PUKERUA BAY-PAEKAKARIKI ESCARPMENT MANAGEMENT STATEMENT

FILE 5/7/317

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August 2001

CONTENTS

PART A: INTROI	PAGE	
 Preface Aims and Objective 	s	3 3
PART B: DESCRI	PTION	
 Location and General Description Legal Description and Tenure Natural Values Threats 		4 4 4 5
PART C: MANAC	GEMENT ISSUES AND POLICIES	
7. Open Space Values 8. Native Flora and Fa 9. Weed and Pest Cor 10. Fencing 11. Entry and Public A 12. Structures and Dev 13. Fire 14. Monitoring and Re 15. Restoration Work	auna ntrol ccess velopments esearch	6 6 8 8 8 9 9
APPENDIX I APPENDIX II APPENDIX III	ReferencesLocation mapAerial photograph	10 11 12

PART A: INTRODUCTION

1 PREFACE

- The National Trust was established by the Queen Elizabeth the Second National Trust Act 1977 with the task of encouraging and promoting the provision, protection and enhancement of open space for the benefit and enjoyment of the people of New Zealand.
- Section 2 of the Trust Act defines "open space" as:

 "any area of land or body of water that serves to preserve or to facilitate the preservation of any landscape of aesthetic, cultural, recreational, scenic, scientific, or social interest or value."
- The Pukerua Bay-Paekakariki escarpment, on the Kapiti Coast, has extremely high landscape value, and the remnants of coastal forest growing on the hillsides are of high ecological significance. The landholder (Tranz Rail Limited) has agreed with the National Trust that the open space values of the escarpment should be protected.
- The landholder has authorised the National Trust to have access to the escarpment area for the purposes of beautification and environmental protection, in terms of a "Licence to Occupy Land" Licence No. 59854. In turn, the National Trust has enabled Nga Uruora-Kapiti Project Inc., in terms of a management agreement, to be the Trust's agent for day-to-day environmental protection activity on the escarpment area.
- This management statement describes the natural resource values of the escarpment, identifies management issues, and outlines policies for environmental protection activity. If additional information indicates that an operative management policy or policies are no longer valid, then the management statement may need to be amended accordingly. The management statement will be periodically reviewed.

2 AIMS AND OBJECTIVES

- 2.1 The broad objectives for environmental protection activity are:
 - a) To protect and maintain the open space values of the land.
 - b) To facilitate protection, restoration and enhancement of the indigenous flora and fauna on the land.
 - c) To protect the landscape amenity of the land.

PART B: DESCRIPTION

3 LOCATION AND GENERAL DESCRIPTION

- The land in question extends some 5km from Pukerua Bay to Paekakariki, and covers most of the escarpment area between the eastern side of State Highway 1 and the top of the ridge. The land is mainly steep cliffs, with altitude ranging from 5 to 200 metres above sea level.
- The escarpment is one section of a larger escarpment system that runs south from Otaki to Wellington. It marks the end of the curving beachline which sweeps southwards from Taranaki.
- 3.3 The district has a mild climate, with warm summers and mild winters. West to northwest winds prevail with relatively frequent gales. The land is exposed to colder south winds. Rainfall is between 800 to 1000mm per year and is evenly distributed.

4 LEGAL DESCRIPTION AND TENURE

- The land has not been defined cadastrally, and therefore no title has issued. It is Crown land, administered by the New Zealand Railways Corporation and on a 40-year lease to Tranz Rail Limited, with a right of renewal for a further 40 years.
- 4.2 The Licence to Occupy in the name of the National Trust is for no finite term but it is a sub-tenancy of the lease from the Railways Corporation to Tranz Rail.
- The land area the subject of the Licence to Occupy is described as all those areas of Category "N" Railway land as defined in the New Zealand Rail Limited Vesting Order 1990 extending outwards (and being between approximately 32.3 and 37.5 kilometres on the North Island Main Trunk Railway metrage) a distance no less than five metres either side of the railway track centre line.
- The area of land covered by the Licence to Occupy is approximately 85 hectares and an aerial photo illustrating the approximate location is at Appendix III. There has been no recent survey definition of the precise boundaries between State Highway No. 1 and the railway land. Therefore, for ease of understanding, the Trust generally regards the western boundary of the area occupied as the actual railway line.

