>344</sup>Paokahu Trust and others v GDC, 2000; Report of Commissioners 1999, p8.

<sup>345</sup>Opus 1999.

<sup>346</sup>Hudson and Armstrong 1999, p3. Resource consent applications were: CP199007, for the discharge; CP199008 for occupation of the coastal marine area; and CP199009 for a structure in the coastal marine area.

than the addition of six years to each of the dates, the Council's proposed timetable from 1999<sup>347</sup> was almost identical to the timetable it had published in 1993:

Proposed timetable...

Consultation and investigations completed; a preferred system selected...by December 31 2000

Consent publicly notified and submissions received; Target date March 31 2001

Hearings before independent Commissioners held, decision released; Target date June 30 2001

Appeals lodged and decided; Target date June 2002

Consent from Minister of Conservation (if applicable); Target date December 2002

Consent implemented, i.e. if different from existing then designed, built and commissioned; December 31 2006

This timetable was no more or less demanding than that from 1993 to 1999 and the consent authority must surely have doubted Engineering and Works' ability to keep to it. Essentially, the 1999 applications for resource consent were a simple request for an extension of the 1993 consent conditions.

Given the inadequacies of the AEE which accompanied the 1993 applications for resource consents, it would have been reasonable to expect the GDC to submit a far more extensive review of the outfall's impacts. Indeed, this was the case and in 1999 there were effectively two AEEs: one to assess general environmental effects<sup>348</sup> and one to assess health risks *vis-a-vis* water quality<sup>349</sup>. The combined outcome was a much more comprehensive review of existing and potential environmental effects. However, it could be argued that the assessments were no better than the 1993 AEE in the regard of accounting for Treaty issues. One of the principal clauses from the health risk assessment which related to Maori concerns stated that:

...concerns have been raised about the appropriateness and acceptability of this form of sewage disposal by a number of interested parties, including Tangata Whenua groups, public health agencies, environmental groups, and members of the general public<sup>350</sup>.

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<sup>347</sup>Opus 1999, p33.

<sup>348</sup>Opus 1999. This was the 'official' assessment to meet the statutory obligations of the Council under s 88 of the RMA. Egis 1999 was non-statutory document, but nevertheless provided important information to support Engineering and Works' application.

<sup>349</sup>Egis 1999.

<sup>350</sup>*Ibid*, p2.

Even in this statement, Maori concerns are forced together with those of the general public and there is no suggestion that Maori should be given specific attention in the remainder of the AEE. Indeed, it was admitted in the assessment that it focused on “risks to humans involved in primary contact recreation (swimmers, surfers, shellfish gatherers)<sup>351</sup>.”

Despite the lack of attention to Maori issues, the health risk assessment did provide a much more strenuous examination of the risks associated with the outfall than ever before. Like other reports, it claimed that the ‘average’ impact of the outfall on water quality was within accepted standards<sup>352</sup>. However, it also admitted that there were, perhaps, too many occasions when the outfall exceeded the standards that had been set for it and that high “levels of contaminations may exceed beyond the ‘boundary’ between SB and SD waters<sup>353</sup>. Therefore, in terms of standards for bathing, the outfall was considered satisfactory during most times of the year but it was believed that some upgrading of the treatment facilities should be implemented to remove entirely the risk of beach pollution in abnormal weather patterns.

Of more importance to iwi, there were several findings which related to the safety of gathering shellfish. The more official of the two AEE included some of the first admissions that the outfall affects the safety of shellfish consumption:

Pipi monitoring at Midway Beach [during] the period 30.09.97 to 20.4.99 found samples containing levels of faecal coliform exceeding Ministry of Health criteria on 8 occasions. As a consequence warning signs were placed at Midway Beach indicating to the public that the shellfish may be unsafe to eat<sup>354</sup>.

Later in the report these tests were further qualified:

Compliance: eight out of sixteen samples failed to meet the Ministry of Health criteria due to high or very high levels of faecal coliforms. The majority of these results were not related to rainfall as Gisborne experienced a relatively dry summer period<sup>355</sup>.

Because the tests did not correlate with rainfall events, the traditional excuse that the rivers were responsible for this type of pollution was not applicable. These results were essentially the first admissions by the GDC or its consultants that the outfall does affect the wisdom of consuming shellfish in Poverty Bay.

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<sup>351</sup>Egis 1999, pV.

<sup>352</sup>*Ibid.*, pVI.

<sup>353</sup>*Ibid.*, pVI.

<sup>354</sup>Opus 1999, p30; See also: “Pipi still not safe to eat.” – Gisborne Herald, p1, 16.1.1998 (GisMUS VF-Cultural Topics).

<sup>355</sup>Opus 1999, Appendix 4.

The health risk assessment also commented upon the safety of consuming local shellfish. For example:

...the limited shellfish data presented for this assessment indicates that shellfish collected from popular beaches are unlikely to cause infections from viruses such as hepatitis a and enterovirus. Enteroviruses have been detected in shellfish at locations close to the outfall (i.e. Tokomaru Buoy and Te Moana Buoy), but shellfish from these locations are not likely to be collected for human consumption and thus pose no significant risk to human health<sup>356</sup>.

Outwardly, this appears to be an endorsement of the outfall, but it is one qualified by an admission of insufficient data. There are several other places within the report where the authors are cautious about the impacts of the outfall on shellfisheries. In relation to Kaiti Beach, for example, it was stated that the "real risk can only be assessed in conjunction with the shellfish quality data from this location which was not available for this assessment<sup>357</sup>." Generally, the health risk assessment was hampered by the lack of water quality monitoring that had occurred in the Bay. It is simply not possible to evaluate the full effect of the outfall with the data which have thus far been published. Yet, the assessment determined that local rivers, especially the Turanganui, were to blame for aberrant levels of pollution associated with shellfisheries<sup>358</sup>. Given the lack of a suitable database, this must surely have been a speculative assumption rather than a statement of verifiable fact.

