

BEFORE THE WAITANGI TRIBUNAL

WAI 475

**IN THE MATTER of the Treaty of Waitangi Act
1975**

AND

IN THE MATTER of the Whanau Mangakahia

EVIDENCE OF GARY WILLIAMS

1. My name is Gary Williams, and I work as a professional engineer specialising in the field of water and soil engineering. I hold the qualifications of Bachelor of Engineering, Bachelor of Science and Master of Commerce. I am a member of the Institution of Engineers New Zealand. Over the last 12 years I have provided an advisory and design service to a wide range of clients including many Regional and District councils, other engineering consultants, government departments, commercial firms and private individuals.
2. I have earlier undertaken two studies of coastal water bodies for the Waitangi Tribunal, one of Te Whanganui Lagoon/ Ahuriri Estuary near Napier, and one of Te Whanga Lagoon on Chatham Island. I have undertaken a study of estuaries on the east coast of the Coromandel Peninsular, following a commission from Charl Hirschfeld, on behalf of the claimants, in July 1999.
3. The investigations I undertook, and the findings of my study are recorded in my report, titled "East Coast Coromandel Peninsular Estuaries - Tairua Harbour (Wai 110), Whangapoua Harbour (Wai 475)." This is a report on the nature of the Tairua and Whangpoua Harbours, and the way in which they have changed since 1840.
4. A copy of this report is attached to my evidence. The report provides an outline of the nature of the large coastal water bodies along the east coast of the Coromandel

Peninsular, the historical activities that have had major impacts on these water bodies, and their sensitivities to current catchment land uses and urbanisation along the margins of the estuaries. It is a general report, and at the request of counsel I have attached the whole report

5. In presenting my evidence I will refer to this report, summarising the main points and highlighting the more relevant and significant findings by reading parts of the report
6. The report is separated into sections, starting with an Introduction, that outlines the purpose of the report, the investigations carried out and my qualifications, and gives a summary of the main findings (in paragraph 16). A general background is then given of the formation of coastal water bodies, and the variability of their natural character, in terms of both physical form and processes and ecological communities present This is followed by a brief description of the nature of the Coromandel estuaries as given by historical records, and the changes brought about over the last 150 to 200 years. Finally an overview is given of the present condition of the estuaries and the main issues in terms of impacts on the nature of the estuaries and their environmental health. The responses of the District and Regional councils is also touch on, with reference to their Plans under the Resource Management Act (1991).
7. As stated in the Conclusions to my report "While the general form of the estuaries has been largely unaltered, the detail of channel patterns, erosion and depositional processes, estuary material size and vegetational patterns have changed. The margins of the estuaries have been most grossly altered, with a nearly complete loss of the fringing wetlands of swamps and lagoons."
8. "The main threats to the estuary environment now arise from the continued clear felling of plantation forests, with much of these forests becoming ready for harvest, and the impacts of increasing numbers of people, both as permanent residents and summer visitors."

catchment vegetation included the Whangapoua estuary. More detailed investigations of sedimentation processes and the effects of catchment afforestation have been undertaken on the Whangamata and Wharekawa estuaries, in two separate studies. Some estuary sedimentation data is also available for the Tairua estuary in more general studies. Historical books on the Tairua and Whitianga areas give extensive historical background information on the estuaries and their catchments. No equivalent published information was obtained for the Whangapoua area. Some information on estuary ecology was available from studies for resource consents for marinas and subdivisions, such as at Whitianga.

- 5 Information on land uses and forest cover was obtained from NZMS series maps and the planning maps of the Thames Coromandel District Council (TCDC). Information on planning objectives and their implementation was also obtained from TCDC through their Strategic Plan (of 1997), Transitional District Plan (of 1994) and Proposed District Plan (of 1998). Information was obtained from TCDC Asset Management Plans (AMPs), on solid waste and sewage disposal, and these plans also provided information on past and expected future population trends. A summary of information available from Environment Waikato (EW), the Regional Council, on coastal environmental issues and impacts is given in the Coastal Resources section (7) of their recent (1999) State of the Environment report.
- 6 A search was made for old survey plans of the estuaries, using the computerised search facilities of Land Information New Zealand (LINZ) at their Hamilton office. These old plans could be particularly helpful as they would detail the estuary form, and were usually annotated with extensive comment about vegetation etc. Unfortunately the computer system is less helpful when searching for very old plans than the previous manual system. Very few relevant old plans were obtained, but this may be because of the approach taken to land purchase in the Coromandel, with block definition for purchase from Maori not being based on accurate survey plans.
- 7 The reports and data obtained make reference to some university theses, but no systematic search has been carried out of relevant theses.
- 8 In spite of some useful studies, such as those on estuary sedimentation trends, there is generally very little relevant information on the nature of the estuaries, and especially of their ecology. This is true of present conditions. Information on the nature of the estuaries last century is very meagre indeed.
- 9 This lack of information about the estuaries and their ecology is not unusual, on the contrary there is in general a lack of information about estuary ecology in New Zealand.
- 10 Field inspections of the Tairua and Whangapoua estuaries and surrounding catchment areas were carried out on 15 and 16 October 1999.

