

Proposed Natural Resources Plan:

Submitter:

Queen Elizabeth II National Trust

Submitter Number:

S157

ECOLOGICAL EVALUATION OF TAUPŌ SWAMP, PLIMMERTON



providing
outstanding
ecological
services to
sustain
and improve our
environments

ECOLOGICAL EVALUATION OF TAUPŌ SWAMP, PLIMMERTON



Taupō Swamp (Photograph credit QEII National Trust).

Contract Report No. 3678

April 2015

Project Team:

Steve Rate - Report author
William Shaw - Peer review

Prepared for:

QEII National Trust
138 The Terrace
Wellington 6140

WELLINGTON OFFICE: 22 RAIHA STREET, ELSDON, P.O. BOX 50-539, PORIRUA
Ph 04-237-7341; Fax 04-237-7496

HEAD OFFICE: 99 SALA STREET, P.O. BOX 7137, TE NGAE, ROTORUA
Ph 07-343-9017; Fax 07-343-9018, email ecology@wildlands.co.nz, www.wildlands.co.nz

CONTENTS

1.	INTRODUCTION	1
2.	ECOLOGICAL VALUES OF TAUPŌ SWAMP	1
2.1	Vegetation and habitats	1
2.2	Uncommon ecosystems	2
2.3	Flora	2
2.4	Birds	3
2.5	Fish	3
3.	SCHEDULE F3 SIGNIFICANCE ASSESSMENT	4
4.	CONCLUSION	5
	ACKNOWLEDGMENTS	6
	REFERENCES	6
	APPENDIX	
1.	Schedule F3: Criteria for identifying natural wetlands with significant indigenous biodiversity values	8

Reviewed and approved for release by:



W.B. Shaw
Director/Principal Ecologist
Wildland Consultants Ltd

© *Wildland Consultants Ltd* 2015

This report has been produced by Wildland Consultants Ltd for QEII National Trust. All copyright in this report is the property of Wildland Consultants Ltd and any unauthorised publication, reproduction, or adaptation of this report is a breach of that copyright.

1. INTRODUCTION

Taupō Swamp (30 ha) is located alongside SH1 between Plimmerton and Pukerua Bay. It comprises the largest remaining harakeke (*Phormium tenax*) swamp in the Wellington Region and provides habitat for uncommon indigenous species of plants and fauna. Taupō Swamp was purchased in 1986 by the Queen Elizabeth II National Trust and has formal protection under an Open Space Covenant.

Greater Wellington Regional Council (GWRC) is currently undertaking a review of the Regional Plan for Wellington Region. The Draft Natural Resources Plan for the Wellington Region was made available for public feedback from September through to November 2014. Chapter 12 Schedule A3 of the draft plan lists wetlands with outstanding indigenous biodiversity values in the Wellington Region. Schedule F3 of the plan contains the criteria for identifying natural wetlands with significant indigenous biodiversity values. Wetlands listed in Schedule A3 are subject to more stringent rules in the plan (e.g. those relating to discharges of water or contaminants, or disturbance to vegetation and land) compared to other wetlands of significance.

The QEII National Trust is concerned that Taupō Swamp is not listed in Schedule A3, particularly as the wetland is considered to be of very high ecological significance and is vulnerable to changing activities in the surrounding landscape that could affect the quantity and quality of water draining into it. In particular, increased run-off and sedimentation could affect the water table and the adjacent road, truck stop, and railway may also result in chemical contamination of the wetland.

This report comprises a desktop assessment to identify the known ecological values of Taupō Swamp and an evaluation of these values against the Schedule F3 significance criteria, in order to determine whether Taupō Swamp should be included in Schedule A3 of the Draft Natural Resources Plan for the Wellington Region.

