

BEFORE THE ENVIRONMENT COURT
I MUA I TE KOOTI TAIAO O AOTEAROA

IN THE MATTER	of the Resource Management Act 1991
AND	of an appeal under clause 14(1) of the First Schedule of the Act
BETWEEN	THE PRESERVATION COALITION TRUST (ENV-2018-CHC-285) Appellant
AND	DUNEDIN CITY COUNCIL Respondent

MINUTE OF THE ENVIRONMENT COURT
(1 April 2020)

Introduction

[1] This Minute is issued for the purpose of case management, the landscape experts having filed directly with the court their joint witness statement.

[2] Please find **attached** a copy of the joint witness statement and accompanying maps both dated 31 March 2020.

Where to from here

[3] Timetable directions for the exchange of evidence have yet to be made.¹

[4] Parties are to consider whether they now wish this appeal (or more particularly the relevant points of appeal) to be referred to mediation or set down for a hearing.

¹ See Record of Telephone Conference held 13 November 2019.



[5] I will direct the parties confer and report back to the court proposing directions. Note: if the parties wish the matter referred to mediation it is unlikely this will be scheduled during the COVID-19 lockdown. In saying that, if the points of appeal engage with matters integral with the proposed plan's strategic objectives and policies, or other higher order provisions such as the general objectives, the resolution of these appeal points is now pressing. The resolution of the planning maps may also be regarded as being of general 'strategic' importance to the implementation of the plan.

[6] The COVID-19 situation in New Zealand remains dynamic and I will, therefore, reserve leave for parties to seek amended (or other) directions, should this be appropriate in the future.

Directions

[7] The parties are to confer and file a memorandum seeking further directions by **Friday 1 May 2020**.

[8] Leave is reserved for parties to seek further (or other) directions.

J E Borthwick

Environment Judge

Issued: 1 April 2020

LANDSCAPE ARCHITECTS JOINT WITNESS STATEMENT

IN THE MATTER of an appeal under the Resource Management Act 1991 (the Act)

BETWEEN The Preservation Coalition Trust ENV-2018-CHC-285

AND Dunedin City Council

Facilitator Ross Dunlop

Date 19 February 2020, and 11-12 March 2020

Venue Southern Cross Scenic Hotel, Dunedin

Witnesses Di Lucas (The Preservation Coalition Trust)

Mike Moore (Dunedin City Council)

Introduction

1. This joint statement relates to expert conferencing on the topic of landscape architecture.
2. It is written in relation to the appeal brought by The Preservation Coalition Trust (PCT) against the decision made by Dunedin City Council (DCC) on the Proposed Second Generation District Plan (2GP).
3. This conference was held on 19 February 2020, and 11 – 12 March 2020 at the Southern Cross Scenic Hotel, High Street, Dunedin.
4. The conferencing was facilitated by Ross Dunlop.
5. Attendees at the conference were:
 - a. Mike Moore on behalf of DCC
 - b. Di Lucas on behalf of PCT
6. The recorder was Katherine Quill.
7. This joint statement is prepared in accordance with section 4.7 of the Environment Court Practice Note 2014.
8. In particular it is confirmed that all present have read the Environment Court Practice Note 2014 in respect of Appendix 3 – Protocol for Expert Witness Conferencing and agree to abide by it.
9. This Joint Witness Statement contains the following matters:
 - a. Methodologies agreed and applied
 - b. Issue statements
 - c. ONL, ONF and SNL mapping attributes and values
 - d. Rural residential zoning within the pONL.



CODE OF CONDUCT

10. We have complied with the Code of Conduct for Expert Witnesses.

Date: 31 March 2020



Di Lucas

Mike Moore

ATTACHMENTS

- a. Appendix 1: 2GP Policy 2.4.4.1
- b. Appendix 2: Proposed Regional Policy Statement for Otago Schedule 3.
- c. Appendix 3 Maps sheets 1 – 13 (print at A3 size)
 - sheet 1 Place Names
 - sheet 2 Geological Map of the Dunedin District (excerpt) Benson, W.N. 1968. NZ Geological Survey, DSIR
 - sheet 3 Geological Map Legend
 - sheet 4 Geopreservation Sites
 - sheet 5 Marine Habitat
 - sheet 6 Wāhi Tūpuna
 - sheets 7-11 Proposed Landscape Overlays
 - sheet 12 pONL as per PCT
 - sheet 13 Rural Residential 1 and 2 Zone sites, & Proposed Landscape Overlays



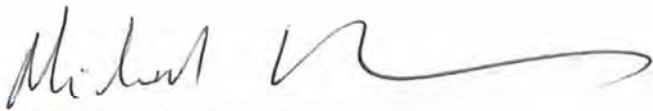
CODE OF CONDUCT

10. We have complied with the Code of Conduct for Expert Witnesses.

Date: 31 March 2020



Di Lucas



Mike Moore

ATTACHMENTS

- a. Appendix 1: 2GP Policy 2.4.4.1
- b. Appendix 2: Proposed Regional Policy Statement for Otago Schedule 3.
- c. Appendix 3 Maps sheets 1 – 13 (print at A3 size)
 - sheet 1 Place Names
 - sheet 2 Geological Map of the Dunedin District (excerpt) Benson, W.N. 1968. NZ Geological Survey, DSIR
 - sheet 3 Geological Map Legend
 - sheet 4 Geopreservation Sites
 - sheet 5 Marine Habitat
 - sheet 6 Wāhi Tūpuna
 - sheets 7-11 Proposed Landscape Overlays
 - sheet 12 pONL as per PCT
 - sheet 13 Rural Residential 1 and 2 Zone sites, & Proposed Landscape Overlays



MATTERS IN DISPUTE

Essentially the Trust's appeal is concerned with the mapping of ONLs on the Otago Peninsula and to the north of the Otago Harbour (refer Appendix 3. Map sheet 1). The Trust seeks that recognised ONLs are expanded and adjoining Significant Natural Landscapes (SNLs) largely become ONLs with fine tuning around settlement boundaries.

The Trust also challenge the appropriateness of a number of Rural Residential 1 (RR1) and Rural Residential 2 (RR2) zones within the appeal area. Whilst planning provisions, including for the Landscape Overlays, are also challenged by PCT, their adequacy for achieving appropriate landscape management through zoning and overlays has not yet been addressed by the witnesses. Thus the agreed recommendations for the RR areas assume adequate landscape provisions will eventuate through the appeal process.

MATTERS OF HIGH-LEVEL AGREEMENT

1. The witnesses are agreed that the landscape areas subject to the appeal can be reconfigured as follows with boundaries shown in Appendix 3, Map sheets 7 - 11:
 - a. Otago Peninsula ONL
 - b. Peninsula Harbourside SNL
 - c. Harbour Islands and Portobello Peninsula ONF
 - d. Heyward Coast ONL
 - e. Pūrākaunui SNL
 - f. Mt Cargill ONL
 - g. West Harbour SNL
 - h. Flagstaff/Mt Cargill SNL
2. The witnesses are agreed that consequential changes of ONL, ONF and SNL descriptions and values to be protected at Appendix A3 to the 2GP are required to reflect the changed delineations supported at paragraph 1 above and to adequately guide protection of the landscapes and feature.

The JWS text that follows addresses these agreed ONL/SNLs as opposed to the ONL/SNLs shown in the 2GP and the PCT appeal and subsequent related documents.