The more general and official of the AEEs commenced with an explanation of the GDC's desire for an extended period for investigation and consultation:

Tangata whenua, the wider community and Council are jointly developing a long term, system wide, strategy for wastewater management from households and businesses through to end use and disposal...Time is required to allow the strategy consultation and consensus process to be completed and any upgrades to be funded, designed, built and commissioned...The term sought for the consent is for a further seven years. This term is requested to allow sufficient time for Council to complete the investigations and consultation required for its wastewater treatment strategy, obtain a new long term substantive consent, and to implement the strategy<sup>359</sup>.

No other explanation was provided in the AEE about why the Council should be given more time to complete investigations that had initially been promised years earlier. In some ways, the above quotation can be read as an attempt to apportion blame for the delay to local iwi: it was consultation with them, after all, that required another extension to the incumbent resource consent. This suggestion would be made several times throughout the 1999 consent and appeal hearings. Consultation on this issue would have required a considerable amount of time.

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<sup>356</sup>Egis 1999, pVIII.

<sup>357</sup>*Ibid.*, p41.

<sup>358</sup>*Ibid.*, p19.

<sup>359</sup>Opus 1999, p1.

However, the 1993-1999 time-frame should have been sufficient and iwi were not to blame for the process beginning so late.

While this particular AEE was a significant improvement over its equivalent in 1993, it too was relatively sparse on detail about the outfall's impacts on Maori values towards the water system. The assessment included many pages on water quality impacts relating to swimming, biological change and other variables. However, there were only two paragraphs under the heading *Cultural significance of the area*. Within these paragraphs it was stated that:

Tangata whenua place great importance on the 'preservation of mauri' in relation to the marine disposal of effluent, where mauri means literally 'life force', 'vitality' or 'essence' of the resource. The generally held view by Maori is that human effluent ought not to be directly mixed with waterways or sea because the sewage directly effects the ocean's mauri. Paptuanuku (or mother earth) is therefore required to purify/neutralise human waste prior to discharge... Consultation is continuing with Tangata Whenua on the technical and cultural conditions for that purification<sup>360</sup>.

In this and other statements throughout the assessment, the exact mechanism for how the GDC might comply with Maori aspirations is left unanswered – supposedly to be discovered in the next round of consultation. This approach meant that the AEE was generally vague about whether or not the GDC supported Maori demands for land-based disposal. Likewise, it was vague about the outcomes of consultation that had been carried out in the years before 1999. A list of Maori concerns appears on pages 25 and 26 of the AEE, but nowhere is there an analysis of whether the GDC agreed with these concerns nor how they could be resolved. This lack of an appropriate emphasis on how Maori views could be implemented in a wastewater strategy reflects the fact that s 6c, 7a and 8 received almost no attention in either of the assessments.

Environment and Planning also assessed the performance of the outfall in its review of the consent application<sup>361</sup>. The report of its officers accounted for breaches of almost all of the consent conditions. Although these types of breaches occurred only occasionally, taken as a whole they suggest that the outfall seldom complied with all its consent conditions at any one time. During the period 1995 to 1999, conditions for floatable oils and grease, total oil and grease, suspended solids and biochemical oxygen demand were all breached. In addition, tests to determine the efficiency of the milliscreens exceeded the zero limit in 36% of samples. While some of the conditions were breached only occasionally, others tolerance levels were exceeded on a regular basis. The total oil and grease requirements have been the parameters most often in breach of the consent requirements: concentration limits were exceeded in 59% of weekly samples. The conditions established in 1993

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<sup>360</sup>Opus 1999, p20.

<sup>361</sup>Hudson and Armstrong 1999.

and confirmed in the 1996 authorisation of consents were not demanding, but the GDC has obviously encountered regular difficulty in complying with them.

In summary, the combined weight of the Environment and Planning officers' report, the AEE and the health risk assessment did not condemn outright the environmental performance of the AEE. However, the three reports confirmed that as more becomes known about the outfall, the list of negative impacts grows more extensive. What sets the 1999 consent hearing apart from all other environmental management decisions that went before it was that the commissioners who heard the resource consent knew that the outfall was not functioning as initially assumed. By 1999, it was accepted that a submarine sewerage outfall had significant potential for detrimental environmental impacts.

Despite the fact that Treaty issues were overwhelmed by public health concerns in the AEE, local Maori also ensured that their concerns were clearly stated at the hearings. There is no doubt that Treaty issues were a more central concern in 1999 than they were in 1993. The commissioners who heard the resource consent listed the...

...principal reasons opposing the applications relate to the cultural concerns with such discharges to the sea being unacceptable to Maori; those cultural concerns being supported by provisions in the RMA itself and in the other relevant statutory documents; the consultation particularly with Maori not having been effectively carried out; health risks to recreational users; and, further progress needing to be made on the Council's evaluation and implementation of an alternative land based disposal system<sup>362</sup>.

This was a fair summary of the objections from TROTAK, Ngati Oneone, Paokahu Trust, Kopututea Trust, Awapuni Trust and a number of individual Maori<sup>363</sup>. Most of the Maori submissions were supportive of the Paokahu Trust objection which was submitted on behalf of tangata whenua. There was considerable overlap among the various iwi submissions.

One of the principal complaints of local Maori leading up to the consent hearings was that the GDC was not consulting properly on issues relating to the outfall. Oho Ake ("the awakening") – a group drawn from environmental and Maori interests – claimed through the local newspaper that the working party was being used as the only channel for information between the Council and Maori<sup>364</sup>. It is not surprising, therefore, that TROTAK was to include in its submission an objection that:

Council has failed to consult with iwi of Turanganui a Kiwa (namely Te Aitanga a Mahaki, Rongowhakaata and Ngai Tamanuhiri.) Consultation by

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<sup>362</sup>Report of Commissioners 1999, p6.

<sup>363</sup>Hudson and Armstrong 1999, p58. In total there were 39 submissions on the resource consent application.