2. ECOLOGICAL VALUES OF TAUPŌ SWAMP

2.1 Vegetation and habitats

Bagnall and Ogle (1981) identified seven major vegetation types in the swamp proper:

- Flax (*Phormium tenax*)-dominated tussockland is the most extensive community.
- *Carex lessoniana* dominated sedgeland, with toetoe (*Austroderia toetoe*), raupo (*Typha orientalis*), and reed sweet grass (*Glyceria maxima*).
- Bracken (*Pteridium esculentum*)-dominated fernland.
- Shrubland with *Muehlenbeckia complexa*, mānuka (*Leptospermum scoparium*), grey willow (*Salix cinerea*) and blackberry (*Rubus fruticosus* agg.).
- Crack willow (*Salix fragilis*)-dominated treeland with a pocket of kahikatea (*Dacrycarpus dacrydioides*).
- Herbfield with mixed dicotyledonous and monocotyledonous herbs.
- Grassland consisting predominantly of adventive grass species.

Indigenous shrubland is present on higher ground to the west and the east of the swamp. Mānuka and kānuka (*Kunzea ericoides*) occur with *Coprosma* spp., māhoe (*Melicytus ramiflorus*), and rangiora (*Brachyglottis repanda*). Gorse (*Ulex europaeus*) and broom (*Cytisus scoparius*) shrubland is also present in previously disturbed sites in this area (Cromarty and Scott 1995).

2.2 Uncommon ecosystems

Wetlands are an under-represented habitat type at a national scale (estimated *c.*10% of the historic extent remaining), in the North Island (*c.*4.9% of the historic extent remaining), and in the Wellington Region (*c.*2.3% of the historic extent remaining). Lowland swamps have undergone the largest loss with only 6% of their original national extent and only 2.3% of their original extent in the Wellington Region remaining (Ausseil *et al.* 2008).

Taupō Swamp is a relatively large (30 ha) representative example of a topogenous lowland freshwater mire, a wetland type characteristic of lowland New Zealand. The swamp is one of only a few lowland topogenous mires in the Wellington Region that have retained a largely indigenous vegetation cover. Taupō Swamp was formed by uplifting of the seabed during an earthquake, which is an unusual way for wetlands to form (Cromarty and Scott 1995).

Taupō Swamp is entirely located within an Acutely Threatened land environments defined in the Threatened Environment Classification (Walker *et al.* 2007). Acutely Threatened land environments have <10% of the original indigenous vegetation cover remaining, on a national basis.

2.3 Flora

Two plant species found in Taupō Swamp are classified as At Risk or Data Deficient (de Lange *et al.* 2013) (Table 1). Two regionally threatened plant species (as per Sawyer 2004) have also been recorded (Table 2).

Table 1: Nationally threatened plant species recorded in Taupō Swamp, Plimmerton.

Species	Common Name	National Threat Classification ¹	Reference
<i>Ranunculus macropus</i>	Swamp buttercup	Data Deficient	Bagnall & Ogle (1981)
<i>Urtica linearifolia</i>	Swamp nettle	At Risk-Declining	Bagnall & Ogle (1981)

Table 2: Regionally threatened plant species recorded in Taupō Swamp, Plimmerton.

Species	Common Name	Regional Threat Status ²	Reference
<i>Epilobium pallidiflorum</i>	Swamp willowherb	Sparse	Bagnall & Ogle (1981)
<i>Galium trilobum</i>	Native bedstraw	Data deficient	Bagnall & Ogle (1981)

¹ As per de Lange *et al.* (2012).

² As per Sawyer. (2004).

2.4 Birds

There are records of seven indigenous bird species in Taupō Swamp, with one of these species (bittern) classified as Threatened-Nationally Endangered and two (marsh crake and spotless crake) classified as At Risk-Relict (Table 3).

Table 3: Indigenous bird species recorded in Taupō Swamp, Plimmerton.