ISSUES

1. Methodology used by witnesses for assessment of ONL, ONF and SNL

1.1 The Attributes to be Used

The 2GP is to implement the Otago proposed RPS. The witnesses are agreed that the factors (variously called values and criteria) to be used for the assessment of ONL in the 2GP do not align in all regards with the corresponding factors in the Otago proposed RPS. Copies of the relevant provisions from the respective instruments are attached as Appendix 1 and 2 (2GP policy 2.4.4.1. and Otago pRPS Schedule 3). Relevant differences between the two instruments are:

- a. pRPS groups factors/criteria under biophysical, sensory and associative attributes
- b. The 2GP does not group them in this way, and omits the presence of water, vegetation, and wild or scenic.

In order to provide a comprehensive list of assessment factors the witnesses have adopted the proposed RPS factors at Appendix 2 but with expanded factors to recognise a bi-cultural lens, such as at paragraph 1a and 2b, and substituting 'aesthetic' for 'amenity' values at 2b, recognising that "aesthetic" references all senses - sound, smell, sight, feel, movement and memory). The assessment factors agreed and applied by the witnesses are therefore as follows with changes from the pRPS underlined:

1. Biophysical attributes

- a. Natural science factors, including geological, topographical, ecological and dynamic components, and as mātauraka Māori
- b. The presence of water including in seas, lakes, rivers and streams
- c. Vegetation (native and exotic)

2. Sensory attributes

- a. Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes
- b. Aesthetic values including memorability (pupuri), and naturalness.
- c. Transient values including presence of wildlife or other values at certain times of the day, night, season or year
- d. Wild or scenic values.

3. Associative attributes

- a. Whether the values are shared and recognised
- b. Cultural and spiritual values for Kāi Tahu, identified by working as far as practicable, in accordance with tikanga Māori, including their expression as cultural landscapes and features
- c. Historical and heritage associations

Rather than a traditional Euro-centric bias, the witnesses agree that bi-cultural relationships with natural landscapes should be recognised with regard to all attributes, thus Māori values should not be confined to consideration as a single associative attribute for Manawhenua. As defined in the 2GP, we recognise wāhi tupuna



are “Landscapes and sites that embody the ancestral, spiritual and religious traditions of all the generations prior to European settlement”. We agree that further liaison by Dunedin City Council with rūnaka as kaitiakitaka is appropriate to refine the landscape descriptions, attributes and values articulated in this JWS.

The witnesses are agreed that the above assessment factors cover those in the NZCPS Policy 15. The witnesses note that several base studies, including Boffa Miskell 2007, pre-date the NZCPS or did not assess this range of attributes, including Moore 2013, and that a 2020 re-assessment as provided in this JWS is appropriate.

1.2 Landscape scale

Another aspect of methodology to be considered is the scale at which landscapes are to be identified and the essential arbitrariness of their separation. Nevertheless, the witnesses accept that for administrative and practical purposes, lines must be drawn on the planning maps to rationally distinguish one landscape from another. In this respect the expert witnesses are agreed that:

- a. A line separating landscapes is essentially arbitrary
- b. Frequently landscapes involve some overlap e.g. a ridge, peak or headland may belong to the landscapes on all sides of that landform
- c. Cross-boundary landscape values need to be addressed, including areas below MHWS, and not within the jurisdiction of territorial authorities, which may contribute importantly

1.3 Landscape Rating involves:

Both witnesses have applied qualitative ratings to the various landscape attributes. Mr Moore and Ms Lucas have rated the various attributes (biophysical/Sensory/Associative) using a seven point rating scale (Very High/ High/ Medium – High / Medium / Medium – Low / Low / Very Low). They have then (qualitatively) determined an overall rating, including an assessment as to whether the landscape or feature is outstanding, or if not outstanding, whether the landscape is adequately natural and significant to be addressed as an SNL.

The ratings recognise the landscape context, with less intact naturalness anticipated on an urban periphery than in a remote location.

The witnesses agree that to be considered an ONL, a landscape needs to be sufficiently natural, and that, whilst an overall judgement is applied, to rate overall as an ONL a landscape would be expected to rate highly in at least two attributes, or very high in at least one.

1.4 ONL/ONF relationship

The 2GP maps ONLs and ONFs separately. Whilst ONFs can be addressed at various scales, in the 2GP they sit within surrounding landscape(s). So, whilst separately delineated, the ONF and ONL need to be considered together. ONF areas are typically important contributors to associated ONL and SNL.

The witnesses agree that the areas identified as SNL (Significant Natural Landscape) in the JWS maps are of an intermediate spatial scale to read as landscapes.



Witnesses agree that consideration of SNL appropriately includes the contribution of associated ONL, ONF and/or of waters of the CMA.

1.6 Landscape Values

A preliminary list of values has been identified for each landscape. With agreement on the ONL, ONF and SNL delineations and attributes, the witnesses agree that revision of descriptions and values is needed in the relevant parts of 2GP Schedule A3. We agree too, that liaison with Manawhenua and planning expertise is also necessary to advance these provisions.



2. Application of Assessment Factors to Individual Proposed ONLs, ONFs and SNLs

2.1 Otago Peninsula ONL

2.1.1 Spatial Extent of ONL

The witnesses agree the Otago Peninsula ONL comprises a large volcanic landform complex, defined by the surrounding coast, within which are several landscape units, including summit, harbour and ocean orientated units. Both witnesses consider that the Otago Peninsula is part of the broader Dunedin volcanic landscape complex (refer Map sheets 2 - 3 Benson, W.N. 1968. Dunedin District. NZ Geological Survey Map, DSIR).

2.1.2 Biophysical Attributes

The witnesses agree that the Otago Peninsula ONL demonstrates the following biophysical attributes:

2.1.2.1 Important natural science factors

Important natural science factors (including geological, topographical, ecological and dynamic components, including as mātauranga Māori) are:

- i. The complex geological history, with the series of volcanic eras beginning 15 million years ago displayed across and along the Peninsula, and their interface with deposition lands resulting in important displays of geodiversity.
- ii. Distinctive natural landforms include steep spur and gully hillsides descending from prominent volcanic knolls and ridges. The iconic Pukemata (Harbour Cone), protruding through much earlier volcanic formations, provides a significant centrepiece.
- iii. Tall cliffs, bays and beaches result from the high level of coastal erosion on the ocean side. Features include sea stacks reefs and extensive sand-blown dunes, as well as dramatic cliff features and impounded inlets
- iv. Some distinctive natural landforms include:
 - Pukekura (Taiaroa Head)
 - Peggys Hill
 - Sandfly Bay dunefields
 - Sandymount Sea Arch
 - Hoopers and Papanui Inlets and associated dunefields as significant depositional features.
 - There are geopreservation sites which include Sandymount lime kilns, Sandymount terracettes, Sandfly Bay lag surface, ventifacts and earth flow, Lovers leap volcanic section and sea arch, The Chasm, Hoopers Inlet drowned valley, Papanui Inlet drowned valley, Otago Peninsula Pyramids, Larnach Castle (reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand) (refer Map sheet 4 attached).

The whole Peninsula is a physically striking landscape, its geodiversity and vegetative cover reflecting the extreme climatic conditions on the seaward flank plus the more serene harbour and



inlet facing areas below the rounded volcanic-coned summit lands.

