

APPENDIX C

SCHEDULE OF AREAS OF SIGNIFICANT NATURE CONSERVATION VALUE AND GEOPRESERVATION SITES (referred to as Sites of Natural Significance on the Planning Maps)

The following sites of nature conservation significance and geopreservation sites have been identified on the Plan.

AREAS OF SIGNIFICANT INDIGENOUS VEGETATION AND HABITAT OF INDIGENOUS FAUNA

12	Lake Dumbell	Map 4	H38 513 577	RAP A3, WERI: Large tarn surrounded by <u>C. macra</u> and <u>Dracophyllum pronum</u> community. The tarn supports the only population of <u>Marsippospermum gracile</u> found in the district. A new genus and species of <u>Carabidae - Megadopinae</u> was collected here, and an endemic weevil (<u>Lyperobius</u> spp) is present. Part Conservation Area.
19	Black Jacks Island	Map 7	H39 875 265	RAP B7: Habitat for three lizard species, including the rare scree skink, <u>Leiopisma ottagense</u> form <u>waimatense</u> . Largest island in the lake and supports a high diversity of potential habitats, and examples of some of the driest associations within the upper Waitaki, as well as high frequency of exotic plants. Notable plants include <u>Carmichaelia curta</u> (rare). Will be important as a benchmark for future scientific work.
62	Mt Ida	Maps 14 and 19	H41 812 829	RAP H12: Representative of vegetation and landforms of the high-alpine zone in the southwest of the district. Important as a type locality for the rare plant <u>Myositis oreophila</u> . Mount Ida contains an extensive alpine herbfields of <u>Celmisia viscosa</u> , which are not found elsewhere in the District, and large populations of vegetable sheep. The area contains scree skink habitat and is a key area for insect conservation.
81	Kakanui River Mouth	Maps 64 and 65	J42 449 556	SSWI: A river mouth lagoon confined behind a shingle barrier that provides suitable habitat for waders during winter. Bird species

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				recorded include black billed gulls, white heron, royal spoonbill, white fronted tern, spotted shag, black stilt, pied stilt and banded dotterel.
82	All Day Bay Lagoon	Map 29	J42 436 527	SSWI: Coastal lagoon with saltmarsh (<u>Carex</u> sp., <u>Scirpus</u> sp., <u>Cotula coronopifolia</u> , and <u>Sarcocornia quinqueflora</u>) providing good wader habitat. Wader species recorded include pied stilt, banded dotterel, royal spoonbill and white heron. Large and high diversity of waterfowl.
91	Katiki Point	Map 35	J43 388 279	SSWI: Rocky point with a scattering of salt-tolerant plants including <u>Coprosma repens</u> and <u>Hebe alliptica</u> . Important nesting area for birds, particularly the yellow-eyed penguin. Other birds recorded include white fronted tern, spotted shags, little blue penguins, and sooty shearwater. The site is a fur seal haul-out area. Katiki Point is a Historic Reserve under the Reserves Act.
92	Katiki Beach	Map 35	J43 388 231	SSWI: 6km of sandy beach with rocky outcrops. Beach grades from sand dunes with marram at northern end to soft rock cliffs in the centre and south. The threatened plant <u>Euphorbia gelauca</u> is present. The area has high habitat value for yellow-eyed penguin, and a good diversity and number of waders and seabirds. Species recorded include pied stilt, variable and South Island oystercatcher, white fronted tern, white faced and reef herons, little blue penguin, and little shag.
93	Shag Point	Map 35	J43 393 231	SSWI: Yellow-eyed penguin and sooty shearwater breed. Major haul-out for seals and shag roosting area. Unusual coastal vegetation includes alpine species such as snow tussock, <u>Celmisia hookeria</u> , as well as broadleaf, ngaio, flax and clematis. Includes Shag Point Recreation and Scientific Reserves.
99	Pleasant River Estuary	Map 38	J43 320 145	SSWI: Estuarine habitat with <u>Salicornia</u> saltmarsh, mudflats and sandspit. Valuable for waders and waterfowl, including Godwit, South Island and variable oystercatchers, pied stilt, banded dotterel, white faced heron, gull and shag species, and grey duck and grey teal. White fronted terns have been reported breeding on the sandspit, and fur seals have been recorded. The area is