Species	Common Name	Threat Classification ¹	Reference
<i>Botaurus poiciloptilus</i>	Bittern	Threatened-Nationally Endangered	Parrish (1984); Clelland (1984); Todd <i>et al.</i> (2013)
<i>Circus approximans</i>	Australasian harrier	Not Threatened	N. McArthur 16/09/2012 P. Hodge 23/12/2013 S. Govella 11/10/2013
<i>Gerygone igata</i>	Grey warbler	Not Threatened	N. McArthur 16/09/2012 S. Govella 6/09/2013
<i>Hemiphaga novaeseelandiae</i>	Kereru	Not Threatened	S. Govella 11/10/2013
<i>Hirundo neoxena</i>	Welcome swallow	Not Threatened	N. McArthur 16/09/2012
<i>Larus dominicanus</i>	Black-backed gull	Not Threatened	N. McArthur 16/09/2012
<i>Porphyrio melanotus</i>	Pukeko	Not Threatened	Clelland (1984)
<i>Porzana pusilla affinis</i>	Marsh crake	At Risk-Relict	Todd <i>et al.</i> (2013)
<i>Porzana tabuensis tabuensis</i>	Spotless crake	At Risk-Relict	Parrish (1984); Clelland (1984); seasonal or core habitat (McArthur and Lawson 2013)
<i>Phalacrocorax melanoleucos</i>	Little shag	Not Threatened	Cromarty and Scott (1995)
<i>Rhipidura fuliginosa</i>	Fantail	Not Threatened	N. McArthur 16/09/2012 S. Govella 6/09/2013
<i>Tadorna variegata</i>	Paradise shelduck	Not Threatened	N. McArthur 16/09/2012 S. Govella 6/09/2013
<i>Todiramphus sanctus vagans</i>	Kingfisher	Not Threatened	Cromarty and Scott (1995)
<i>Zosterops lateralis</i>	Silvereeye	Not Threatened	Bagnall & Ogle (1981)

2.5 Fish

Eight indigenous freshwater fish species have been recorded in Taupō Swamp, with four of these species classified as At Risk (Table 4). Various other indigenous species are thought to be present², including common smelt (*Retropinna retropinna*) and giant bully (*Gobiomorphus gobioides*) (both Not Threatened), and brown mudfish (*Neochanna apoda*) and inanga (*Galaxias maculatus*) (both At Risk-Declining) (Porirua City Council 1980).

¹ As per Robertson *et al.* (2013).

² Note that Cromarty and Scott (1995) state that these species have been recorded in the wetland, but their cited reference states only that they may be present.

Table 4: Fish species recorded in Taupō Swamp, Plimmerton.

Species	Common Name	Threat Classification ¹	Reference
<i>Anguilla australis</i>	Shortfin eel	Not Threatened	Porirua City Council (1980); QEII National Trust (1989)
<i>Anguilla dieffenbachii</i>	Longfin eel	At Risk-Declining	Porirua City Council (1980); QEII National Trust (1989)
<i>Galaxias argenteus</i>	Giant kōkopu	At Risk-Declining	Porirua City Council (1980)
<i>Galaxias fasciatus</i>	Banded kōkopu	Not Threatened	Porirua City Council (1980); Leigh 2005
<i>Gobiomorphus cotidianus</i>	Common bully	Not Threatened	Leigh 2005
<i>Gobiomorphus hubbsi</i>	Bluegill bully	At Risk-Declining	Leigh 2005
<i>Gobiomorphus huttoni</i>	Redfin bully	At Risk-Declining	Porirua City Council (1980); Leigh 2005

3. SCHEDULE F3 SIGNIFICANCE ASSESSMENT

Wetlands in the Wellington Region have been assessed for significance using nine criteria listed in Schedule F3 of the Draft Natural Resources Plan for the Wellington Region (GWRC 2015): 1 Representative; 2 Threatened Environment Classification; 3 Ecosystem or Habitat; 4 Indigenous Flora and Fauna; 5 Ecosystem; 6 Species; 7 Connectivity; 8 Buffering; and 9 Seasonal or core habitat. Definitions of these criteria are provided in Appendix 1. Each wetland in the Region has been scored against each criterion, from A (high) to E (low). Outstanding wetlands are natural wetlands that are highly representative and rare, or highly representative and highly diverse, being assigned scores of A1 and any of A3 or A4 or A5 or A6 (GWRC 2015).