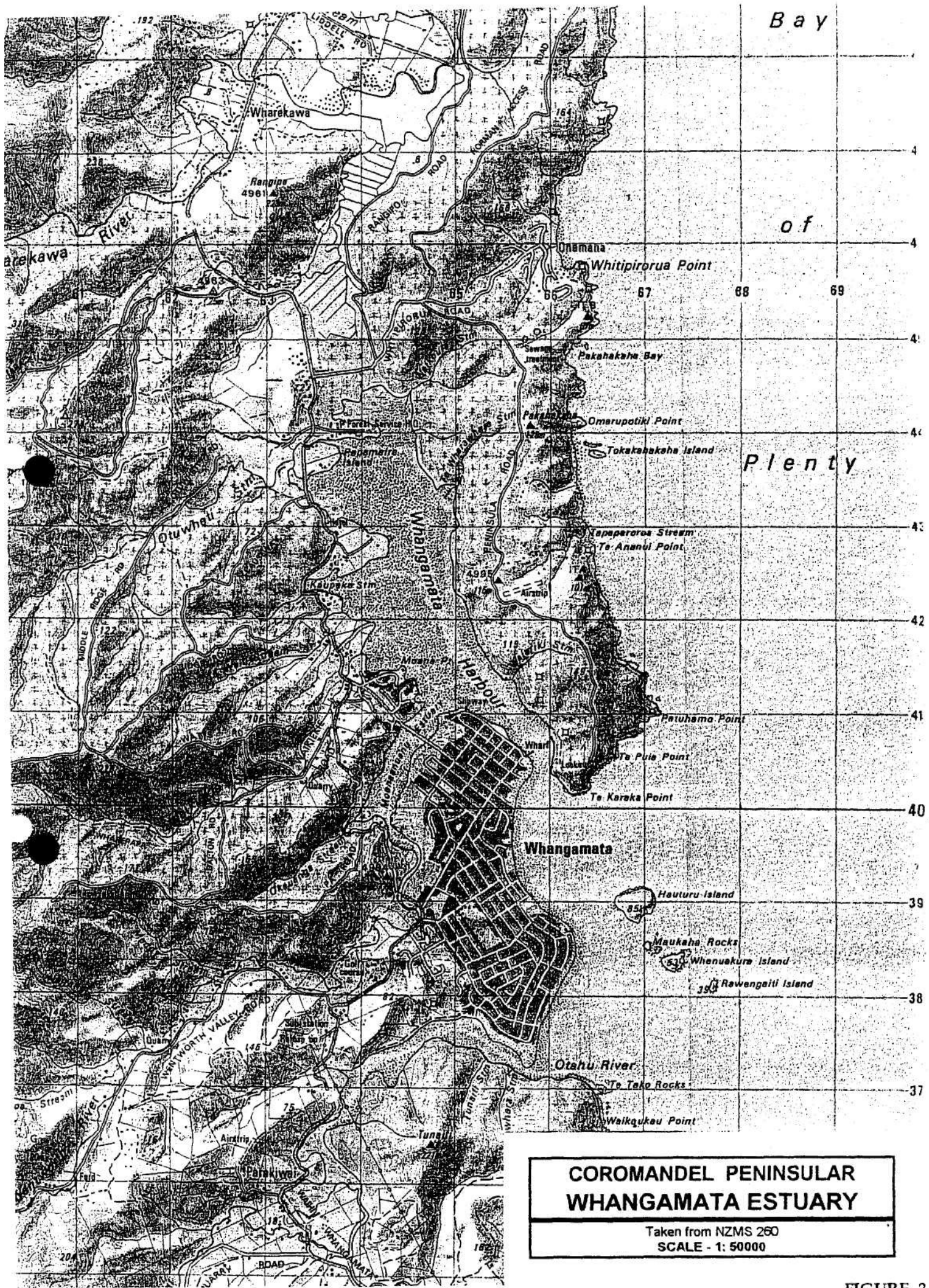