- vi. The extensive Papanui and Hoopers inlet systems, saltmarsh and salt meadows provide valued habitat for numerous native and exotic species.
- vii. The Peninsula coasts demonstrate a diversity of in-shore marine environments. Seaward there are the exposed shallow reefs and exposed shallow beaches, each with different marine ecosystems. In the inlets, there are estuarine sandflats and mudflats with their own estuarine biota. Coastal wildlife includes internationally renowned colonies of Toroa/Northern Royal Albatross and Hoiho/Yellow-Eyed Penguin as well as Hooker sea lions and seals. As well as the inlets, the ocean reefs provide particularly important marine habitat (refer Map sheet 5 Marine Habitat).
- viii. Other wetlands also contribute important habitats. Identified significant wetlands (Otago Regional Plan: Water) include: Papanui Inlet Salt Marsh, Ōkia Flat dune hollows, Tomahawk lagoons and Hoopers Inlet swamp.
- ix. The extent, integrity, coherence and natural character of the Peninsula land and water elements, including the landforms, streams, areas of remnant and regenerating indigenous vegetation, and the indigenous fauna, all provide significant natural value.

2.1.2.2 The presence of water

The volcanic complex has been somewhat inundated and eroded by coastal processes, particularly marine currents and storm action. The area is surrounded by and orientates strongly to the South Pacific Ocean and Otago Harbour. There is also the presence of tidal inlets (Papanui and Hoopers) as well as the Tomahawk lagoons on the ocean side. The high energy open ocean contrasts with the gentler inlets and harbour, and their feeder spring, stream and wetland areas.

2.1.2.3 Vegetation

The area is largely pastoral with areas of remnant / regenerating forest and duneland / wetland (e.g. Taiaroa Bush and Ōkia Reserve), and, below MHWS, reefs with associated kelp forests.

The witnesses agree that the biophysical attributes are particularly significant on the ocean side of the Peninsula in a way that differentiates it from the Harbourside reflecting the more vigorous marine and climatic environment. This is expressed in a more natural shoreline and greater concentration of important natural ecosystems and geomorphic features.

Along with mātauranga Māori, they consider the geological, topographical and ecological components of the summit lands and harbour slopes together contribute important and different natural attributes. The contrasting oceanic and harbour character is a natural response to differing natural origins and processes.

In total the witnesses rate the biophysical attributes of the Otago Peninsula ONL as high.



2.1.3 Sensory Attributes

The witnesses agree the Otago Peninsula demonstrates the following sensory attributes:

2.1.3.1 Legibility or expressiveness

- o The complex array of volcanic promontories, the subsequent 10 million years of erosion (marine, wind and water) and coastal deposition, are together strongly legible in the landforms. The vigorous oceanic climate is expressed in wind-shorn native and exotic vegetation. Compared to the current regime, a previous more intensive late 19th century dairy farming landscape is still legible in the landscape (rock walls/homestead plantings and ruins).
- o For manawhenua their tūrakawaewae and wāhi taoka have very important memorability and legibility. The 2GP recognition of wāhi tūpuna assists other persons to appreciate the experience of manawhenua. Refer 2GP Appendix Wāhi Tūpuna A4.41 Upper slopes and Peaks of Otago Peninsula (refer Map sheet 6).

2.1.3.2 Aesthetic values including memorability and naturalness

- o High aesthetic values (including memorability, pupuri, naturalness and other sensory experiences) provided through the range and drama of the array of landforms experienced as encircled by the contrasting lengths of ocean coast and inlets. The landscape is variously enjoyed from high on the Peninsula (knolls, ridges, flanks and promontories) from low fringes, from surrounding waters and from lands beyond the Peninsula.
- o Experience of the peninsula landscape with important natural and cultural features, including Hereweka (Harbour Cone), Poatiri (Mt Charles), Pukekura (Taiaroa Head) and many others.
- o The degree of naturalness is a significant subset of aesthetic values. Naturalness is expressed strongly across and along the Peninsula through the dominant volcanic landform suites, and on the open ocean side the evident powerful ongoing natural processes. The landscape is diversely vegetated. After 150 years of farming, the landscape retains significant naturalness due to generally legible natural landforms beneath pasture, scrub and marram cover, and areas of indigenous vegetation. Also built elements and associated exotic plantings are generally sparse and small-scale throughout, and subservient to natural elements.
- o The degree of memorability is also a significant subset of aesthetic values. The Peninsula is a highly memorable landscape due to the complex array of volcanic landforms protruding within the encircling coast. Cliff-edged headlands are interspersed with sandy beaches, dramatic erosional features (e.g. The Chasm and Lovers Leap) and active dune systems, volcanic landforms (e.g. Mt Charles / Poatiri), and the relationship of the landforms with the drowned valley inlets. From high on the Peninsula, wide views are enjoyed along the summit and the slopes below to north and south. From lower areas more confined views are enjoyed of the inlets, headlands and beaches seaward; and, inland of the inner and outer harbour lengths and enclosing lands opposite. For Manawhenua, pupuri is recognised in Wāhi Tūpuna. The variety of experiences, including dramatic landform features such as Harbour Cone, contribute to the memorability of the Peninsula. At the smaller



scale, heritage farming features e.g. volcanic stone walls and historic macrocarpa shelter belts also contribute to memorability across the Peninsula.

2.1.3.3 Transient values

- o A night sky with capacity to view astronomical features is an important transient attribute. Hoopers Inlet, on the ocean side of the peninsula, is recognised in tourist information (e.g. nzpocketguide.com) as one of the top New Zealand locations to view Aurora Australis (Southern Lights).
- o Transient values also include the presence of distinctive wildlife (e.g. penguins, albatross, sea lions, seals), the biota of reef and inlet habitats, the weather - storms, southerly winds and presence of fog, sea state, and, light effects. We agree the transient values overall are high for the Peninsula landscape.

2.1.3.4 Wild or scenic values

- o The dominance of the natural volcanic landform array encircled by the varied natural coastline result in very high scenic values throughout. The natural elements, forms and processes orientated to the open ocean gives the peninsula high wild values.
- o The witnesses agree that the Peninsula has high memorability attributes due to the dramatic volcanic and erosional landforms, the scenic values, the qualities of wildness and naturalness, and, the peninsula coastline definition.

In terms of sensory attributes overall, the witnesses agree that the peninsula has high values on the basis of highly legible volcanic landforms, naturalness of the coastal landscape, the memorability / pupuri, and, the wild and scenic values. Significant transient values associated include the presence of marine wildlife.

2.1.4 **Associative Attributes**

We agree the Peninsula demonstrates the following associative attributes:

2.1.4.1 Shared and recognised values

The whole area has been recognised as of great cultural significance to Kāi Tahu. The summit lands right through to Taiaroa Head / Pukekura, and down the ocean side include well-recognised tourist and recreational destinations for their wildlife and natural landscape values. The peninsula in overview and as viewed from beyond is a recognised signature landscape of Dunedin. In part the peninsula has been accepted as an ONL for some years in the Dunedin City District Plan.

2.1.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori, including their expression as cultural landscapes and features.

Various peninsula slopes and summit lands are important to Te Rūnanga o Ōtākou tribal identity. The peninsula is valued as the ancestral home of the rūnaka. In total, the area is a highly significant cultural



landscape as the context for the signing of the Treaty of Waitangi at Muaupoko in 1840. The eastern end of the peninsula was reserved from the sale of the Ōtākou block in 1844 as significant land to iwi.