Taupō Swamp has been assessed against the Schedule F3 significance criteria in Table 5 below, scoring A for Criteria 1, 2, 3, and 9.

¹ As per Goodman *et al.* (2014).

Table 5: Schedule F3 Significance assessment of Taupō Swamp, Plimmerton. Outstanding wetlands are natural wetlands that are highly representative and rare, or highly representative and highly diverse, being A1 and any of A3 or A4 or A5 or A6 (shaded boxes).

Criterion	Schedule F3	Justification
1. Representative	A	One of the best remaining examples of a topogenous lowland freshwater mire with a largely indigenous vegetation cover in the Wellington Region (Cromarty and Scott 1995). A nationally significant flax wetland (GWRC undated).
2. Threatened Environment Classification	A	Located entirely within an Acutely Threatened land environment.
3. Ecosystem or Habitat	A	Swamps are nationally much reduced with only 6% of their original extent remaining (Ausseil <i>et al.</i> 2008). Created by a nationally distinctive mechanism, having been formed by the uplifting of the seabed during an earthquake (Cromarty and Scott 1995).
4. Indigenous Flora and Fauna	B	Provides habitat for one nationally Threatened species: bittern (Threatened-Nationally Endangered), as well as At Risk species of birds and fish.
5. Ecosystem	B	One main ecosystem type (swamp) with a range of vegetation types, although dominated by flaxland.
6. Species	B	Typical range of wetland species present including fish, birds, and plants.
7. Connectivity	B	Contains gradients from wetland to terrestrial. Connected by Taupō Stream to the Tasman Sea.
8. Buffering	E	Bounded by SH1 and the Main Trunk Railway line, and surrounded by farmland and residential and commercial properties.
9. Seasonal or core habitat	A	Provides seasonal or core habitat for bittern (Threatened-Nationally Endangered), spotless crake and marsh crake (both At Risk-Relict), longfin eel and giant kōkopu (both At Risk-Declining).

4. CONCLUSION

Using information currently available on ecological values, and assessed against the significance criteria listed in Schedule F3 of the Draft Natural Resources Plan for the Wellington Region (GWRC 2015), Taupō Swamp scores A for four criteria: Criterion 1 Representative, Criterion 2 Threatened Environment Classification, Criterion 3 Ecosystem or Habitat, and Criterion 9 Seasonal or Core Habitat. On this basis, Taupō Swamp is an Outstanding Wetland. It also scores B for a further four criteria, and it should be noted that some of these scores are likely to be at the 'upper end' of the B ranking.

ACKNOWLEDGMENTS

Rosalynn Anderson-Lederer (QEII National Trust, Wellington) provided project liaison.