<sup>364</sup>"Group wants say on sewage disposal options." – J. Gillies, Gisborne Herald, 23.12.1996 (GisLIB VF-PBEL).

way of participation in the Wastewater Working Party and the Tangata Whenua Caucus Group is not seen as sufficient in this case<sup>365</sup>.

Given the agreement which led to the termination of the appeal in 1994, this was a particularly serious claim. As stated previously, TROTAK had clearly stated to the GDC that its involvement on the working party was not to be seen as consultation for future resource consents. However, it is obvious that the GDC used the working party as its main form of consultation. There were a series of short hui leading up to the hearings in 1998 and 1999, but these were of a limited nature. A consultant had been hired to facilitate meetings between iwi and the GDC<sup>366</sup>, but was underemployed in the months leading up to the hearing.

The main thrust of TROTAK's submission was that the "discharge is abhorrent to Maori culturally<sup>367</sup>." This sentiment was echoed by Ngati Oneone which opposed the application because the discharge was "an affront to the hapu culturally, spiritually, emotionally and socially<sup>368</sup>." TROTAK also questioned why the application for consent had been submitted so close to the expiry date of the existing consent, the short period for submissions and how quickly the hearing had been scheduled. An invitation for submissions had been published in the local newspaper on the 4<sup>th</sup> of September 1999, with the hearings scheduled for late October 1999. Given the lack of consultation during the period 1993-1999, the time for the submissions does seem particularly short.

The seven year duration of the consent application was questioned by all Maori submitters. While they recognised that it was "impractical to 'turn the tap off'<sup>369</sup>", in the event that the consents were authorised, local iwi believed that it should not take the GDC seven years to implement a new strategy. Having seen the GDC waste much of the time devoted to investigation during the 1993-1999 consent period, they were concerned that the GDC would repeat this strategy. As a result, the Ngati Oneone submission called for the GDC to made accountable to a binding timetable with quarterly reviews to ensure compliance. Several Maori submissions also requested that the commissioners force the GDC to adopt land-based treatment. Submitters related their claims to ss 6e, 7a and 8 of the RMA and a general submission also suggested that the resource consent contravened the New Zealand Coastal Policy Statement, the Gisborne District Regional Policy Statement, and the Proposed Regional Coastal Environmental Plan<sup>370</sup>. Essentially, the 1999 consent

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<sup>365</sup>"Submissions by Te Runanga o Turanganui-a-Kiwa in relation to resource consents involving the discharge of wastewater into the Bay." – 4.10.1999 (Submissions on CP199007-9).

<sup>366</sup>"Council will broker agreement on outfall." – 29.4.1998 (GisMUS VF-Water Pollution).

<sup>367</sup>"Submissions by Te Runanga o Turanganui-a-Kiwa in relation to resource consents involving the discharge of wastewater into the Bay." – 4.10.1999 (Submissions on CP199007-9).

<sup>368</sup>"Submissions by Ngati Oneone hapu in relation to the following resource consents: discharge of municipal wastewater; occupation of land in the coastal marine area; a structure in the coastal marine area." – B. Tupara, October 1999 (Submissions on CP199007-9).

<sup>369</sup>Hudson and Armstrong 1999, p59.

provided another useful test for whether ss 6e, 7a and 8 provided meaningful protection of Maori interests.

In many respects, the officers' report prepared by Environment and Planning had been generally sympathetic to the concerns of iwi. Ultimately, however, it came to the 'realistic' conclusion that the consent had to be authorised because Engineering and Works had failed to find any other alternative<sup>371</sup>. This much may well have been predictable to local iwi. Nonetheless, they would have been disappointed that Environment and Planning was "satisfied that the consultation has been adequate in fulfilling the requirements of the RMA 1991<sup>372</sup>." The recommendation to grant the consent would have provided a relatively strong sense of legitimacy for the commissioners to do the same and, indeed, this was the case.

At times, the report of the commissioners condemned the inaction of the GDC during the period 1993-1999. With respect to consultation, the report suggested that:

The Commissioners express surprise that the Council has been unable to carry out consultation in an effective manner given particularly in relation to tangata whenua, the matters included in the RMA, in the relevant statutory documents and the very nature of the Gisborne locality which has strong associations with the Maori people and coastal planning issues.

The Commissioners are of the view that the Council needs to undertake a far more active consultative role if it is to be able to proceed on any sound basis with the development of its longer term strategy and its associated substantive wastewater process<sup>373</sup>.

Similar sentiments were stated about the failure to investigate and develop an alternative before 1999:

...submitters felt particularly aggrieved that the Council was now seeking a further similar period for similar reasons it had advanced in 1993 for seeking consent through to an end of 1999...the evidence to the Commissioners was somewhat 'light' on alternatives being considered by the Council...

The submitters felt they, along with the Commissioners, were being put in a most difficult position that there was no immediate or short term alternative to the current discharge arrangement such that a declining of the consents would not be realistic<sup>374</sup>.

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<sup>370</sup>"Submission on an application for resource consent under section 96 of the Resource Management Act." – Te Runanga o Turanganui a Kiwa, The Paokahu Trust, the Kopututea Trust, Awapuni Trust, 4.10.1999 (Submissions on CP199007-9).

<sup>371</sup>Hudson and Armstrong 1999, p67.

<sup>372</sup>*Ibid.*, p66.

<sup>373</sup>Report of Commissioners 1999, p9.

<sup>374</sup>*Ibid.*, p9.

In the end, the Commissioners were forced to accept that an immediate cessation in the use of the outfall would have been unacceptable for public health reasons.

Interestingly, the outfall did not pass the 'exceptional circumstances' test of RMA s 107(2)(a) at the 1999 hearing and the Commissioners agreed that the outfall was against the logic of the New Zealand Coastal Policy Statement, the Proposed Regional Coastal Environment Plan and the Regional Policy Statement. The commissioners, however, allowed the outfall on the basis of s 107(2)(b) – that the discharge was of a temporary nature. Consequently, they reduced the period of consent to four years and concluded that this:

...is not to say the Commissioners support the continuance of the current situation but the evidence is that if only allowed to continue on a restricted, temporary basis, in the future then steps can be taken towards the implementation of an alternative disposal system<sup>375</sup>.