The peninsula cultural landscape involves a dense whakapapa. Wāhi tūpuna listed in the 2GP Appendix A4 include Pukekura (Taiaaroa Head – Pā), Ōtākou Harbour and views across, Ōkio (settlement), Tuhiraki and Takakitaka o Te Piro o Kapo (Papanui Inlet islands wāhi tapu), Poatiri (Mt Charles – cultural marker), Papanui Beach (settlement site), Te Pahi (Allans Beach – settlement site), Pukemata (Harbour Cone – mauka), Pikiwhara (Sandymount and Sandfly Bay (kāika and urupā), and Ocean Grove (settlement site) (refer Map sheet 6).

2.1.4.3 Historical and heritage associations

The area has important historic and heritage associations for Manawhenua, including in relation to the signing of the Treaty of Waitangi. As cued to in Wāhi Tūpuna, there are many important historic sites around the peninsula, including early Kāti Māmoe settlement sites and many later Kāi Tahu sites. Pre-settlement the peninsula was well-covered in native forest and a village at Papanui Inlet involved a large moa hunter site located close to seal colonies.

There are heritage structures (as per 2GP Appendix A1.1) including – the Mathieson complex (Centre Road), The Soldiers Monument (Highcliff Rd), Smail's Homestead, Lime kilns, Taiaaroa Head lighthouse, fog station, and Fort Taiaaroa, and Pukehiki Community Church. Other significant heritage areas / sites include the gold battery and mining site at harbour Cone and the wreck of the Victory at Victory Beach, Larnach Castle and stables, drystone walls, and the Mathieson homestead and cheese factory. More widely, a 19th century dairy farming landscape is still legible in paddock layouts, exotic shelter plantings, old buildings and stone walls giving the area a heritage character.

We agree that there are high associative values that apply to the Peninsula ONL.

2.1.5 Summary

Otago Peninsula ONL

	Mike Moore	Di Lucas
Biophysical attributes	High	High
Sensory attributes	High	High
Associative attributes	High	High
OVERALL JUDGEMENT	HIGH – ONL	HIGH - ONL

The witnesses agree that the Otago Peninsula ONL extends from the seaward coast up and across the summit lands and down harbourside slopes to include the wāhi tūpuna 'Upper slopes and peaks of Otago Peninsula' boundary (A4.41) and that this mapping appropriately reflects the high associative significance of summit and slope areas and the significance in terms of sensory values of the volcanic upper landforms. It is agreed that the complexity of volcanic landforms and the varied encircling coast to the peninsula are of such



high biophysical, sensory and associative value that the peninsula landscape is appropriately assessed as an ONL.

2.1.6 ONL values to be protected

We agree that the 'description of area' and 'values to be protected' statements in Appendix A3.2.3 of the 2GP (relating to the Peninsula Coast ONL) require amendment. This is because the spatial extent of the ONL has been reconfigured and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP appendix A3.2.3 in this regard. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, we include a suggested statement for the Otago Peninsula ONL as follows:

2.1.7 Otago Peninsula Outstanding Natural Landscape

VALUES TO BE PROTECTED

Biophysical values

- The array of landforms from three volcanic eruptive phases.
- The interplay between marine and terrestrial environments.
- The natural science values of the listed geo-preservation sites.
- Remnant and recovering indigenous ecosystems, and the habitat for indigenous wildlife (terrestrial, avian and marine).
- Natural character values of the coastal environment and wetland areas.
- The extent, integrity and natural character of the natural landscape elements.
- The marine interface involving valued habitats and biota.

Sensory values

- Legibility of the suite of natural landforms.
- The visual coherence, with land cover and land use patterns reflecting the natural topography.
- The dominance of underlying natural patterns, processes and elements.
- Naturalness of slope and summit landforms and legibility of wāhi tūpuna.
- The characteristic and signature biota evident or known, terrestrial, avian and marine.
- Low impact of built elements, earthworks, and exotic tree plantings.
- Qualities of wilderness and isolation.
- The integrity of the scenic qualities.
- The natural darkness of the night sky.
- The extent and quality of views across the landscape from public roads and tracks.



Associative values

- The peninsula in total, in overview and from within, has long been a recognised natural landscape icon.
- Landscape values associated with wāhi tūpuna as listed in Appendix A4 (2GP)
- Associations with the native reserve lands.
- Legacies of early European settlement including historic buildings and structures and shelter and amenity plantings.
- Heritage landscape qualities and the legibility of the previous more intensive dairy farming land use.



2.2 Peninsula Harbourside SNL

2.2.1 Spatial Extent of the Peninsula Harbourside SNL

This area encompasses the rural, mid-lower slope harbourside lands of the Otago Peninsula. The area forms an important context and foreground to the volcanic landscape complex protruding above and seaward. Its upper boundary is defined by the wāhi tūpuna above - 'Upper slopes and peaks of Otago Peninsula boundary (A4.41). Whilst the lower boundary excludes the areas zoned township and settlement, the area forms the immediate setting of the harbourside settlements and is influenced by the presence of these and by the adjacent harbour waters and sand flats. The area excludes Portobello Peninsula (which is addressed within an ONF – see below).

The area forms the immediate rural landscape context to the harbourside settlements including Macandrew Bay / Company Bay, Broad Bay, Portobello, Harwood and Harington Point. Between settlements, the SNL boundary is along the harbour shoreline which has in part been modified by reclamation and rock walling associated with Portobello and Harington Point Roads.

Reasons for Landscape Status

2.2.2 Biophysical Attributes

This area forms part of the Otago Harbour volcanic caldera landscape between Taiaroa Head in the north-east through to urban Dunedin in the south-west. The peninsula harbourside landscape involves outer and inner harbour lengths, either side of the 'harbour divide' of Portobello Peninsula and the islands.

The landscape is predominantly pastoral but with areas of regenerating indigenous forest, some native shrubland on hill slopes, and areas of exotic woodlots. There are extensive sand flats at Harwood.

We agree the Peninsula Harbourside demonstrates the following biophysical attributes:

2.2.2.1 Important Natural Science Factors

Important natural science factors (including geological, topographical, ecological and dynamic components, and as mātauraka Māori) are:

- An eroded volcanic landscape legible in the topography
- Geopreservation sites including Harwood earth flow and Harwood stranded sea cliffs.

2.2.2.2 The presence of water

The area orientates and strongly relates to, Otago Harbour. Springs and streams lead from the volcanic lands above to the harbour waters below, with biota moving between them. In mātauraka Māori, the land-water interplay is of significance. The associated harbour waters were major mahika kai.

2.2.2.3 Vegetation



There are a few areas of significant biodiversity value including forest remnants / regenerating forest at Collinswood Bush and Grassy Point. Whilst the lands are largely pastoral, with some native shrubland-clothed slopes, there are numerous areas of remnant / regenerating native forest, including on roadsides. These areas cue to the past and potential naturally forested landscape. Historic *Macrocarpa* trees and hawthorn hedgerows are also present.

We agree that the area has medium - high values associated with biophysical attributes. This rating factors in the contribution to the legible volcanic landforms of the peninsula, the presence of a few sites of geopreservation and ecological significance, the dispersed native vegetation, the waterways, wetlands and harbour, the largely non-built character across the landscape, but also the considerable modification along much of the harbour shoreline.

2.2.3 Sensory Attributes

We agree the Peninsula Harbourside demonstrates the following sensory attributes:

2.2.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes: We agree that the old volcanic landforms are generally legible under the current pastoral cover. The naturally forested character is evident in areas of secondary and regenerating cover. A previous more intensive dairy farming landscape is still somewhat legible in the landscape (rock walls / homestead plantings). These lands have a highly legible relationship with and across the harbour waters of the crater basin.