REFERENCES

- Ausseil A.-G., Gerbeaux P., Chadderton W., Stephens T., Brown D., and Leathwick J. 2008: Wetland ecosystems of national importance for biodiversity: Criteria, methods and candidate list of nationally important inland wetlands. Discussion document. *Landcare Research Contract Report LC0708/158*. Prepared for Chief Scientist, Department of Conservation, Wellington.
- Bagnall R.G. and Ogle C.C. 1981: The changing vegetation structure and composition of a Mire at Plimmerton, North Island, New Zealand. *New Zealand Journal of Botany* 19: 371-387.
- Boffa Miskell Ltd 2011: Desktop delineation and assessment of significance of wetlands of the Wellington region. Methodology & results. *Report Number W10140-007*. Prepared for Greater Wellington Regional Council. November 2011. 50 pp.
- Clelland D. 1984: Unprotected areas of the Wellington region. A survey of eleven areas of biological significance. *Unpublished report*. Prepared for the Wellington District Office of the Department of Lands and Survey.
- Cromarty P. and Scott D.A. (eds). 1995: A Directory of Wetlands in New Zealand. Department of Conservation, Wellington, New Zealand. Available at: <http://www.doc.govt.nz/Documents/science-and-technical/nzwetlands08.pdf>.
- Goodman J.M., Dunn N.R., Ravenscroft P.J., Allibone R.M., Boubee J.A.T., David B.O., Griffiths M., Ling N., Hitchmough R.A., and Rolfe J.R. 2014. Conservation status of New Zealand freshwater fish, 2013. *New Zealand Threat Classification Series 7*. Department of Conservation, Wellington. 12p.
- GWRC undated: Taupō Swamp / Ara Harekeke. *Where The Wild Things Are: 45*. Available at: <http://www.gw.govt.nz/assets/WRS/Biodiversity/45-Taupō-Swamp-Ara-Harakeke.pdf>.
- GWRC 2015: Draft Natural Resources Plan for the Wellington Region. Available at: <http://www.gw.govt.nz/assets/Plans--Publications/Regional-Plan-Review/Draft-Regional-Plan-docs/Chapter-12-Schedules-Schedule-F.pdf>.
- Leigh S. 2005: Fish Pass Evaluation - Taupō Stream. Prepared in association with Massey University and Greater Wellington Regional Council. 5 pp.
- McArthur N. and Lawson J. 2013: Coastal and freshwater habitats of significance for rare and threatened bird species in the Wellington region. Greater Wellington Regional Council.

- Parrish G. 1984: Wildlife and wildlife sites of the Wellington Region. *Fauna Survey Unit Report No. 38*. New Zealand Wildlife Service, Wellington.
- Porirua City Council 1980: 118/80 Proposed Change to District Scheme (Pukekura Bay Section). pp. 24-34 Report of Town Planner 8 September 1980.
- QEII National Trust 1989: Taupō Swamp Plimmerton Management Plan.
- QEII National Trust 2008: Taupō Swamp: A wetland of national importance. Available at: <http://www.openspace.org.nz/includes/download.aspx?ID=98600>. 13 pp.
- Robertson H.A., Dowding J.E., Elliott G.P., Hitchmough R.A., Miskelly C.M., O'Donnell C.J.F., Powlesland R.G., Sagar P.M., Scofield R.P., and Taylor G.A. 2013: Conservation status of New Zealand birds, 2012. *New Zealand Threat Classification Series 4*. Department of Conservation, Wellington. 22 pp.
- Sawyer J.W.D. 2004: Plant Conservation Strategy. Wellington Conservancy (excluding Chatham Islands) 2004-2010. Department of Conservation, Wellington.
- Todd M., Kettles H., Graeme C., Sawyer J., McEwan M. and Adams L. 2013: Estuarine systems in the lower North Island: ranking of significance, current status and future management options. Department of Conservation.
- Walker S., Cieraad E., Grove P., Lloyd K., Myers S., Park T., and Porteous T. 2007: Guide for users of the threatened environment classification, Version 1.1, August 2007. Landcare Research New Zealand. 34 pp. plus appendix.

APPENDIX 1

SCHEDULE F3: CRITERIA FOR IDENTIFYING NATURAL WETLANDS WITH SIGNIFICANT INDIGENOUS BIODIVERSITY VALUES

Indigenous ecosystems or habitats are considered to have significant indigenous biodiversity values if they meet one or more of the criteria in RPS Policy 23. These criteria have been interpreted specifically for use in wetlands. Suitably qualified wetland ecologists shall use this schedule to evaluate a natural wetland and determine whether it has significant indigenous biodiversity values. White boxes describe wetlands that do not meet the RPS Policy 23 criteria and are managed as natural wetlands by this plan. Shaded boxes describe wetlands that meet the Policy 23 criteria, and are managed as significant wetlands by this plan. Outstanding wetlands are natural wetlands that are highly representative and rare, or highly representative and highly diverse, being A1 and any of A3 or A4 or A5 or A6.