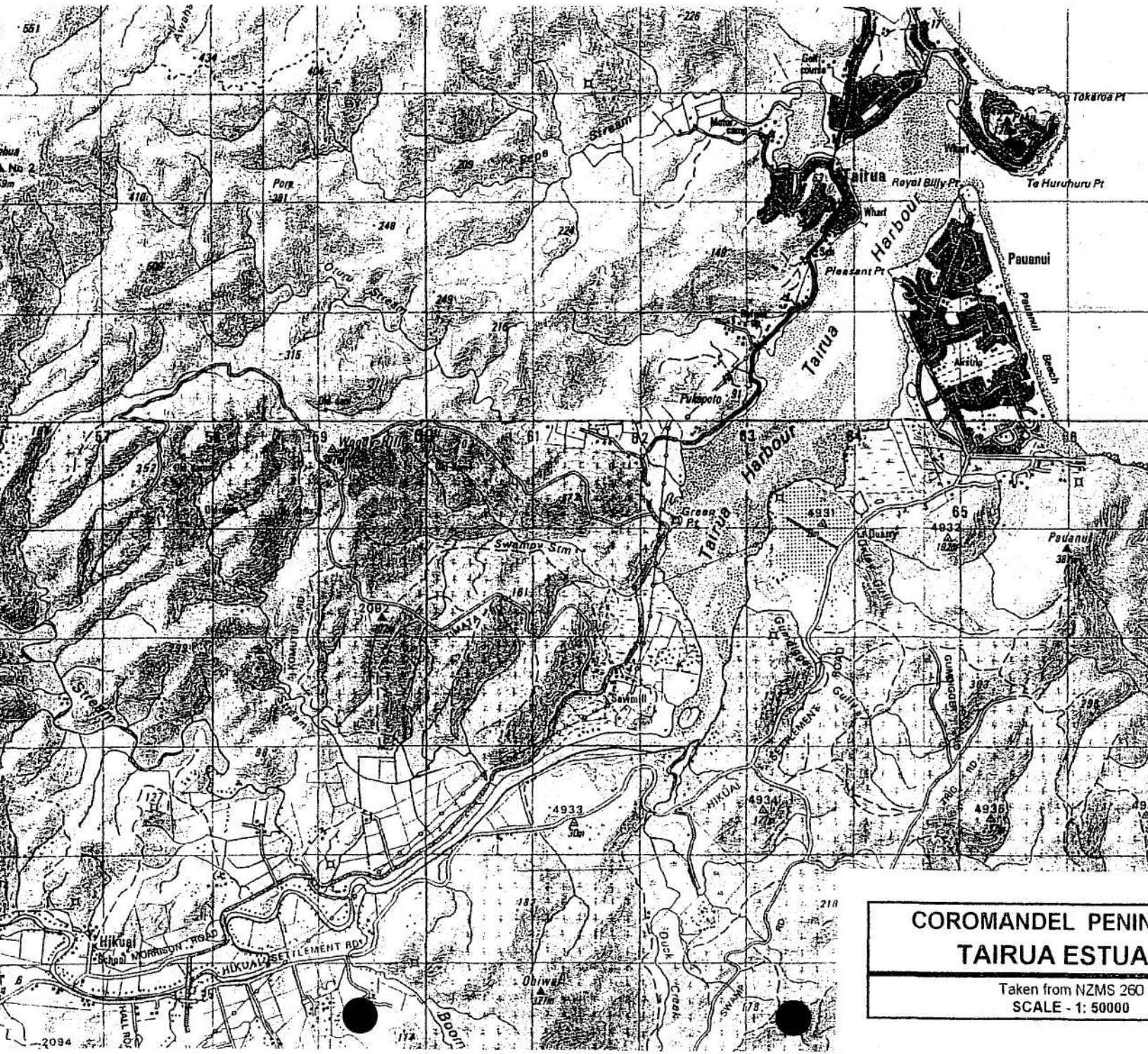