2.2.3.2 Aesthetic values including memorability and naturalness

We agree that naturalness is modified by adjoining settlements, harbourside roads and reclamation, however the area has a limited scatter of structures, highly legible natural landforms, and is well-vegetated with patches of indigenous cover, and, connections to and across the harbour waters.

We agree that the Peninsula Harbourside is a memorable landscape based on the enclosure of settlements by the well-vegetated or pastoral, landform-dominated rural landscape, and the associations with harbour waters and overall harbour landform. There is variety in character and naturalness from the inner to the outer harbour. Closely associated with Ōtākou Marae, this landscape has important pupuri / memorability and naturalness.

Whilst the most memorable elements are beyond the confines of the mapped SNL (e.g. the hill summits, the harbour waters and the harbour peninsula-island feature), the rural / natural character of the land included, together with the associated ONF, contributes importantly to the wider harbour and peninsula landscape values.



At the smaller scale, heritage farming features e.g. stone walls and historic macrocarpa shelter belts also contribute to memorability.

2.2.3.3 Transient values

We agree that the Peninsula Harbourside landscape has important transient values including tidal, seasonal and biotic rhythms, marine smells (a transient aesthetic attribute), the presence of seabirds and occasional marine mammals, lighting effects on the hillslopes, and, various moods associated with different weather conditions.

2.2.3.4 Wild or scenic values

This area faces the relatively sheltered harbour and the landscape character is generally not wild. There are scenic qualities associated with the legible volcanic landforms, the heritage rural character, and, the harbour basin and peninsula context.

In terms of values associated with sensory attributes overall, we agree that they are generally high.

2.2.4 **Associative Attributes**

We agree the Peninsula Harbourside SNL demonstrates the following associative attributes:

2.2.4.1 Shared and recognised values

We agree that the harbourside of the peninsula is valued for its scenic landscape qualities and opportunities for recreation (sight-seeing, walking, cycling, and boating). It contributes to the whole peninsula as an important national landscape signature, a valued area to relate to, and to visit. The rural landscape values have been recognised as a Landscape Conservation Area in the 2006 Dunedin District Plan, and, enjoys shared recognition by Kāi Tahu.

2.2.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori, including their expression as cultural landscapes and features.

Including Ōtākou Marae, this area at the centre of the cultural and spiritual relationship with the rohe, including with lands to and across the harbour waters, is a valued cultural landscape.



Wāhi tūpuna include Wellers Rock (tauranga waka), the Ōtākou Marae Reserve (Wharenui / urupā), the Ōtākou Native Reserve, the associated harbour waters, and, the mauka, the peaks visible around the harbour and peninsula. The Ōtākou Harbour is significant for mahika kāi and transportation. (refer Map sheet 6)

2.2.4.3 Historical and heritage associations

The site for the signing of the Treaty of Waitangi in 1840, the Ōtākou landscape is a significant heritage landscape. The eastern end of the peninsula was then reserved from the sale of the Ōtākou block in 1844 as significant land to tangata whenua. Ōtākou was an important area of pre-European settlement with various historic pa and kāika recognised. It was an important area of early European / Māori contact. There was a whaling station at Wellers Rock in the 1830's. The 'City of Otago' at Te Rauone was burned in 1831 following the Whareakeake affray. In the 1850's, windblown sand buried the village of Te Ruatitiko at Te Rauone.

There are heritage structures including Ōtākou church and marae, Otago Harbour walls, and Glenfalloch, In places a 19th century dairy farming landscape is still legible in paddock layouts, exotic shelter plantings, old buildings and stone walls giving the area a heritage character.

We agree that the Peninsula Harbourside landscape has high associative values.

2.2.5 Summary

Peninsula Harbourside SNL

	Mike Moore	Di Lucas
Biophysical attributes	Medium - High	Medium - High
Sensory attributes	High	High
Associative attributes	High	High
OVERALL JUDGEMENT	SNL	SNL

The witnesses agree that the Peninsula Harbourside landscape has high sensory and associative values with a level of modification that makes SNL status appropriate. Overall, it is our assessment that an SNL overlay will appropriately recognise the contribution of the rural mid–lower slope lands to the wider Otago Harbour and Peninsula landscape.

2.2.6 SNL Values to be Protected

We agree that the 'description of area' and 'values to be protected' statements in Appendix A3.2.5 of the 2GP (relating to the North-West Peninsula SNL) require amendment. This is because the spatial extent of the SNL has been reconfigured and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical,



sensory and associative attributes above will inform the redrafting of 2GP appendix A3.2.5 in this regard. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, a suggested statement for the Peninsula Harbourside SNL follows:

2.2.6.1 Peninsula Harbourside Significant Natural Landscape

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:

Biophysical values

- The extent, integrity and natural character of the natural landscape elements.
- The regenerating native forest, shrubland and sandflats.
- The integrity of the natural landforms.
- The natural science values of the listed geo-preservation sites.
- Indigenous biodiversity and habitat for indigenous wildlife.
- Interconnections with the marine environment.
- Natural character values of the coastal environment.

Sensory values

- Legibility of the natural landform and associated visual coherence of the landscape i.e. patterns of land use reflecting the underlying topography.
- Naturalness of landforms, including lowlands, slopes, summits and ridgelines.
- Low impact of built elements and earthworks, of exotic tree plantings, and the significant relative dominance of natural landscape elements.
- The extent and quality of views across the landscape from public roads and tracks.
- Naturalness attributes of the rural landscape which provide backdrop and containment to the discrete harbourside settlements.
- Respectful relationships to wāhi tūpuna and to Ōtākou Marae.

Associative values

- Cultural, spiritual and heritage landscape values associated with place names, landforms, waters and wāhi tūpuna such as listed in Appendix A4 (2GP).
- Legacies of early European settlement including historic buildings and structures, and, shelter and amenity plantings.
- Heritage landscape qualities, including the legibility of the previous more intensive dairy farming land use.



- The contribution of the rural character of the area to the shared and recognised natural and amenity values of the harbour landscape.



2.3 Harbour Islands and Portobello Peninsula ONF

2.3.1 Spatial Extent of the Harbour Islands and Portobello Peninsula ONF

This area encompasses Goat Island (Rakiriri), Quarantine Island (Kamau Taurua) and all of Portobello Peninsula beyond the township and settlement zone boundary but excludes the Portobello Marine Science Mapped Area.

Reasons for Landscape Status

2.3.2 Biophysical Attributes

The witnesses agree that Rakiriri (Goat Island), Quarantine Island (Kamau Taurua) and Portobello Peninsula form an entity as the 'volcanic divide'. These landforms between Portobello and Port Chalmers are remnants of the original vent to the Dunedin Volcano, from some 16 million years ago, that then formed a ridgeline separating valleys draining north-east and south-west to either side. Rakiriri and Kamau Taurua are already recognised in the 2GP as ONF's and it is our assessment that it would be appropriate to treat the three natural landforms as a single ONF.

Rakiriri (Goat Island)—is the smaller of the two mid Otago Harbour islands and is covered in indigenous bush. Two flattened areas, retained by rock walling, date from this island's use for quarantine purposes. A pylon is located on its summit.

Kamau Taurua (Quarantine Island) is the larger Island and is predominantly pastoral although there are significant areas of regenerating native bush present as well. Channels run around all sides. There are a few buildings, including a restored barracks building dating from use as a quarantine station, along with other relics dating from this historic period. There is a jetty and some historic hulks in the bay nearest the buildings. Two pylons are present on its western end.