	1 Representative ¹	2 Threatened Environment Classification ²	3 Ecosystem or Habitat	4 Indigenous Flora and Fauna	Diversity	6 Species	7 Connectivity	8 Buffering	9 Seasonal or core habitat
RPS Policy 23	Representativeness The ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or region, and: (i) are no longer commonplace (less than about 30% remaining); or (ii) are poorly represented in existing protected areas (less than about 20% legally protected)		Rarity The ecosystem or habitat has biological or physical features that are scarce or threatened in a local, regional or national context. This can include individual species, rare and distinctive biological communities and physical features that are unusual or rare	Diversity The ecosystem or habitat has a natural diversity of ecological units, ecosystems, species and physical features within an area	Ecological context of an area The ecosystem or habitat: (i) enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats; or (ii) provides seasonal or core habitat for protected or threatened indigenous species				
A	Wetlands that are the best or one of the best remaining examples that are typical and characteristic of the full range of the original or current natural diversity of ecosystems and habitat types in the region	"Acutely Threatened" <10% indigenous vegetation left	Contains an indigenous ecosystem or habitat or biological community or physical feature that is nationally rare or threatened or distinctive ³	Habitat for more than two threatened species ⁴ of flora or fauna	A high natural diversity ⁵ of ecological units or ecosystems or physical features or the full range of expected natural diversity	A high natural diversity of species of flora and fauna or the full range of the expected natural diversity	Wetland ecosystem or habitat which enhances connectivity and is a key part of an extensive system of wetlands and waterways or part of an uninterrupted sequence from the wetland margins to forests, coasts and rivers	Wetland ecosystem or habitat that buffers representative, rare or diverse indigenous ecosystems and habitat	Provides seasonal or core habitat for one or more threatened species
B	Wetlands that are the best or one of the best remaining examples that are typical and characteristic of the full range of the original or current natural diversity of ecosystems and habitat types in an ecological district	"Chronically Threatened" 10-20% indigenous vegetation left	Contains an indigenous ecosystem or habitat or biological community or physical feature that is regionally rare or threatened or distinctive	Habitat for one or two threatened species, or two or more at risk ⁶ species of flora or fauna	A natural diversity ⁵ of ecological units or ecosystems or physical features	A natural diversity ⁶ of species within an area	Wetland ecosystem or habitat which forms part of an intact ecological sequence or ecotone from freshwater to terrestrial or estuarine ecosystem types	Ecosystem does not provide buffering to diverse indigenous ecosystems and habitat	Provides seasonal or core habitat for one or more protected species

1 An assessment of representativeness requires the delineation of ecological units (vegetation and landform type, or wetland type, e.g. manuka bog) and identifying wetlands which best represent the original or current extent of different wetland types in the region or ecological district (Kelly and Park 1986, Myers et al 1987)

2 Threatened Environment Classification assesses how much native (indigenous) vegetation remains within land environments, its legal protection status, and how past vegetation loss and legal protection are distributed across New Zealand's landscapes. It uses a combination of three national databases: Land Environments New Zealand (LENZ), classes of the 2nd Land Cover Database (LCDB2) and the Protected Areas Network (PAN-NZ) (<http://www.landcaresearch.co.nz/resources/maps-state/threatened-environment-classification>)

3 All species determined to be classified by the New Zealand Threat Classification System 2008 (or subsequent revisions) as Nationally Critical, Nationally Vulnerable, Nationally Endangered in the Threatened category. For biotic groups that have not been revised to conform with the New Zealand Threat Classification System 2008, all species determined to be classified by the New Zealand Threat Classification 2005 as Acutely Threatened and Chronically Threatened categories are included

4 Contains the full natural suite of species expected for the ecosystem type. Provides a regional biodiversity hotspot.

5 All species determined to be classified by the New Zealand Threat Classification System 2008 (or subsequent revisions) as Declining, Relict, and Recovering categories of the 'At Risk' category

