



AWAKINO AND FLAXMILL SWAMPS

SNA ID:	K018
Protection Status:	Includes QEII Covenants and Public Conservation Land (Marlborough School Conservation Area, Kaihu Forest (Pt Northland Conservation Park))
Area (ha):	134.15
Altitude Range (m):	11-85
Ecological District:	Tangihua/Kaipara
Grid Reference:	E1676680, N6027521
Property ID:	xxxx

VEGETATION TYPE	LANDFORM
Raupō reedland	Alluvium
raupō-harakeke-tī kōuka reedland	Alluvium
<i>Bolboschoenus fluviatilis</i> sedgeland	Alluvium
Raupō-tī kōuka reedland	Alluvium
Raupō- <i>Machaerina articulata</i> -alligator weed reedland	Alluvium
Raupō-harakeke reedland	Alluvium
Tī kōuka- <i>Coprosma propinqua</i> shrubland	Alluvium
Tī kōuka-kahikatea forest	Alluvium
<i>Eleocharis sphacelata</i> - <i>Machaerina rubiginosa</i> reedland	Alluvium
<i>Lepidosperma laterale</i> - <i>Gleichenia</i> sp. sedgeland	Alluvium
Kahikatea forest	Alluvium
Mānuka-harakeke shrubland	Alluvium
Alligator weed herbfield	Open water
Open water	
Goldwater et al. (2009)	

Flora	<i>Machaerina complanata</i> ('Threatened-Nationally Vulnerable') and <i>Coprosma rigida</i> (regionally significant) were recorded in 1999 and 2006 (SSBI P07/H040). <i>Carex secta</i> (regionally significant), <i>Coprosma rigida</i> (regionally significant), and <i>Potamogeton suboblongus</i> (regionally significant) were recorded in 2006 (SSBI P07/H040). <i>Coprosma tenuicaulis</i> (regionally significant) was recorded in 2009 during a survey by Wildland Consultants.
Fauna:	Australasian bittern (<i>Botaurus poiciloptilus</i> ; 'Threatened-Nationally Critical'), grey duck (<i>Anas superciliosa</i> ; 'Threatened-Nationally Critical'), spotless crane (<i>Porzana tabuensis tabuensis</i> ; 'At Risk-Declining'), North Island fernbird (<i>Bowdleria punctata vealeae</i> ; 'At Risk-Declining'), black mudfish (<i>Neochanna diversus</i> ; 'At Risk-Declining'), <i>Peripatus</i> sp. (regionally significant) and inanga (<i>Galaxias maculatus</i> ; 'At Risk-Declining') were recorded in 2006 (SSBI P07/H040). Black shag (<i>Phalacrocorax carbo novaehollandiae</i> ; 'At Risk-Naturally Uncommon') and North Island fernbird were recorded by Wildland Consultants in 2009. Banded rail (<i>Gallirallus philippensis assimilis</i> ; 'At Risk-Declining') (SSBI P07/H040). Grey teal (<i>Anas gracilis</i> ; regionally significant) also utilise the site (R. Hoetjes, NZ Fish & Game, pers. comm. 2009).
Notes/Comments:	The site comprises two ecologically significant, large and