Portobello Peninsula is a larger landform than either of the islands and is mainly pastoral with some regenerating indigenous forest. Unlike the majority of the harbour, it retains a mainly natural shoreline and land-water interface. Built elements include a road and pylons.

We agree the Harbour Islands and Portobello Peninsula ONF demonstrates the following biophysical attributes:

2.3.2.1 Important Natural Science Factors

Important natural science factors (including geological, topographical, ecological and dynamic components, and as mātauraka Māori) are:



- The island / peninsula chain is a key element and focal feature of the Dunedin eroded volcanic landscape and represents the centre of the ancient volcano. It is also one of very few areas in Otago Harbour with a natural shoreline.
- There are important ecological values including remnant / regenerating Ngaio / Kōhūhū forest on Rakiriri (Goat Island) and areas of regenerating indigenous forest on Kamau Taurua (Quarantine Island) and Portobello Peninsula. Both Islands are breeding sites for Shags, with other marine birds also present. The islands are pest free with plant life in better condition than mainland sites. Portobello Peninsula has the only sea / land interface on the Otago Peninsula that retains original native vegetation, including grass trees, tree daisies, and ground orchids.

2.3.2.2 The presence of water

The islands and peninsula are features of Otago Harbour.

2.3.2.3 Vegetation

There are important areas of indigenous vegetation, particularly on both Rakiriri (Goat Island) and Portobello Peninsula, along with broad areas of pasture.

We agree that the island – peninsula feature has high values associated with biophysical attributes.

2.3.3 **Sensory Attributes**

We agree the Harbour Islands and Portobello Peninsula ONF demonstrates the following sensory attributes:

2.3.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes: We agree that the island - peninsula chain has high legibility due to being evident relics of the former volcanic vent and then a watershed barrier, their small comprehensible scale, and their natural vegetation cover or patterning that are a response to the island and peninsula topography. Natural low bushland and the pasture cover make the landforms easily readable. The natural shorelines are expressive of coastal processes.

2.3.3.2 Aesthetic values including memorability and naturalness

We agree that naturalness is minimally modified by the presence of a few pylons, buildings, jetties, and (on Portobello Peninsula) a road. Overall, naturalness is high due to the natural shorelines and land-sea relationships, the presence of indigenous vegetation, coherent natural landforms, scant disruption by development, and significance to Manawhenua.

We agree that the island - peninsula group forms a very memorable feature and a focal point within the wider Otago Harbour landscape. This is on account of the pupuri and associations with harbour waters and lands, its visually prominent central position, the presence of indigenous vegetation, the natural landforms, and, the heritage buildings on Quarantine Island.



2.3.3.3 Transient values

We agree that the island - peninsula group has transient values associated with tidal rhythms in the harbour, the common presence of seabirds and occasional presence of marine mammals.

2.3.3.4 Wild or scenic values

With the small islands and peninsula emergent amidst the relatively sheltered harbourscape, the landscape feature has high scenic qualities associated with the legible, highly natural, volcanic landforms and the heritage character of evident human-induced change. Set apart from mainland landscapes, their naturalness provides a degree of wildness value.

In terms of values associated with sensory attributes overall, we agree that they are high.

2.3.4 **Associative Attributes**

We agree the Harbour Islands and Portobello Peninsula ONF demonstrates the following associative attributes:

2.3.4.1 Shared and recognised values

We agree that the island - peninsula group is generally valued for its scenic and heritage landscape qualities, and the significance to Manawhenua. The islands are recognised in the Otago Regional Plan: Coast as an outstanding natural feature / landscape, and the islands and peninsula have been recognised in the 2006 Dunedin City District Plan as a 'coastal landscape preservation area'.

2.3.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori, including their expression as cultural landscapes and features

Wāhi tūpuna include Rakiriri (wāhi tapu – the abode of Takaroa and an important landmark), and Kamau Taurua (kāika, mahika kāi and tauraka waka – the site of a settlement). There are statutory acknowledgements in place for Rakiriri and Kamau Taurua (place names). The island – peninsula group is recognised as a significant contributor to the Ōtākou harbour as a cultural landscape.

2.3.4.3 Historical and heritage associations

The historic associations of takata whenua contribute importantly. Both islands were then used for quarantine purposes (1860's – 1920's) and structures relating to those purposes are still evident – most significantly on



Quarantine Island. Both have Heritage NZ Historic Area classifications. The Marine Science facility on Portobello Peninsula started as a fish hatchery in 1904.

We agree that the Harbour Islands and Portobello Peninsula group has very high associative values

2.3.5 Summary

Harbour Islands and Portobello Peninsula ONF

	Mike Moore	Di Lucas
Biophysical attributes	High	High
Sensory attributes	High	High
Associative attributes	Very High	Very High
OVERALL JUDGEMENT	ONF	ONF

The witnesses agree that the Harbour Islands and Portobello Peninsula feature has high biophysical values, high sensory values and very high associative values. Overall, it is our assessment that an ONF overlay recognising the islands and peninsula as an entity is appropriate.

2.3.6 ONF values to be protected

Given that we have combined the islands and added Portobello Peninsula as one feature, we agree that the 'description of area' and 'values to be protected' statements in Appendix A3.1.3 and A3.1.13 of the 2GP (relating to the Goat and Quarantine Islands ONF's) require amendment. This is because the spatial extent of the ONF has been reconfigured and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP Appendix A3.1.3 and A3.1.13 in this regard. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, a suggested statement for the Harbour Islands and Portobello Peninsula ONF follows:

2.3.6.1 Harbour Islands and Portobello Peninsula Outstanding Natural Feature

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:



Biophysical values

- The geophysical, ecological and marine-associated natural heritage attributes.
- The extent, integrity and natural character of the natural landscape elements
- The natural character values of the coastal environment
- Indigenous biodiversity and habitat for indigenous wildlife
- The extent, quality and significance of indigenous vegetation
- The cues to natural land-sea relationships.
- Any ecological value as island ecosystems.

Sensory values

- Legibility of the natural landforms and their evolution from vent, to barrier, to islands and peninsula.
- The associated visual coherence of the landscape i.e. patterns of land use reflecting the topography
- Low impact of built elements, earthworks, and exotic tree plantings and the significant relative dominance of natural landscape elements
- Naturalness of landforms
- Qualities of wilderness and isolation
- The quality of views to and across the three units of the feature.
- The distinctiveness of each unit, and their harbour relationships.

Associative values

- Landscape values to Manawhenua including associated with wāhi tūpuna as listed in Appendix A4 (2GP).
- Legacies of early European settlement including historic buildings and structures and shelter and amenity plantings
- Heritage landscape qualities and the legibility of the use of the islands for quarantine purposes.



2.4 Heyward Coast ONL

The witnesses have agreed to combine the Heyward Coast and Outer Harbour pONLs (as per PCT) as the “combined Heyward Coast ONL”, with part excluded and addressed as the Pūrākaunui SNL (follows below).

2.4.1 Spatial Extent of the Heyward Coast ONL

We are agreed that this area encompasses the eastern coastline from Pūrākaunui Inlet south to Aramoana, and along the Outer Harbour to Deborah Bay. It extends inland to the summits of Mihiwaka and Mopanui and along the ridge between Pūrākaunui and Ōrokonui. The area excludes the settlements of Pūrākaunui, Long Beach and Aramoana. (Please note that there is a need for a minor adjustment to the boundary with the Pūrākaunui SNL currently shown in the maps (sheets 7 – 11) to include the Pūrākaunui Stream within the Heyward Coast ONL. This boundary is correctly shown in Sheet 14).