6 Contains a typical assemblage of wetland ecosystem or habitat types

7 Contains a typical species mix or assemblage for a wetland ecosystem or habitat type

RPS Policy 23	Representativeness The ecosystems or habitats that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystem and habitat types in a district or region, and: (i) are no longer commonplace (less than about 30% remaining); or (ii) are poorly represented in existing protected areas (less than about 20% legally protected)		Rarity The ecosystem or habitat has biological or physical features that are scarce or threatened in a local, regional or national context. This can include individual species, rare and distinctive biological communities and physical features that are unusual or rare		Diversity The ecosystem or habitat has a natural diversity of ecological units, ecosystems, species and physical features within an area		Ecological context of an area The ecosystem or habitat: (i) enhances connectivity or otherwise buffers representative, rare or diverse indigenous ecosystems and habitats; or (ii) provides seasonal or core habitat for protected or threatened indigenous species		
	1 Representative ¹	2 Threatened Environment Classification ²	3 Ecosystem or Habitat	4 Indigenous Flora and Fauna	5 Ecosystem	6 Species	7 Connectivity	8 Buffering	9 Seasonal or core habitat
C	Wetlands that are typical and characteristic examples of the full range of the original or current natural diversity of ecosystems and habitat types in a district or region	"At Risk" 20-30% indigenous vegetation left	Contains an indigenous ecosystem, habitat, biological community or physical feature that is rare or threatened or distinctive in the ecological district	Habitat for one or more species, or one or more regionally rare ¹ species of flora or fauna	Low diversity of ecological units or ecosystems or physical features	Low diversity of species within an area	Wetland ecosystem which facilitates the movement of indigenous species between representative, rare or diverse indigenous ecosystems and habitat		Not providing a seasonal or core habitat for protected or threatened species
D	Wetlands that have elements that are typical and characteristic of the natural diversity of ecosystem and habitat types of an ecological district	"Critically Underprotected" >30% indigenous cover remaining; and <10% legally protected	No rare, threatened or distinctive ecosystems, habitats or physical features identified	No rare or threatened species of flora or fauna recorded			Wetland ecosystem which forms part of a habitat network with other wetland sites in close proximity		
E	Wetlands dominated by exotic species that contain little or no elements that are representative of the natural diversity of a district or region	"Underprotected" >30% indigenous cover remaining; and 10-20% legally protected					No bio-physical connection to representative, rare or diverse indigenous ecosystems and habitat		

¹ All species determined to be regionally critical, regionally endangered, regionally vulnerable, regionally sparse or regionally vulnerable (e.g. Savvyser 2004)



Call Free 0508 WILDNZ
Ph: +64 7 343 9017
Fax: +64 7 3439018
ecology@wildlands.co.nz

99 Sala Street
PO Box 7137, Te Ngae
Rotorua 3042,
New Zealand

Regional Offices located in
Auckland, Hamilton, Tauranga,
Whakatane, Wellington,
Christchurch and Dunedin

ECOLOGY RESTORATION BIODIVERSITY SUSTAINABILITY

www.wildlands.co.nz



QEII National Trust
Open Space New Zealand
Ngā Kārauhī Papa

Our ref: P22

24 September 2015

Greater Wellington Regional Council
PO Box 11 646
Manners Street
Wellington 6140

Dear Sir/Madam

Submission on proposed Natural Resources Plan

Thank you for the opportunity to make a submission on the proposed Natural Resources Plan for the Wellington region.

Queen Elizabeth II National Trust (the National Trust) is an independent charity established almost 40 years ago under its own Act to facilitate the protection and enhancement of natural and cultural heritage on private and leasehold land for the benefit of present and future generations of New Zealanders.

The principle means by which the National Trust achieves this objective is through establishing open space covenants with individual landowners over land or bodies of water to protect natural or landscape features of aesthetic, cultural, recreational, scenic, scientific or social value. The National Trust also owns 27 properties around New Zealand. The National Trust purchased Taupō Swamp in 1986 to protect its significant indigenous biodiversity values.