Given the recent history of the outfall's management, this may well be wishful thinking. Moreover, while the decision of the Commissioners was realistic, it also made a mockery of RMA s 6e, 7a and 8. The following statements showed that the Commissioners accepted wholeheartedly all of the objections of local iwi and, yet, they still provided the GDC with the extension to the consent for the outfall:

This disposal of wastewater to the waters of Poverty Bay as currently carried out is clearly offensive and unacceptable to tangata whenua. Given their particular concerns and the related provisions in the RMA and the various statutory documents, direct actions need to be taken in the investigation and implementation of alternative means of wastewater disposal...

...in the decision of the Commissioners there is an acknowledgement that consultation with tangata whenua interests, and indeed non-maori interests, has not been effectively carried out to date. This is a matter which must be addressed with the initial initiative for that responsibility lying with the Council itself. The Commissioners expect the Council will take action accordingly.

Engineering and Works did not receive the seven years that it had requested, but again it had been rewarded for wasting time by being given more time to waste. The clear tactic of the GDC throughout the 1990s was to delay investigations of alternative mechanisms in such a way that the only possible outcome was an extension of the life of the existing outfall. That such simple delaying tactics could overcome the logic of RMA ss 6e, 7a and 8 suggests that these sections are not satisfactory for the protection of Maori environmental interests.

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<sup>375</sup>Report of Commissioners 1999, p13.

## Appeal on the 1999 decision

In February of 2000, local iwi appealed the decision to the Environment Court<sup>376</sup>. Once again, they reiterated ss 6e, 7a and 8 of the RMA and once again they clearly labelled the outfall a cultural affront to local Maori:

Granting consent...means that the respondent has not recognised and provided for, as a matter of national importance, the relationship of Maori with their waters, wahi tapu and other taonga as required by s.6(e) of the Act.

Granting consent...has resulted in a failure by the respondent to give particular regard to kaitiakitanga as required by s.7(a) of the Act.

Granting consent...has resulted in a failure by the respondents to take into account the principles of the Treaty of Waitangi, including but not limited to the principle of active protection<sup>377</sup>.

Apart from these statements, the main basis for appeal was that:

A shorter period of time for the consents granted/recommended for approval by the Minister of Conservation does not adequately direct the respondent to take action aimed at an alternative wastewater treatment and disposal method. The relevant condition (condition 16 of the Coastal Permit 199007) is advisory only and does little more than require a written report on progress<sup>378</sup>.

The relief sought by the tangata whenua appeal was to have the consents declined. Failing this, there was a request to limit the consent period to three years rather than four and that there "should be no ability for the applicant to apply for an extension of these consents<sup>379</sup>." It also demanded a more meaningful role for iwi in the investigation and choice of new alternatives for sewage disposal and treatment. The Environment Court rejected all of these demands for relief and confirmed the consents as they had been granted in 1999.

At present, iwi and the GDC are engaged in a process of mediation but the issue is all but deadlocked. While the GDC appears to be seriously evaluating alternatives during the present consent period, few of the alternatives that have been investigated involve the land-based treatment systems that iwi demand<sup>380</sup>. The advisor to TROTAK on this matter has summarised the pointless nature of the mediation process:

Unless there is a significant change in attitude by the GDC to include land based treatment and disposal in the next round of consent applications it would appear to be a somewhat fruitless exercise continuing with the media-

<sup>376</sup>Paokahu Trust and others v GDC, 2000.

<sup>377</sup>*Ibid.*, p4.

<sup>378</sup>*Ibid.*, p5.

<sup>379</sup>*Ibid.*, p7.

<sup>380</sup>G. Pavelka, Mediator appointed by GDC, 2.6.2000 (Material supplied by Ngai Tamanuhiri Whanui Trust).

tion process. There have been no assurances given that land based treatment will actually be advanced, indeed the timelines suggest that land based options may or may not be implemented at some time over the next decade. If 2013 onwards is the time frame within which this might occur this will mean that it will be some 20 years from the 1993 hearing at which these concerns were raised<sup>381</sup>.

The intention of the GDC is to apply for consents for either oxidation ponds or activated sludge treatment in 2001, with the new system implemented in 2006<sup>382</sup>. This, in itself, would require yet another extension through resource consents to the existing use of the outfall. Given that this direction is entirely antithetical to the desires of tangata whenua, it is not surprising that they view the mediation process as an attempt to co-opt their consent. It would not be surprising at the next round of consent hearings if the GDC claim that the mediation process fulfilled its obligations to consult, nor if iwi claim that there has been insufficient consultation. Consultation is, of course, an established principle of the Treaty of Waitangi. RMA s 8 was intended to render Treaty principles a focus of environmental management decisions. There is ample evidence from Gisborne, both in terms of consultation and other Treaty principles, that the provisions to protect Maori interests under the RMA are failing to assist Maori in this regard.

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<sup>381</sup>B.W. Turnpenny, Turnpenny Associates Ltd., Gisborne, to J. Campbell, Paokahu Trust, T. Tangihaere, Te Runanga o Turanganui-a-Kiwa, J. Ruru, Kopututea Trust, and P. Kapua, Walters Williams and Co., Auckland, 23.5.2000 (Material supplied by Ngai Tamanuhiri Whanui Trust).

<sup>382</sup>*Ibid.*

## 11.6 The outcomes of neglect

It was indicated at the very beginning of this Chapter that it would be impossible to account precisely for the impacts of the submarine sewerage outfall on Maori environmental values. The lack of monitoring of Poverty Bay waters is slowly being addressed. However, the historical paucity of such work means that it is difficult to say with certainty how serious the long-term impacts of the outfall's discharge will be nor what the spatial extent of those impacts has been. However, the very fact that this is true represents a significant failure of environmental legislation for Maori. While there has been many examples of *specific* failure to incorporate Maori within local systems of environmental management, and while this is the case both before and after the enactment of the Resource Management Act, it is the *general* failure of those systems which has impacted on Maori interests to the most significant degree. Government agencies of environmental protection and public health should have ensured that such activities as monitoring were carried out at the local level, but that has not been the case.