Reasons for Landscape Status

2.4.2 Biophysical Attributes

This area involves volcanic cones and ridgelines leading seaward to a suite of headlands embracing a series of ocean beach-fronted valleys and harbourside bays. Now worn down to half its original height, the Mihiwaka summit still displays a remnant of the final eruption some 10 m years ago. Mihiwaka, Mopanui and Hare Hill are each recognised as important contributors to the skyline ridge of late phase domes formed by the Dunedin Volcano. Seaward flanks to the inlet, ocean and harbour coasts display earlier volcanic formations. (refer Geology Map and Legend, sheets 3 - 4).

Mihiwaka has biodiversity significance for its subalpine vegetation. Various other steeper slopes, including above Deborah Bay and Pūrākaunui, display secondary native forest. As a long farmed area, the predominant landcover of gentler slopes involves pasture plus shelter and woodlots.

The headlands link to reef areas with valued marine biodiversity (refer Marine Habitat Map sheet 5). There are extensive wetland and dune ecosystems associated with the suite of ocean beaches. Toward the harbour mouth the Aramoana salt marsh contributes an important ecosystem, with significant biodiversity, an intact vegetation sequence and habitat value. It is integrally linked with Otago Harbour natural tidal / marine processes, although the harbour mouth area is modified by dredging and mole construction. Potato Point encloses the Pūrākaunui Inlet drowned valley and inter-tidal estuary.

We agree the Heyward Coast ONL demonstrates the following biophysical attributes:

2.4.2.1 Important Natural Science Factors



Important natural science factors (including geological, topographical, ecological and dynamic components) are:

- An eroded multi-era volcanic landscape, legible in the topography and in rock exposures.
- Geopreservation sites including North Dunedin Phonolite domes (Hare Hill / Mopanui / Mihiwaka), Aramoana - Heyward Point Lava Flows, and the Pūrākaunui Inlet drowned valley (refer Map sheet 4).
- Areas of significant biodiversity value including Mihiwaka (subalpine vegetation), Heyward Point Scenic Reserve (indigenous forest remnants), Aramoana Beach (Hoiho/Yellow-eyed Penguin habitat), Aramoana Saltmarsh, Jennings Creek Marsh, Whareakeake Marsh, and the edge of Pūrākaunui Inlet (wetland values).
- Natural reef ecosystems, plus other marine fauna around the varied coasts of this landscape (refer Map sheet 5).
- The area is a sequence of cliff-edged headlands with reefs below, interspersed with sweeping sandy beaches backed by dune systems and wetlands.

2.4.2.2 The presence of water

The area orientates and strongly relates to the outer harbour, the ocean, and also to Pūrākaunui Inlet and the entrance to Blueskin Bay. Freshwater streams flow from the uplands through each valley to wetlands, beaches and bays below, including streams sourced from Mihiwaka flowing down to Pūrākaunui Inlet and Deborah Bay. Fresh, brackish and saline ecosystems are evident along with dunelands, sandflats and reefs.

2.4.2.3 Vegetation

The area is predominantly covered in pasture but there are areas of regenerating / remnant native forest, duneland and wetland, along with generally smaller areas of exotic scrub or woodlot. Below the subalpine communities of Mihiwaka, secondary native forest extends along ridgelines to Mopanui, and in places from summit to sea. Harbour and Inlet remnant and regenerating vegetation cues to the natural ecological sequences that belong.

With the natural altitudinal ecological sequence from summit to sea, the distinctive geomorphology, the important natural processes, and, the valued geodiversity and biodiversity from mountains to sea, the biophysical values are appropriately rated High overall.

2.4.3 **Sensory Attributes**

We agree the Heyward Coast landscape demonstrates the following sensory attributes:

2.4.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes:

- The volcanic ridge series from Pūrākaunui Inlet though to the outer Harbour encloses a suite of valleys fronted by beaches and open coast.
- The natural processes of volcanism, marine, wind and water erosion, and, of marine deposition, are generally highly legible.



- In places, a previous more intensive late 19th century dairy farming landscape is still legible in the landscape (rock walls / homestead plantings and ruins)
- Generally, the landscape is highly expressive of the eroded volcanic landform and marine erosive and depositional processes, including at the harbour mouth and other headlands through to Potato Point.

2.4.3.2 Aesthetic values including memorability and naturalness

Naturalness is modified by the effects of over 150 years of pastoral farming. Naturalness qualities are high at the Aramoana Salt Marsh and on various native vegetated slopes including up to Mihiwaka, Mopanui (another prominent peak) and on along the associated ridge. Throughout, naturalness is positively influenced by legible natural landforms, the considerable presence of indigenous vegetation and the presence of the ocean and inlet with natural tidal processes, patterns and biota of the land-sea interface complexes.

The witnesses agree that in total, with the strong natural landform enclosure by the major ridges; the Inlet, open coast and harbour orientation; and, the scarcity of built development, the landscape overall exhibits Medium-High naturalness.

Overall, the Heyward Coast ONL is a highly memorable landscape due to the volcanic landform structure surmounted by Mihiwaka and Mopanui and fingering down to Potato Point, Pilot Point, Purehurehu Point and Heyward Point. At the harbour to open coast junction, Aramoana provides important memorability. This landscape, from Mihiwaka down to Pūrākaunui and Aramoana, has high memorability/pupuri for manawhenua.

2.4.3.3 Transient values

Transient values are significant in this area including the common presence of marine mammals, mist / cloud effects on the hilltops, various moods associated with different weather and sea state conditions, lighting effects on the landforms and waters, and, tidal rhythms as well as the marine life, such as associated with the reefs.

2.4.3.4 Wild or scenic values

Evident natural elements, forms and processes toward the open coast lends this landscape significant wild and scenic values. Scenic values are high in relation to Mihiwaka and Mopanui above. Scenic values are high within the Pūrākaunui inlet, supported by the natural characteristics of the inlet waters, the areas of indigenous vegetation, legible natural volcanic landforms, and, the very localised and human scale of buildings and roads.

Seawards there are high wildness characteristics associated with the series of ocean beaches and headlands. Scenic values are High overall, contributed to positively by the generally legible and coherent natural landforms, the dramatic ocean coast cliffed headland and beach series adjoining the contrasting inlet and harbour coasts.



In terms of sensory attributes generally, the witnesses assess the coastal landscape of Mihiwaka and Mopanui, from Pūrākaunui to Aramoana and around to Deborah Bay, as of high sensory value overall due particularly to high legibility, aesthetic, memorable, wild and scenic value. Involving a suite of volcanic ridges surmounted by landmark peaks and terminating at coastal headlands, the varied intervening spaces are overviewed and enjoyed from within, including the highly scenic enclosed inlet, a series of wild ocean beaches, and the outer harbour.

In terms of values associated with sensory attributes overall, we agree that they are generally high.

2.4.4 Associative Attributes

We agree the Heyward Coast landscape demonstrates the following associative attributes:

2.4.4.1 Shared and recognised values

This area is valued by locals and visitors for its natural landscape qualities and was recognised as a Coastal Landscape Preservation area in the 2006 Dunedin City District Plan. Public access routes enable the landscape to be well overviewed. The area forms the setting for popular recreation destinations (Aramoana, Long Beach / Whareakeake / Pūrākaunui) and contributes to the setting of the harbour and Pūrākaunui. The area has an important relationship with the harbour entrance, harbour waters and Peninsula lands opposite, including to Ōtākou.

2.4.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikaka Māori, including their expression as cultural landscapes and features.