Covenant agreements run with land title and are legally binding on present and future owners and occupiers of the land. Such covenants are 'indefeasible' once registered and provide a very high level of protection as demonstrated through recent case law. Currently there are over 4,000 covenants registered on private and leasehold land across New Zealand providing a high level of protection for over 180,000 hectares.

With the introduction of the 'New Zealand Biodiversity Strategy' in 2000 and the 'National Priorities for Protecting Rare and Threatened Native Biodiversity on Private Land' in 2007, the National Trust has put a high priority on securing covenants that protect indigenous vegetation and/or habitats that meet one of these four national priorities. Around 90% of all new covenants satisfy these priorities. The balance protect outstanding landscapes and other natural, historic, and cultural features. The National Trust operates on private land where there has been the biggest loss of indigenous biodiversity and our work is critical to helping secure the important indigenous biodiversity that remains.

Councils have responsibilities under the Resource Management Act 1991 to promote the protection of natural and physical resources; to safeguard the life-supporting capacity of air, water, soil, and ecosystems; and provide for the following matters of national importance:



- the preservation of the natural character of the coastal environment (including the coastal marine area), wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development
- the protection of outstanding natural features and landscapes from inappropriate subdivision, use, and development
- the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna
- the maintenance and enhancement of public access to and along the coastal marine area, lakes, and rivers
- the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, waahi tapu, and other taonga
- the protection of historic heritage from inappropriate subdivision, use, and development
- the protection of protected customary rights.

The Proposed Natural Resources Plan for the Wellington Region identifies Taupō Swamp complex as 'significant' in 'Schedule F3: Identified significant natural wetlands'. The National Trust requests the status of Taupō Swamp complex is elevated to 'Outstanding'. To be recognised as an 'Outstanding' wetland, a wetland must meet the criteria of A1 Representativeness and any one of A3, A4, A5 or A6.

The National Trust commissioned Wildlands to assess Taupō Swamp following the criteria set out in the Proposed Natural Resources Plan. I have attached a copy of this assessment, which concludes that **'Taupō Swamp scores A for four criteria: Criterion 1 Representative, Criterion 2 Threatened Environment Classification, Criterion 3 Ecosystem or Habitat, and Criterion 9 Seasonal or Core Habitat. On this basis, Taupō Swamp is an Outstanding Wetland'**.

The National Trust also believes that Taupō Swamp deserves a higher level of protection than the rules afforded to it under the 'Significant' schedule. The section 32 report on Wetlands for the Proposed Natural Resources Plan for the Wellington region identifies significant resource management issues related to managing wetlands.

Issue 1.11

Indigenous ecosystems and ecosystems of importance to indigenous species are significantly reduced in extent and continue to be degraded. Ecosystem health and function across the region is compromised.

There are 2.3% of wetlands currently remaining in the Wellington region. Taupo Swamp covers 29.6 hectares. This makes it the largest remaining harakeke swamp in the Wellington region.

Issue 1.2

The lower reaches of rivers, lakes, estuaries and harbours are places where there is an accumulation of adverse effects of human activities on land, in water bodies and on the coast.

and

Issue 4.2

The ecosystem health and function of surface water bodies is being impaired by activities that degrade habitat quality, with some wetland and lowland stream ecosystems coming under particular pressure.'

Taupō Swamp is a receiving environment for the larger catchment. It is affected by a continuous accumulation of sedimentation from the culverts that feed water into the swamp from State Highway 1.

Porirua City Council's 'Northern Growth Area Structure Plan' proposes to develop a large area in the catchment of Taupō Swamp. Associated earthworks may exacerbate sedimentation and introduce environmental weeds to the swamp. Stricter rules offered for 'Outstanding' wetlands will help prevent these adverse effects during the development of this area.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Mike Jebson', written in a cursive style.

Mike Jebson
Chief Executive