5 NATURAL VALUES

5.1 Vegetation

5.1.1 The escarpment is located within the Cook Strait Ecological District. The vegetation is an artefact of disturbance over the past 150 years. The land has been partially cleared for timber, and more recently for grazing.

5.1.2 Coprosma propinqua, Cassinia leptophylla and Olearia solandri scrubland dominate the indigenous vegetation over much of the land, with scattered kanuka-karaka-kohekohe forest remnants. In the northern portion there are larger pockets of ngaio-karaka-kawakawa scrubland; to the south there are remnants of kohekohe-mahoe-

- karaka forest, often with a vigorous understorey of kawakawa and rangiora. Groves of cabbage trees (Cordyline australis) and Carex secta are also present.
- 5.1.3 Regular gales and the generally exposed nature of the escarpment are limiting factors to natural regeneration.
- 5.1.4 The Biological Resources of the Wellington Region (1984) lists three significant sites on the escarpment:
 - i) Site No. 2u: An area at the north end of the escarpment noted for exposed coastal vegetation and *Coprosma propinqua*, ngaio, karaka and kawakawa shrubland. It is significant because it is one of the few remaining regional examples of coastal cliff shrubland and could develop into coastal forest if undisturbed;
 - ii) Site No. 2v: This is the major kohekohe, mahoe, karaka shrubland remnant. It is a regionally representative example of coastal cliff vegetation.
 - iii) Site No. 2t: The general escarpment, including coastal cliff pohuehue shrubland, plus pasture grassland and scattered karaka-kohekohe forest remnants.

5.2 Fauna

5.2.1 Native bird species present include kingfisher, shag, grey warbler, fantail, white-eye and harrier.

5.3 Landscape

5.3.1 The escarpment forms a dramatic backdrop along this section of the Kapiti Coast. It is visible from Paraparaumu, Paekakariki and Pukerua Bay, meaning more than 40,000 residents view the escarpment from urban areas. It is also in direct line of sight down the Paraparaumu and Paekakariki beaches and from the coastal walkway at Pukerua Bay. Being on the main route into Wellington, the escarpment is a prominent feature for the tens of thousands of commuters and travellers who travel by road or train along the escarpment's base each day.

6 THREATS

- The main threats to the open space values of the area are:
 - a) Browsing of indigenous vegetation by uncontrolled stock.
 - b) Erosion of unstable, steep soil surface by stock.
 - c) Weed species, especially boneseed, smothering or displacing the indigenous vegetation and causing detriment to the landscape amenity.
 - d) Introduced animal pest species including rabbits, possums, ferrets, cats, rodents and magpies that predate native fauna and eat native flora.
 - e) Fire, probably from rank grass, particularly during the dry summer months.
 - f) Degradation of landscape amenity due to development or inappropriate plantings.

PART C: MANAGEMENT ISSUES AND POLICIES

7 OPEN SPACE VALUES

- 7.1 The escarpment is a significant area of open space because it is a natural, integral and highly visible part of the landscape and a habitat for indigenous flora and fauna.
- 7.2 **Policy** Protection and enhancement of the open space values of the land will be a focus of management.

8 NATIVE FLORA AND FAUNA

- The indigenous vegetation present represents a highly significant biological remnant in a district that has suffered a great loss of vegetation. Intensification of land use and closer settlement is further diminishing the open space values in the district.
- Throughout the escarpment it is intended that the existing flora be allowed to progress naturally towards climax vegetation. While regeneration of the native vegetation will naturally occur, once stock and browsing animal pests are excluded, weed control and appropriate native plantings can enhance this.
- Due to constraints on physical access and safety considerations, it is intended that ecological restoration work be confined to the land to the east of the railway tracks. The exception to this might be if there is a significant weed or pest plant threat originating from the strip between the railway tracks and the highway which requires attention. There may also be ecologically important plants or a habitat of significance within the strip or above the tunnels that merit particular attention.
- Indigenous stock, locally sourced from within the Cook Strait Ecological District, will be used for any plantings. Revegetation activity will be designed to enhance the land as habitat for wildlife, improve its scenic value, and retard rank grass growth. Indigenous plant materials such as seeds, berries, leaves or cuttings may be collected on site for the purposes of propagation, provided this does not significantly damage the natural life cycle of the ecosystem.
- Indigenous fauna, including birds, lizards and invertebrates, are a vital part of the ecosystem of the escarpment. There is little detailed knowledge of the presence and population sizes of indigenous fauna, although a range of species has been noted.