102	Deighton Creek	Maps 33 and 36	I43 057 210	important for estuarine terrestrial invertebrates. Priority habitat area for Otago skink and Grand skink. Common skink, spotted common gecko also present. Deeply entrenched stream with extensive outcrops and bluffs. Vegetation includes snow tussock grassland, manuka and matagouri shrubland and outcrop vegetation. Significant historic values.
103	Emerald Stream	Maps 33, 34, 36 and 37	I43 080 238	Priority habitat area for Grand skink and Otago skink. Most diverse lizard population in the South Island. Other species include green skink, common skink, spotted common skink, speckled common skink and common gecko. Shallow valleys and gentle rolling ridges with extensive outcrops and bluffs along streams and standing tors. Vegetation includes snow tussock vegetation, manuka shrubland and outcrop vegetation. Falcon present.
106	Macraes Ponds	Map 72	I42 099 334	SSWI: Important waterfowl area. Rare moth <u>Gingidiobora nebulosa</u> present on local form of plant <u>Gingidia montana</u> .
G10	Kokoamu Bluff brachiopods	Map 17	I40 296 910	Abundant Duntroonian brachiopods in cliff face and fallen blocks below.
G26	Lorne Eocene Molluscan fauna	Map 26	J41 433 702	Very diverse Kaiatan Moluscan fauna and unusual hard-bottom fauna. Holostratotype of disused Waiarekan Stage.
G27	Old Rifle Butts	Map 26	J41 498 627	Section through Eocene pyroclastic volcano, superb and rare rhodolith deposits of the MacDonald limestone. Also Pleistocene penguin and sea eagle (?) remains and excellent raised Pleistocene beach.
G32	Trig M Eocene Brachiopod Fauna	Map 26	J41 445 623	Diverse Runangan brachiopod fauna in Totara Limestone.
G45	Moeraki Boulders	Map 32	J42 395 379	A group of about 20 concretions (1-2m in diameter) eroded out of rocks at the back of Moeraki Beach.
G46	Moeraki Peninsula erionite	Map 70	J42 421 362	Good examples of zolite, erionite and phillipsite, and barite.

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a	Nenthorn Ridge Wetland Management Area	Map 33	I43 057 243	This area contains a wide variety of wetland types including a low turf ephemeral tarn, a medium turf ephemeral tarn, <i>Purei</i> wetlands, pools, bogs and moist red tussock grasslands in a relatively small area (112 ha) on upper slopes and ridge crests at altitude 540 – 570m. The threatened herb <i>Gratiola nana</i> is present in the low turf ephemeral tarn at Emerald Creek, one of only 23 known locations throughout the South Island (Johnson 1993). Two locally rare species <i>Elatine gratioloides</i> and <i>Glossostigma</i> sp. Occur in the medium turf ephemeral tarns. A very diverse range of wetland vegetation, a distinctive insect fauna and a diverse and relatively abundant waterfowl fauna are present. A wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.
b	Redbank Wetland Management Area	Map 34	I43 085 275	A copper tussock wetland and a low turf ephemeral tarn. Altitude 470 – 654m. The threatened plant species <i>Isolepis basilaris</i> and <i>Myosurus minimus</i> subsp. <i>Novae zelandiae</i> are present in the low turf ephemeral tarn. A high diversity of wetland species is present. A diverse and interesting aquatic insect fauna in seepages and creeks, including the brown caddis (<i>Psilochorema tauroru</i>).
c	Paddy's Rock Ephemeral Tarn	Map 36	I43 051 177	A small low turf ephemeral tarn supports the threatened plant <i>Tetrachondra hamiltonii</i> on the tarn margin. The tarn has a high plant diversity. The tarn contains the native herb <i>Hypsela rivalis</i> , the sedge <i>Carex gaudichaudina</i> and the rush <i>Eleocharis acuta</i> .
d	Devils Bridge Lagoon	Map 23	J41 480 722	Previously an ephemeral lake, after installation of a weir this area has become a permanent lagoon protected by a QEII covenant. It provides important habitat for a high diversity of wetland bird species and is one of the few habitats of this type in North Otago. Habitat for marsh crake, banded rail, Australian coot, NZ scaup, white heron, white faced heron, pied stilt, grey teal, black swan, pukeko and others.

e	Kemps Road Lagoon	Map 35	J42 418 334	A shallow lagoon immediately inland from the mouth of Kemps Road Creek. Area 10 ha. Altitude 15m. Regionally significant waterfowl and wader habitat. Breeding and feeding area for a number of species including paradise, shoveller and grey ducks, grey teal, pied stilt, black swan and spur winged plover.
f	Goodwood Salt Marsh	Map 38	J43 316 152	A saltmarsh near the Pleasant River mouth. A scarce wetland type. The saltmarsh plant community contains <i>Sarcocornia quinqueflora</i> (glasswort), <i>Puccinellia</i> spp. <i>Atriplex</i> spp. <i>Selliera radicans</i> , <i>Samolus repens</i> and jointed rush.
g	Shag River Estuary Swamp	Map 35	J43 375 242	An area of saline swamp above the Shag River mouth. A scarce wetland type. The saltmarsh community contains <i>Sarcocornia quinqueflora</i> (glasswort), jointed rush, and <i>Atriplex</i> spp. A wetland which is highly valued by Kai Tahu for mahika kai or other waahi taoka.