FIGURE 2



**COROMANDEL PENINSULA
TAIRUA ESTUARY**
Taken from NZMS 260
SCALE - 1: 50000

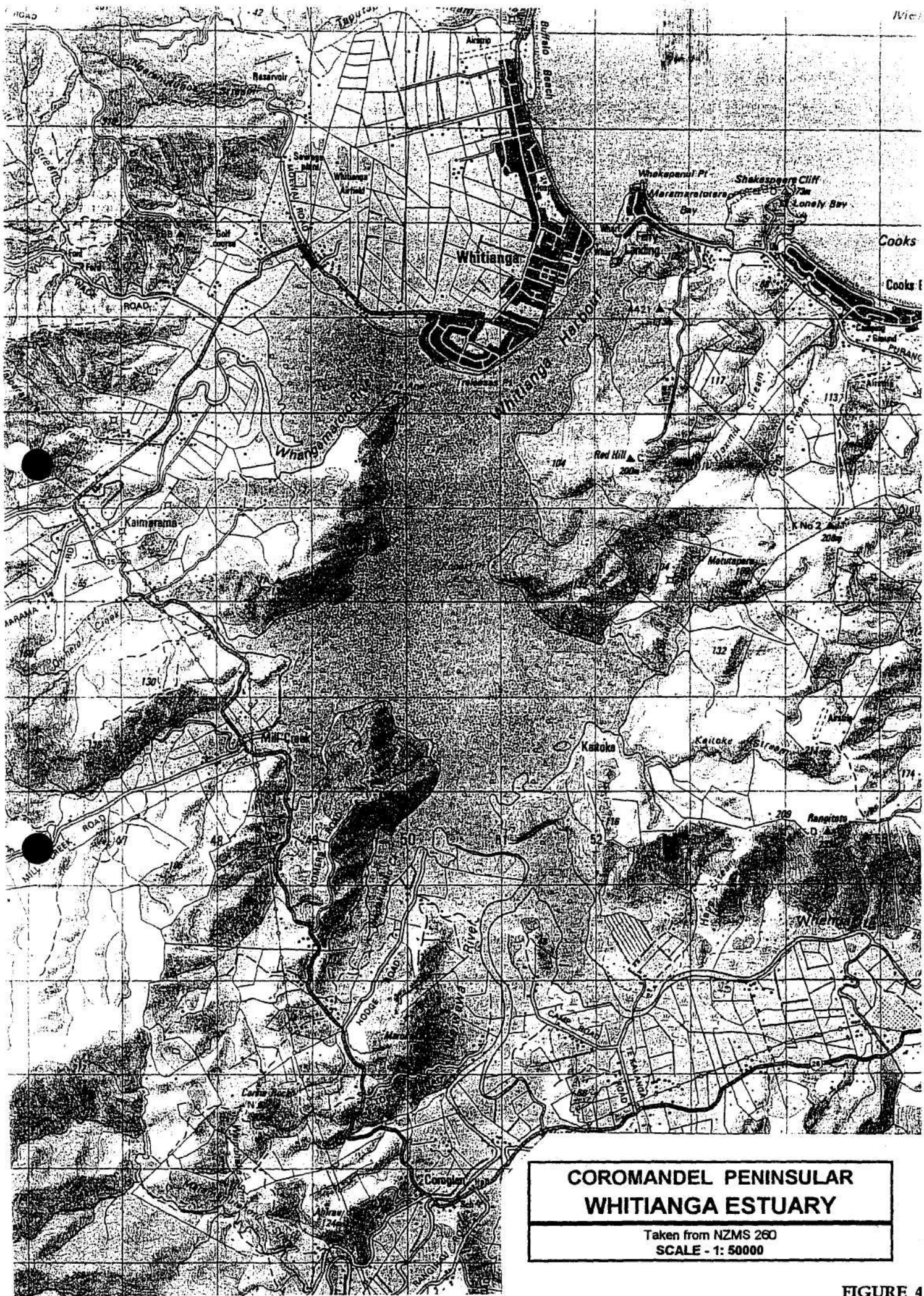
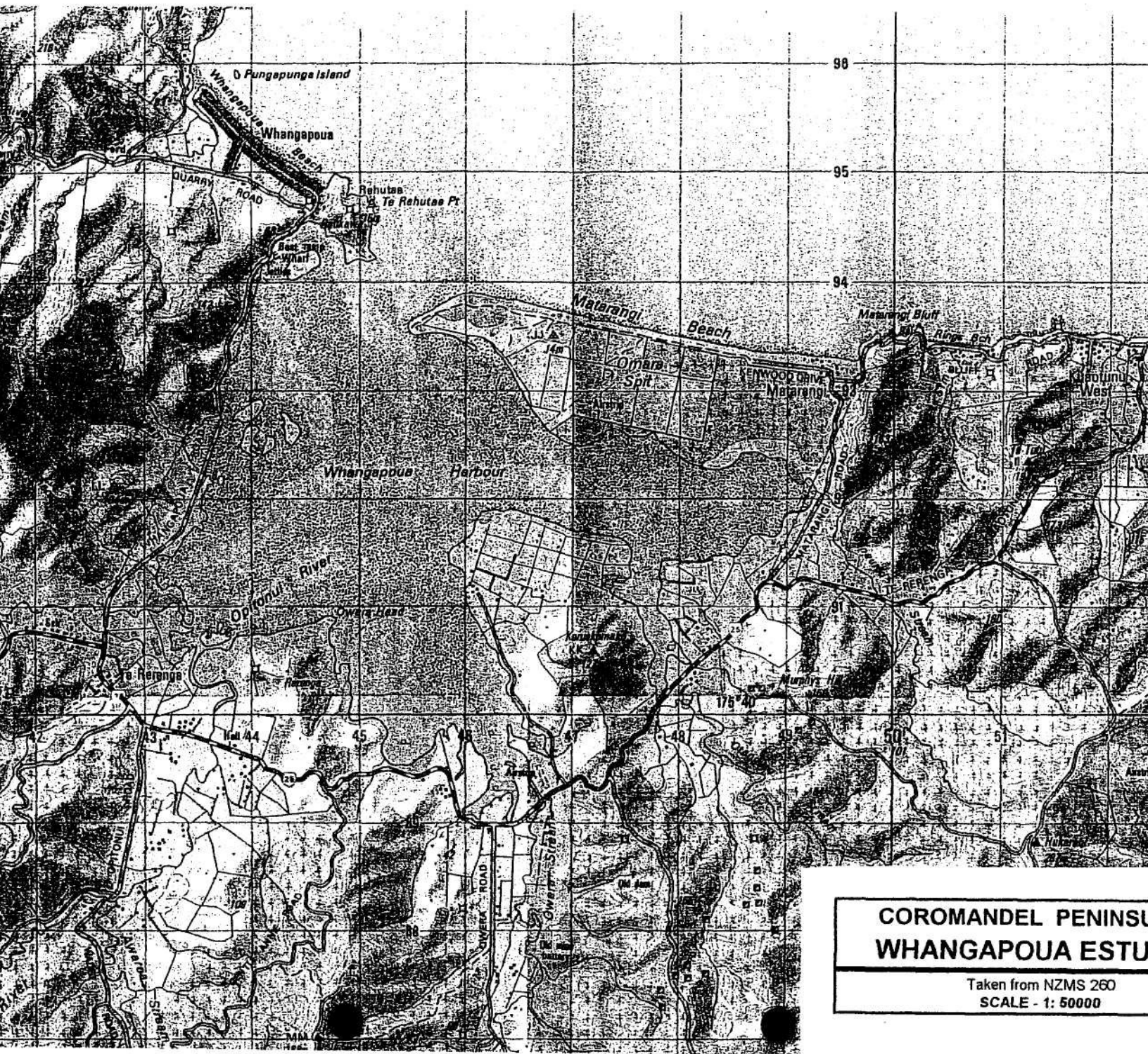


FIGURE 4



5-Williams G 20th-24th March 2000
Te Whanau o Hamiora Mangakahia Claim



30/3/75
(Also of 12
29)

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NEW ZEALAND
DEPARTMENT OF INTERNAL AFFAIRS
WELLINGTON

CORRESPONDENCE TO BE ADDRESSED—
SECRETARY FOR INTERNAL AFFAIRS,
PRIVATE BAG, WELLINGTON C. I.

TELEGRAMS AND CABLES "INTERNAL"
TELEPHONE 70-279

Mr P. Bright,
Tiki Road,
Coromandel.

Dear Mr Bright,

At a recent meeting the Fauna Protection Advisory Council discussed the donation of some of the Mercury Islands to the Crown as a sanctuary. Council considered this a very public spirited gesture and hopes that others would be inspired to follow this example.

As you are aware the islands provide habitat for a number of rare birds and plants. Their reservation as a sanctuary ensures not only the survival of these species, but also sets the islands aside as a memorial for all time to the foresight and generosity of the owners.

It is with considerable pleasure that I pass on to you the Council's sincere appreciation of the gift you have made to Conservation and to your fellow New Zealanders.

Yours sincerely,

(G.R. Williams)
Chairman

Fauna Protection Advisory Council