8.6 Policies -

- i) The protection and enhancement of native vegetative cover and indigenous animal and insect populations and their habitats will be a focus of management.
- ii) Any threatened and rare species found to be present will be protected and actively managed.
- iii) Only seedlings grown from appropriately sourced seeds will be used for revegetation plantings.

9 WEED AND PEST CONTROL

- A number of troublesome plant species exist on the land, with boneseed, periwinkle and ivy being the most difficult to control.
- 9.2 The escarpment's bird population, especially chicks and eggs, are extremely vulnerable to mammalian predators such as feral and domestic cats, ferrets, stoats, and possibly rats, possums and hedgehogs. Possums and rabbits present a threat to regeneration of palatable shrubs, ferns and herbaceous plants.
- Animal pests are able to migrate freely between the escarpment area and neighbouring land, therefore the co-operation of neighbouring landholders is important in controlling them.
- In terms of the Biosecurity Act 1993 and regional pest management strategies (RPMS) adopted under that legislation, there are legal obligations requiring the control and, where possible, eradication of all plant and animal species designated "pest". For plants and animals that are a threat to the open space values of the land, greater control than that required by the RPMS may be necessary.
- One element of the environmental protection activity proposed for the escarpment is the exclusion of domestic livestock. While the presence of these animals may have contributed to a suppression of natural regeneration of indigenous species, they have also probably restricted the spread of palatable weeds. Therefore, careful watch will be necessary for a potential explosion of weed species that may be a threat to regeneration of indigenous species once stock are excluded from the site.
- While biological and physical methods of control of weeds, unwanted plants and animal pests are preferred, it is appreciated that, in this situation, chemical application is the most practical method of control. In order to minimise the threat or damage to indigenous fauna, flora, and the purity of the environment, chemicals are to be used with appropriate safety consideration, with spraying being kept to a minimum and chemicals being generally applied wherever possible by the painting of stumps.
- 9.7 A detailed assessment of weeds and problem plant species present on the escarpment has been undertaken. The assessment report and recommendations therein is a useful guide to determining priorities for practical action on weed control.

9.8 Policies -

- i) The control of pest plants and animals will be carried out in accordance with the requirements of the Regional Pest Management Strategy and the Biosecurity Act 1993.
- ii) All troublesome and unwanted plants and animals will be prioritised for action, and will be progressively controlled and eradicated where practicable.
- iii) Priority will be given to the control of weeds and animal pests that pose the greatest threat to the open space values of the land, with the priorities for action being established annually.
- iv) Control methods adopted will be so chosen to minimise the detrimental effect on protected vegetation, wildlife and other open space values.
- v) Weed and pest control programmes will be undertaken in co-operation with neighbouring landowners, as appropriate.

- vi) As appropriate and where practical, revegetation planting will be undertaken as part of the ongoing weed control programme.
- vii) Domestic animals will not be permitted on the escarpment.

10 FENCING

- Part of the land adjoining the escarpment is currently pastoral and grazed by stock. The landscape and habitat values of the land are vulnerable to uncontrolled grazing animals. Stock can cause erosion by trampling and uprooting vegetation and disturbing topsoil.
- In some places, the private properties to the east of the railway escarpment land have pockets of indigenous vegetation on them which can be significant extensions of the ecologically important vegetation on the railway land. Where the neighbouring property owners agree to formal protection of the vegetation pockets on their properties, there will be no need to fence on the title boundary; rather, fencing can be around the vegetation edge.
- Policy Permanent stockproof fencing will be maintained to secure the indigenous vegetation on the escarpment from stock intrusion.

11 ENTRY AND PUBLIC ACCESS

- It is important to recognise that the occupation agreement between Tranz Rail and the Trust includes strict conditions relating to access to the land. Those conditions require:
 - a) The places where access is to be gained to be determined by Tranz Rail.
 - b) No crossing of the railway lines.
 - c) No activity occurring that
 - Obstructs the view of the railway track from any road or right of way crossing the railway;
 - ii) Damages or destroys any timber, trees, timber-like trees or ornamental trees growing on the land;
 - iii) May impair the stability of the land adjacent to the railway track such as, but not limited to, excavation work or vegetation clearance especially, or
 - iv) May increase the risk of fire on the land.
- In addition to the occupation agreement constraints, there are physical challenges due to the steepness of the escarpment in many places which make it inappropriate for the public to have general rights of access. Accordingly, members of the public wishing to visit may only do so if associated with groups authorised and supervised by the Trust or its agent Nga Ururoa-Kapiti Project Inc.