Despite the impossibility of determining impacts with any sense of assurance, there are some general comments which can legitimately be made. First, the overall impact of the outfall is likely to be lower than one might expect. Although a significant volume of effluent is discharged into Poverty Bay, the effect of this effluent is masked to some degree by the volume of sediment which is introduced into the Bay by the Waipaoa River. Fortunately, the predominant winds in the area *are* from the north-westerly quarter, so much of the effluent does move offshore. Second, it has to be remembered that there have been no cases of notified infectious diseases contracted by Gisborne residents through swimming or eating shellfish for a very long time in the area<sup>383</sup>.

These disclaimers only apply, however, in *average* conditions and, more importantly, local Maori do not tend to orient their cultural activities and preferences to western public health conceptions of 'average safety.' The hearings for outfall consents reveal that tangata whenua reject a simple conception of environmental impact as a loss of medical assurances about the consumption of shellfish. Part II of the Treaty of Waitangi supposedly guarantees the rangatiratanga of nga iwi Maori over fisheries that are important to them. In this sense, rangatiratanga implies a *relationship* between iwi and their resources. To adequately protect this relationship, the Crown will have to do more than protect Maori resources spaces up to some pre-specified conception of an 'average' level of consumption safety. To Maori, the relationship is broken when the spiritual bond is weakened through culturally inappropriate mixing of wastewater with natural water. Small or infrequent changes in water quality are sufficient to have a long-term perceptual impact on the desirability of a particular shellfishery. Adequate incorporation of Part II of the Treaty into resource man-

<sup>383</sup>“Re: Health issues arising from recreational or other activity in Poverty Bay.” – J. Smith, Medical Officer of Health, Gisborne, to W.J. Turner, Manager, Engineering and Works, GDC, 6.10.1993 (GCC 01-330-04).

agement law will require the acceptance of environmental values which might not be measurable. Despite the wording of RMA ss 6e and 7a, which appear to give considerable weight to Maori cultural values, the Gisborne case suggests that the present legislation does not afford sufficient regard to those values.

Table 11.2 – Averages lie: Faecal coliforms per 100ml<sup>a,b</sup>

Median for period 1990-1998						
Sample site	N	NE	NW	S	SE	SW
Overall	18	30	30	13	28	28
Median for the period November to February						
Sample site	N	NE	NW	S	SE	SW
1995-96	28	17	18	18	20	10
1996-97	30	970	15	10	15	25
1997-98	30	10	81	8	8	6
1998-99	9	8	6	8	11	2
Median for the period May to August						
Sample site	N	NE	NW	S	SE	SW
1995	445	210	410	370	265	470
1996	205	760	355	165	525	295
1997	80	90	105	40	65	85
1998	155	3063	395	395	754	310

- Source: Hudson and Armstrong 1999, p15.
- The median value for bathing waters should be no more than 200 faecal coliforms per 100ml (and, for shellfish consumption, no more than 100 faecal coliforms per 100ml).
- All sample sites lie outside the SD-SB boundary established by the classification of Poverty Bay and coastal waters, 1991. This boundary corresponds with the *expected* range of effluent before it is reasonably mixed with sea-water.

Abnormal weather conditions in Gisborne provide many examples of the infrequent departures from average conditions that are mentioned above. At times, for example, the mixing zone for raw effluent can exceed the SB-SD boundary by a significant degree, bringing bacteria dangerously close to the shoreline<sup>384</sup>. Results released in 1999 show that enterococci levels per 100ml are exceeded on many

occasions along Waikanae, Midway and Paokahu beaches<sup>385</sup>. While these occasions are, on 'average', infrequent enough to protect the beaches' status as bathing areas, the frequency is high enough to disrupt Maori environmental preferences.

Table 11.2, confirms that a typical 'average' value for pollution in the Bay masks significant temporal variation from the mean. As can be seen, the overall averages are well under the maximum of 200 faecal coliforms per 100ml for bathing areas. However, the seasonal variation is dramatic: while the averages for summer months are generally compliant, the averages for winter range to levels far in excess of acceptability. The GDC's response to this type of variation has been that few people swim in winter, when lower levels of sunlight mean that more bacteria survive beyond the SD-SB boundary. This only further highlights the cultural bias in local pollution discourses: 'culture' should not be reduced to recreation but, as has been shown in this Chapter, this is often the case in Gisborne. Maori are repugnant of such extremes of pollution, regardless of whether they occur in summer or winter. That such pollution occurs in winter months has an impact on the cultural decision to consume shellfish within the Bay, regardless of whether shellfish are officially 'safe' for consumption in summer.

Because of ineffective monitoring programmes, it can only be guessed as to what the long-term impacts of such winter values are for water quality in Poverty Bay. By the GDC's own admission there have been few studies of the impact of the outfall on aquatic life<sup>386</sup>, with the only major study being over ten years old<sup>387</sup>. While that study concluded that significant biological changes are only present in close proximity to the outfall, it also suggested that such impacts were observed up to 1600m from the terminus of the facility<sup>388</sup>. With up to 18 tonnes of solid matter being discharged through the outfall every day<sup>389</sup> the potential impact is significant. While this level of deposition is small in comparison to the impact of the sediments carried by the Waipaoa River, it is, nonetheless, deserving of attention. The lack of study on aquatic impacts reflects the cultural preoccupation with the potential impact on bathing. In turn, this has also led to a lack of attention to such other variables as changing levels of pH and the impact of the discharge via its Biochemical Oxygen Demand (BOD). It appears that the consent conditions for the outfall are sometimes exceeded in terms of both pH and BOD<sup>390</sup>. In any case, the conditions allow for a very high BOD with the result that some species in the Bay may gradu-

<sup>384</sup>"Statement of evidence by R. Fullerton." – 11.10.1993 (GCC 01-330-04).