	adjoining semi-fertile freshwater wetlands (Goldwater <i>et al.</i> 2009).																															
	Geology: Valley floor wetland on Holocene alluvium.																															
Significant:	Yes																															
Significance Justification:	<table><tr><th>Criteria Met</th><th>Justification</th></tr><tr><td>1a(i)</td><td>The site is representative for at least ten ecosystem types.</td></tr><tr><td>1a(ii)</td><td>Contains many wetland vegetation type(s) that would have existed circa 1840, e.g. raupō reedland.</td></tr><tr><td>1a(iii)</td><td>Contains a representative assemblage of fauna taxa including land freshwater fish and wetland birds.</td></tr><tr><td>1b(i)</td><td>The site comprises two nationally significant, large and adjoining semi-fertile freshwater wetlands.</td></tr><tr><td>1b(ii)</td><td>Not substantially degraded by anthropogenic activities.</td></tr><tr><td>2a(i)</td><td>The site occurs on 'Acutely Threatened' and 'Chronically Threatened' land environments.</td></tr><tr><td>2a(iii)</td><td>Vegetation exceeds the size threshold for swamps.</td></tr><tr><td>2b</td><td>Habitat for numerous 'Threatened', 'At Risk', and regionally significant taxa.</td></tr><tr><td>3a(ii)</td><td>Contains a high diversity of wetland plant species, including regionally significant and threatened species.</td></tr><tr><td>3b</td><td>Contains vegetation which reflects variations in moisture and water levels.</td></tr><tr><td>3c</td><td>Contains ecological sequences of indigenous reedland, sedgeland and forest vegetation.</td></tr><tr><td>4a</td><td>Wetland and forest function as a buffer to the upper catchment/tributary of the Awakino River.</td></tr><tr><td>4b</td><td>Large wetland complex, which provides hydrological connectivity to the upper catchment/tributary of the Awakino River.</td></tr><tr><td>4c</td><td>Wetlands provide habitat for one of the few black mudfish populations recorded in the Kaipara District. The site also provides important habitat for indigenous wetland birds and other species of indigenous fish.</td></tr></table>		Criteria Met	Justification	1a(i)	The site is representative for at least ten ecosystem types.	1a(ii)	Contains many wetland vegetation type(s) that would have existed circa 1840, e.g. raupō reedland.	1a(iii)	Contains a representative assemblage of fauna taxa including land freshwater fish and wetland birds.	1b(i)	The site comprises two nationally significant, large and adjoining semi-fertile freshwater wetlands.	1b(ii)	Not substantially degraded by anthropogenic activities.	2a(i)	The site occurs on 'Acutely Threatened' and 'Chronically Threatened' land environments.	2a(iii)	Vegetation exceeds the size threshold for swamps.	2b	Habitat for numerous 'Threatened', 'At Risk', and regionally significant taxa.	3a(ii)	Contains a high diversity of wetland plant species, including regionally significant and threatened species.	3b	Contains vegetation which reflects variations in moisture and water levels.	3c	Contains ecological sequences of indigenous reedland, sedgeland and forest vegetation.	4a	Wetland and forest function as a buffer to the upper catchment/tributary of the Awakino River.	4b	Large wetland complex, which provides hydrological connectivity to the upper catchment/tributary of the Awakino River.	4c	Wetlands provide habitat for one of the few black mudfish populations recorded in the Kaipara District. The site also provides important habitat for indigenous wetland birds and other species of indigenous fish.
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	indigenous fauna, or communities within the context of the Tangihua Ecological District	
	3. Rarity and distinctiveness	
	3.1 Site provides habitat for three nationally 'Threatened' and six 'At Risk' indigenous species as identified in the New Zealand Threat Classification System lists.	High
	3.3 Indigenous wetland vegetation that has been reduced to less than 20% of its former extent in the Tangihua Ecological District and the Northland Region.	High
	4. Ecological context	
	4.1 Site is a large size and compact in the context of freshwater wetland habitat remaining in the Tangihua Ecological District.	High
	4.3 Site provides a partial link between other Significant Natural Areas, e.g. Awakino East Bush (K019) to the north and Waihue Road Shrubland and Forest Remnant (K458) to the northwest.	Medium
	4.5 Site supports large numbers of indigenous fauna, including cryptic wetland birds, waterfowl, and freshwater fish.	High
Overall significance:	<p>The site is partially located in an 'Acutely Threatened' and 'Chronically Threatened' land environment and comprises two nationally significant semi-fertile freshwater wetlands. Wetlands are a regionally and nationally threatened habitat type, and this site is representative for ten ecological units. The wetlands provide an important area for threatened and regionally significant taxa, including a population of black mudfish.</p> <p>Rating: High</p>	
Threats/Modifications/Vulnerability (Desktop Assessment):	Willow weed, alligator weed and pampas are locally common in several areas of the site (Goldwater <i>et al.</i> 2009). NZ Fish & Game allow cattle to graze Flaxmill Wetland on a seasonal basis in order to control weeds such as kikuyu and pampas (Goldwater <i>et al.</i> 2009). Some indigenous plants have been heavily browsed (N. Goldwater, pers. obs. 2009).	
References:	Goldwater <i>et al.</i> (2009).	
Assessment for Significance Based On:	Northland 0.1 metre Urban Aerial Photos (2017) and existing information as cited above.	
Boundary Changes Since 1999:	Real change (increase and decrease): Boundaries adjusted to include a relatively large area of forest and scrub south of the original SNA boundaries, and a gully that connects to the eastern side of the site. A large area at the northern end of the site has been converted to pasture, and has been removed from the SNA.	
Field Work required?	Yes. Boundary needs to be surveyed to accurately determine wetland extent where it borders pasture.	
Assessment Date:	17/10/2019	