11.3 Policies -

i) General public access to the escarpment will not be permitted.

- ii) Where access to the escarpment is authorised by the Trust or its agent, the specific conditions associated with the granting of approval including the particular requirements of Tranz Rail Limited must be strictly adhered to.
- iii) Any member of the public visiting the area on their own initiative does so at their own risk.

12 STRUCTURES AND DEVELOPMENTS

- In general, the escarpment is to be maintained and enhanced as a natural landscape. Major changes in the appearance or use of the land would detract from the landscape and other open space values of the land. Any development on steep slopes, unstable land, or close to any watercourse, would be very detrimental to stability.
- The National Trust recognises that the land the subject of the occupation licence is an essential buffer zone for the North Island main trunk railway line and that, as a result of natural processes, it may be necessary from time to time for land stabilisation works to be undertaken in order to safeguard the railway line. If such stabilisation works are required, it is possible the works may have an adverse impact on the environmental protection activities undertaken. In such cases, the Trust will liaise with Tranz Rail with a view to minimising adverse impact and ensuring restoration planting can be undertaken as part of the remedial work.
- 12.3 Policy No new structures, other than fencing, will be erected on the escarpment.

13 FIRE

- Fire is a risk to the scenic and habitat values of the escarpment. Wild fires can put the regeneration process back by many years.
- 13.2 Establishing a band of fire resistant native vegetation adjacent to the railway lines would help reduce the likelihood of other weeds becoming established, minimise the fire risk and enhance aesthetic values.

13.3 Policies

- i) Strict monitoring of fire risk will be carried out, particularly during dry periods.
- ii) Fire will not be used as a control measure for weeds or other vegetation.

14 MONITORING AND RESEARCH

- In order to ensure that the objectives for the environmental protection activity are being achieved, it is desirable for the escarpment to be monitored to confirm the appropriateness of management.
- To this end, it may be desirable to set up fenced exclosure plots (eg 20x20) and permanent sampling points. The Trust and its agent intend implementing a system of monitoring which best suits the protection objectives and the particular sites on the

- escarpment. In addition, monitoring using photographs taken from fixed points and descriptive information will be undertaken and kept under review.
- The escarpment provides unlimited opportunities for research on the flora and fauna of the district and benchmark studies of ecological processes.

14.4 Policies

- i) A monitoring process will be established and implemented, with monitoring being undertaken by the Trust and its agent in consultation with other appropriate expertise.
- ii) Scientific research will be encouraged to provide further information on the natural and physical resources of the escarpment and its protective management.

15 RESTORATION WORK PROGRAMME

The National Trust is indebted to its agent Nga Uruora Kapiti Project Inc for the enthusiastic voluntary commitment of human and financial resources towards ecological restoration activity on the escarpment. In order that activity is coordinated and focussed, the priorities for action will be established annually, having regard to outcomes achieved. In the light of experience, it may be necessary to prepare detailed restoration plans for specific sites.

15.2 Policies

- i) The Trust and its agent will formally meet at least annually to review the outcome of restoration work undertaken and to establish the priorities and programme for work to be undertaken in the year ahead.
- ii) Where the need is identified, the Trust will prepare restoration plans for specific sites.

APPENDIX I: REFERENCES

Department of Conservation Ecological Regions and Districts of New Zealand, Sheet 2. 1987.

Environmental Weed Management Services: Weed Assessment and Recommendations for the Nga Uruora-Kapiti Scenic and Ecological Restoration Project. August 2000.

Nga Uruora-Kapiti Project Inc: Proposal to Tranz Rail Ltd. For ecological restoration project on railway escarpment, Kapiti Coast. Unpublished. 2000.

Wellington Regional Council: Regional Pest Management Strategy, 1996-2001

Wellington Regional Council, Queen Elizabeth the Second National Trust, NZ Biological Resource Centre – joint publication – *Biological Resources of the Wellington Region*. November 1984.

LOCATION MAP APPENDIX I: LOCALITY MAP PUKERUA BAY - PAEKAKARIKI **ESCARPMENT** PROTECTED AREA NORTH

APPENDIX III: AERIAL PHOTOGRAPH



Pukerua Bay - Packakariki Escarpment 28/08/01