<sup>385</sup>Hudson and Armstrong 1999, p8.

<sup>386</sup>Opus 1999, p31.

<sup>387</sup>Roper *et al.* 1989, p308.

<sup>388</sup>"Review of consent applications for two marine outfall discharges and one dredge spoil dumping into Poverty Bay." – D. Smith, D. Roper, and W. Vant, NIWA Consultancy Report GDC802, Hamilton, August 1993 (GCC 01-330-04).

<sup>389</sup>"Sewage pollution." – Letter to editor of Gisborne Herald, H.C. Williams, former City Engineer, 19.8.1987 (GHB CB).

<sup>390</sup>Hudson and Armstrong 1999, p25.

ally be starved of oxygen. In the case of all of the factors explored in this paragraph, the cumulative impact will only be known in the long-term.

As monitoring programmes are being improved, more details are emerging about the impact of the outfall. In the previous Section it was mentioned that the 1999 consent hearings witnessed the first full admission by GDC staff that pipi at Paokahu and Midway beaches were affected by pollution from the outfall. As has been shown, since the commissioning of the outfall there have been several explanations for pollution of pipi on these beaches:

- From 1965 to 1971 the view of the GCC was that any residual pollution of shellfish had to be related to the Pacific Street Abattoir and not to the submarine outfall.
- After the connection of the abattoir to the City sewer system, it was believed that shellfish pollution on Midway and Paokahu beaches was being caused by polluted waters of the Turanganui River as they spread along the coast.
- When data began to emerge confirming that pollution occurred at these beaches irrespective of the flood levels in the Turanganui, it was assumed that 'fatty froths' from the outfall might be responsible for the pollution. It was also assumed that milliscreening would solve this problem.
- In 1998 – well after the installation of milliscreens – a new data set proved that the submarine outfall was responsible for shellfish pollution at Midway Beach in all weather conditions.

This progression signals the need for concern about the wider impacts of the outfall. Local Maori are often portrayed as alarmist when they connect the outfall to pollution of shellfisheries that are not in close proximity to the outfall. Given the way in which similar connections had been discounted for Midway Beach, only to be confirmed when sufficient research had been completed, it may well be premature to discount the beliefs of tangata whenua in this regard. Exceedances of Ministry of Health standards for shellfish collection still occur at Kaiti Beach<sup>391</sup>, many years after the closure of the Weddel-Kaiti freezing works and not always in ways correlated with rainfall events and water volumes in the Turanganui River. It remains to be seen whether research will one day associate pollution at Kaiti to the submarine outfall.

Local iwi have attributed pollution of shellfisheries even further afield than Kaiti to the outfall. Ngai Tamanuhiri iwi have for a number of years opposed the outfall principally, though not exclusively, because of its potential impact on shellfisheries at Brown's Beach and within Wherowhero Lagoon. The Lagoon was recognised in the classification of Poverty Bay waters as an important shellfish gathering site and, as a result, it received a SA classification<sup>392</sup>. Often, however, the waters are not maintained up to this standard much to the dismay of tangata whenua:

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<sup>391</sup>Hudson and Armstrong 1999, p9.

<sup>392</sup>ECCB-RWB 1989, p22.

A woman representing the Te Kuri a Paoa community of Muriwai summed up the Maori view when she said 'no more tutae in our food basket'.

The Wherowhero Lagoon, where the people of this district traditionally collected their shellfish, was the only estuary on the East Coast between Whakakai near Wairoa and Opotiki, she said...Every second week now the Area Health Board and the Gisborne District Council were coming to test the water.

Whenever there had been rain the people were told not to collect shellfish and the children were getting hakihaki (scabs) from the water. The people had been told the pollution was from farm run-off but they did not believe this, suspecting it had more to do with the run-in from the sea<sup>393</sup>.

Run-off from farm properties into the creeks surrounding the Lagoon as well as pollution from the Waipaoa River are the most likely sources of contamination of the Lagoon<sup>394</sup>. This does not mean, however, that the outfall has no effect on the Lagoon and neighbouring beaches. Because of the inherent cultural bias towards bathing beaches in Poverty Bay monitoring programmes, insufficient research has been carried out into the sources of pollution at the Muriwai end of the Bay.

Indeed, if agricultural sources are to blame for pollution of the Wherowhero Lagoon, then it would be reasonable for the GDC to do something about this problem. Neither the proposed RCEP nor the Combined Regional Land and District Plan are particularly strong with respect to rules or policies which restrict agricultural run-off. When the GDC was asked to complete a survey entitled *Agricultural impacts on water quality*, a Council staff member replied in the following manner<sup>395</sup>:

Primary agriculture, '3' [on a scale of 1 to 10 with 10 representing 'very serious']...

Faecal contamination of surface water by livestock, '2' [on a scale of 1 to 5 with 5 representing 'very serious']...

Which uses of water are affected by this pollution...Maori values, '**don't know**'

This might suggest that the agricultural sources are not as important as the GDC frequently states to local Maori in its defence of the outfall. Alternatively, it could mean that the GDC views such pollution as being unimportant. The respondent went on to admit that the GDC employed only "minimum standards" in attempts to limit agricultural run-off.

<sup>393</sup>"Maori condemn sewage in 'foodbasket'." – M. Spence, Gisborne Herald, p1, 29.1.1991 (GisMUS VF-Local Govt. Facilities).

<sup>394</sup>"Evidence of Bevan Tumpenny." – Preliminary classification of Poverty Bay waters, 26.3.1990 (GDC 369-02a).

<sup>395</sup>GDC responses to "Agricultural impacts on water quality." – R.D. Elliot, MAF Policy, to CEO, GDC, 4.6.1991 (GDC 365-01).

Whatever the case, the discharge of settled sewage from the town of Te Karaka into the Waipaoa River does not assist the preservation of water quality of that river<sup>396</sup>. While this discharge may represent a relatively minor addition in the context of the Waipaoa's significant volume<sup>397</sup>, it also represents a cultural affront to local iwi. One must remember that the phrase, "Ko Waipaoa te Awa" is a declaration of importance to tangata whenua. Maori downstream of Te Karaka were only informed of this discharge in 1999, revealing the limited amount of consultation that has been completed for sewage disposal practices in the District. It may be many years before there is any certainty about the source of pollution at Muriwai.

Figure 11.3 – Contamination notice at Wherowhero Lagoon.

Cause of contamination: agricultural runoff (?), the Waipaoa River (?) or the submarine sewerage outfall (?)



In the meantime, the Tairāwhiti Health Board regularly posts notices such as the one depicted in Figure 11.3 when it closes the Lagoon to pipi gatherers because of faecal contamination. This picture adequately summarises one of the principal themes of this Chapter: uncertainty. That uncertainty about the impacts of the outfall remains in 2000 reflects the level of negligence in local environmental management. This negligence has been as much a national problem as it has been a local one with such key agencies of the Crown as the PAC and the LALB taking considerable responsibility for the construction of the outfall in 1965. None of the three phases of legislation outlined at the beginning of this Chapter have had a significant positive impact.

<sup>396</sup>“Monthly report: February 1993. Water Right No. 82035. Compliance monitoring: Discharge of treated sewage effluent from Te Karaka sewage treatment pond to the Waipaoa River.” – 25.2.1993 (GDC 365-04).

<sup>397</sup>Egis 1999, p19.



A sign prohibiting access to the Kurtz farm.

11-22-20

11-22-20

11-22-20

11-22-20

11-22-20

11-22-20

## Conclusion: ecological imperialism

The picture on the previous page conveys two issues which have not been given full attention in this report, because they are not to be found in archival sources or other forms of published record. The first issue relates to the Cartesian logic of colonisation. Settler society imposed straight lines on the landscape, the outcomes of which were twofold. In the first instance, the freedom of tangata whenua to traverse the landscape in search of kai was greatly diminished through the imposition of surveyed boundaries. Fences, stopbanks, arbitrary lines between 'critical headwaters' and 'pastoral foreland', drainage channels, surveyor's determinations of high water mark and all other point-to-point demarcations represent the silent ecological lore of the coloniser. On the basis of historical records, it is impossible to account for the cultural offence of the European doctrine of *trespass*. However, the inability of local iwi to access their favoured habitats for kai or their ancestral urupa is a resource issue of importance. In the case which is depicted in the photo-

graph, it has become difficult for Ngai Tamanuhiri to access ancestral burial sites on Te Kuri a Paoa. Similar examples include: the difficulty of obtaining access to the Waipaoa for fishing after the taking of land between stopbanks; the way in which port reclamations have become private space; and the physical and legal obstacles to attempts to walk along city rivers and creeks. In the second instance, the imposition of these lines on the landscape works against the logic of nature. The Gisborne to Napier railway severed the connection between tributary streams and the Wherowhero Lagoon. The boundaries of the Poverty Bay River District did not follow the physical borders of the Waipaoa Catchment, so Ngai Tamanuhiri could not benefit from the early work of flood control. The stopbanks of the Waipaoa River flood control scheme prevented the drainage of hill slopes to the west of the river, leading to increased flooding on that side of the river.

The second issue of importance which is depicted in the photograph is the renaming of the landscape. While *Young Nick's head* will never come to replace *Te Kuri a Paoa* in the lexicon of local iwi, the name itself stands as a sad reminder of alterations to the environment. As was contended at the beginning of this report, 'Poverty Bay' was an imaginary concept from its first usage, but this does not limit the insult of the phrase. Moreover, the renaming of the landscape reflects the loss of rangatiratanga over the environment. Te Kuri a Paoa is no longer in Maori hands, while such unresolved resource management issues as the submarine sewerage outfall continue to suggest that local iwi have suffered a loss of mana in relation to the Bay. Turanganui-a-Kiwa has not yet become a Bay of poverty, but the destruction of Maori resources spaces in the Gisborne casebook area has been systematic and, at times, calculated.

Essentially, both the renaming of the landscape and its inscription with straight lines are indicative of the rights of property which are bestowed upon landowners under the European system of land management. The way in which resource management legislation protected property rights rather than Treaty rights has been a recurring theme of this report. In the case of the Waipaoa River flood control scheme, the motivation for substantial alterations to the environment was the protection of farmland. Farmers generally benefited from the work of the Poverty Bay Catchment Board. Soil conservation schemes in the headwaters of major rivers, water allocation plans for Te Arai River, and the flood protection scheme itself were all permitted under resource management legislation which was designed to preserve pastoral agriculture rather than the environment. Yet, this protection of property and farming was inconsistently applied. In the example of the acquisition of land for the Mangatu State Forest, agencies of environmental management accepted public opinion that Maori were 'bad farmers' and restricted accordingly the range of options for erosion control which were offered to Maori landowners. While pakeha farmers on comparable land were allowed to experiment with physical barriers to erosion and other forms of land management, Maori were left with no option but to give up their land.

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Property owners had relatively strong rights of objection under such legislation as the Town and Country Planning Act 1953 and 1977. On the other hand, there were no mechanisms to ensure that Maori were involved in resource decisions relating to their ancestral lands or to the despoilment of habitats which are important to them. Raupo swamps along Waikanae Creek were infilled on the basis of simple permissions granted by *neighbours* who were immediately adjacent to future landfills. While few Maori lived alongside the Waikanae Creek during the destruction of its wetlands, this did not mean that they had abandoned their attachment to the creek. After all, their ancestors had invested much time and effort in the construction, maintenance and defence of eel weirs along that waterway. The failure of the Town and Country Planning acts to offer anything more than a *general* right of objection represents a Crown failure to implement the logic of the Treaty of Waitangi.

The destruction of mudflats and wetlands along Waikanae Creek represents only one of many examples of ecological imperialism in the Gisborne casebook area. These examples range from the planting of *Spartina* grass in the Taruheru River, to the lowering of Tuaiti island, the reclamation of wave platforms on Kaiti Beach, and the drainage of the Awapuni Lagoon. Many of these transformations were the direct outcome of the Crown's assumption of ownership of foreshore areas. In particular, the way in which wetlands were predetermined as wastelands stands out as the single defining feature of the ecological history of the Gisborne casebook area. The Crown and its appointees can probably find legal refuge for these acts of ecological imperialism in such legislation as the Harbour Board Act 1950. However, the unbridled consumption and reconstruction of foreshore resources appeared to pay no heed to the Treaty of Waitangi rights of local Maori. The Crown may have been acting within its Treaty mandate to grant, for example, the Gisborne Harbour Board a significant tract of foreshore. However, it did not ensure that the needs of the Board were balanced against the rights of local Maori. As such, the Crown's divestiture of the foreshore equated with an act of irresponsibility.

The failure of the Crown to enact resource legislation which provided for levels of iwi participation beyond general rights of objection was also evident in the local outcomes of legislation which was intended to protect the water regime. The only grounds to object to the establishment of the submarine sewerage outfall in the Water Pollution Act 1953 were infrastructural and design considerations. There were no requirements in that Act, nor in its successor, the Water and Soil Conservation Act 1967 and amendments, to include Maori in the decision-making for a project which would affect their rangatiratanga relationship with customary fisheries. While the 1967 Act extended the general grounds for objection to cultural issues, 'culture' within the Act was so lacking in specificity that local overseers of the law were seen to reduce it to 'recreation'. These environmental laws failed to shift the agenda for local water pollution from a preoccupation with *bathting* beaches. The abject pollution of Kaiti Beach by the local freezing works was allowed to continue as long as the general population of Gisborne could feel safe about swimming at Waikanae Beach. In this regard, the classification of Poverty Bay

waters under the 1967 Act represents the ultimate failure of the Crown to take Maori environmental values seriously. Kaiti Beach was protected with a reasonably strong classification which was rendered nonsensical by its close proximity to the outfall for the freezing works; the City rivers were debased by classifications which in no way reflected their worth to local iwi as places to collect shellfish. Within proceedings under the Water and Soil Conservation Act 1967, local Maori values were balanced against either economic progress or perceived recreational needs and, in both cases, they almost always were relegated to secondary concerns.

Opportunities for fair and meaningful participation in environmental management were not, therefore, available to local Maori and, as a result, they were not granted the capacity to be kaitiaki over their natural taonga. Additionally, in situations where tangata whenua developed a niche for involvement in environmental decisions, influences which were external to the resource management process often limited the equity of this involvement. There was no chance for a fair result in either the decision to sell land for the Mangatu State Forest or in the planning decisions which led to the establishment of the Paokahu landfill. In both cases, the thinly veiled threat of public works takings lurked behind all proceedings. It is not an exaggeration to suggest that Maori no longer expect fair outcomes from the resource management process.

At present, there is a widely accepted myth that the Resource Management Act 1991 (RMA) has answered many of the legislative omissions of the Crown which have been identified in the conclusion to this report. The Act's statutory reference to Treaty principles, in conjunction with its recognition of kaitiakitanga and the non-property rights of Maori to ancestral lands, represent a significant advancement over the Town and Country Planning Act and the Water and Soil Conservation Act. As a result, during the 1990s local iwi have been involved in the resource management process as never before. Involvement of this kind, however, is meaningless – perhaps even exploitative – where it constantly fails to produce an outcome which is in keeping with the logic of the Treaty. Maori have been involved in a number of major resource decisions over the last decade, but the results confirm the lack of merit in the RMA. These major cases include:

- Resource consents and water permits for a poorly designed landfill which discharges toxic leachate into the surrounding environment. The landfill has exceeded its initial design parameters and has repeatedly transgressed conditions in a lease with Maori owners, as well as conditions of existing resource consents. **Result:** The first opportunity for iwi to use the mechanisms for protection of Maori interests under the RMA was forestalled by the Council's failure to write an assessment of environmental effects. The second such opportunity led only to minimal changes in the operation of the tip. The tip remains operational, however, and will continue to expand for a number of years.
- Resource consents and dumping permits for the disposal of harbour dredgings at sea (2 sets of consent hearings: 1993 and 1998). **Result:** Although attempts have been made to incorporate Maori concerns into the practice of marine disposal, no

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attempt has been made to pursue the land-based disposal options which local iwi have demanded.

- Discharge permits for the sewerage outfall associated with the Weddel-Kaiti freezing works. **Result:** Despite a classification of Kaiti wave platforms as suitable for shellfish gathering, the freezing works was permitted to discharge reasonably strong in close proximity to Kaiti Beach. This only ceased when the company became insolvent.
- Discharge permits for the City sewerage outfall – Two iterations of consents, each with costly, litigious appeals. **Result:** the City outfall remains operational and recently drafted proposals for an upgraded sewage treatment system singularly fail to incorporate tangata whenua desires for land-based disposal. Simple delaying tactics by the District Council defeated entirely the provisions for the protection of Maori interests under the Act.

In each of these cases, local iwi have carefully constructed their argument according to the principles of the Treaty of Waitangi. Given that the outcome has almost always been unsatisfactory, there can be no other conclusion than a failure of the Resource Management Act to adequately incorporate Maori rights. In several of these cases, there is also the suggestion of duplicitous tactics by the local authority. Treaty issues are national concerns; they require national-level monitoring, policing and implementation. It is negligent to assume that local level agents will implement the logic of the Treaty in the absence of a clear mandate and the possibility of central government coercion. The Waitangi Tribunal may need to pass judgement on the attempt of legislators to spatially devolve resource decision-making under the RMA. Local agents of environmental administration have repeatedly failed tangata whenua in the Gisborne casebook area. A stronger *national* mandate to consider Maori environmental values is required.

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