- Wahi tūpuna include Whareakeake (settlement / pa and battle site - also pounamu manufacturing site), Wharauwerawera (Long Beach – settlement / Māori Reserve and Mahika kāi site), Pūrākaunui (Kāika, whaling station and urupā), and Mihiwaka (cultural identity marker and mahika kāi) Pūrākaunui / Potato Point is part of an important cultural landscape from Pūrākaunui – Hikaroroa – Huriawa. Also Pukekura, Huikaahu, Ka Pukepuke-o-Te-Waiparapara, and Ōtawhero in the Outer Harbour. Other wāhi tūpuna include hill faces near / at Aramoana (settlement / urupā), The Saltmarsh and spit (mahika kāi / settlement), and Otaheiti (Acheron Point – home of Taiaroa and urupā)
- The coastal and harbourside area below, and above to Mihiwaka, are an important part of the views from, and associations with, Ōtākou Marae
- The Harbour is significant (mahika kāi / transport)
- The area includes high cultural and spiritual values for Te Rūnanga o Ngāi Tahu involving expression as an important cultural landscape with valued cultural features,



- Whareakeake was the site of a fight between Māori and crew of the brig Sophia
- Pūrākaunui was the site of a whaling station
- Returning servicemen were resettled in this area establishing dairy farms along ridgeline roads
- Long Beach was a popular camping picnic destination from Dunedin from 1900, later developed as a typical kiwi crib settlement
- Aramoana has significance in the nation's history as the subject of protests over a proposed aluminium smelter and for the 1990 massacre
- At Aramoana, the Mole and the Pilot houses on the spit are heritage structures

We agree that there are high associative attributes values across the Heyward Coast landscape.

2.4.5 Summary

Heyward Coast ONL

	Mike Moore	Di Lucas
Biophysical attributes	High	High
Sensory attributes	High	High
Associative attributes	High	High
OVERALL JUDGEMENT	ONL	ONL

We agree that considering the volcanic cones/mauka above, the inlet and outer coastal complex, plus the outer harbour area, the landscape is sufficiently natural and the composite of distinctive biophysical values, together with the high sensory and associative values, the overall landscape is appropriately recognised as ONL.

2.4.6 ONL values to be protected

We agree that the 'description of area' and 'values to be protected' statements in Appendix A3.2.2 of the 2GP (relating to the Heyward Coast ONL) require amendment. This is because the spatial extent of the ONL has been reconfigured and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP appendix A3.2.2 in this regard. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, we include a suggested statement for the Heyward Coast ONL as follows:



2.4.6.1 Heyward Coast Outstanding Natural Landscape

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:

Biophysical values

- The extent, integrity and natural character of the natural landscape elements.
- The naturalness of the landforms and their uncluttered character.
- The natural science values including the listed geo-preservation sites.
- Indigenous biodiversity and habitat for indigenous wildlife (terrestrial, avian and aquatic).
- Natural character values of the waterways, coastal environment and wetland areas.

Sensory values

- Legibility of the natural landform and associated visual coherence of the landscape i.e. patterns of land use reflecting the topography.
- Low impact of built elements, earthworks, and exotic tree plantings, and the significant relative dominance of natural landscape elements.
- Naturalness of ridgelines and other elevated land.
- Qualities of wilderness and isolation.
- The natural darkness of the night sky.
- The natural tidal rhythms of inlet, harbour and ocean interfaces.
- Scenic values of the diverse mountain to sea landscape.
- The extent and quality of views across the landscape from public roads and tracks.
- Natural vegetative cover and associated natural ecosystems, both terrestrial and aquatic.

Associative values

- Cultural landscape values including associated with wāhi tūpuna as listed in Appendix A4 (2GP).
- Legacies of early European settlement including historic buildings and structures, plus shelter and amenity plantings.
- Heritage landscape qualities and the legibility of the previous more intensive dairy farming land use.



2.5 Pūrākaunui SNL

2.5.1 Spatial Extent of the Pūrākaunui SNL

This area encompasses the mid and lower slope land on the western side of Pūrākaunui Inlet below the 200m contour, excluding the township and settlement zoned land at Osborne. It extends seaward including the coastal lands between Pūrākaunui Inlet and Doctors Point at the entrance to Blueskin Bay.

Reasons for Landscape Status

2.5.2 Biophysical Attributes

We agree the Pūrākaunui SNL demonstrates the following biophysical attributes:

This area forms part of a wider landscape defined by ridgelines to the east and west focused on Pūrākaunui Inlet, a small drowned valley behind volcanic promontories – BB, a hill above Doctors Point (refer sheet 1. Place name 49) and Māpoutahi, and Potato Point. The steep-sided inlet is an intertidal estuary with salt meadow and salt marsh around its fringes, and an extensive sand dune barrier to the beach of Pūrākaunui Bay extending from Māpoutahi toward Potato Point. Seaward below BB, cliffed flanks extend around the coast from the Māpoutahi promontory to Doctors Point and the Taoka Arches at the entrance to Blueskin Bay.

The area has a varied vegetative cover including pasture, exotic woodlots, wildings and scrub, regenerating indigenous forest, plus wetland, salt meadow and saltmarsh ecosystems. It is influenced by the presence of the railway and a road partially defining the inlet edge. The small, well-vegetated Osborne settlement is excluded.

2.5.2.1 Important Natural Science Factors

Important natural science factors (including geological, topographical, ecological and dynamic components, and as mātauraka Māori) are:

- This area is part of a volcanic landscape, the origins of which are legible in the topography. The elevated lands involve the final lava flows extruded from the broad shield volcano. From Mopanui to BB and the Blueskin Cliff at the coast below involves a length of that phonolite flow from summit to sea (refer Map sheet 2).
- The Pūrākaunui Inlet is a listed geopreservation site as an almost perfect example of a small drowned valley forming an intertidal estuary with a sand dune barrier across the entrance. The wide barrier is composed of numerous longitudinal dunes and almost closes off the entrance to the estuary. (refer Map sheet 4)
- The Doctors Point coastal features are associated with a geopreservation site rated the best Holocene site in Otago, and a good late Pleistocene site, with carbon dated shells cueing to historic sea levels.



- The edge of Pūrākaunui Inlet is a recognised Area of Significant Biodiversity Value (2GP) for its wetland values. Compared with other sprawling inlets around the Dunedin Volcano periphery, this is a steep-sided inlet and has salt meadow and saltmarsh around the fringes.
- Natural ecosystems and natural processes are evident within the inlet and beach at Pūrākaunui Bay and along the ocean coast through to Doctors Point.

2.5.2.2 The presence of water

Streams sourced from Mihiwaka and Mopanui flow down to the estuarine Pūrākaunui Inlet. A large sand barrier fringed with brackish ecosystems separates the Inlet from Pūrākaunui Bay, and the significant and diverse ocean coast around Blueskin Cliff to the tidal inlet to Blueskin Bay.

2.5.2.3 Vegetation

Vegetative cover is a mix of pasture, regenerating indigenous forest, plantation forestry, native and exotic scrub, duneland flora and some wetland.

We agree that the area has medium - high values associated with biophysical attributes. This rating factors in the presence of recognised geomorphological and ecological values but also the presence of considerable modification to the inlet edge and vegetation.

2.5.3 **Sensory Attributes**

We agree the Pūrākaunui SNL demonstrates the following sensory attributes:

2.5.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes:

We agree that the inlet area has high legibility as a drowned valley and enclosing sand spit forming Pūrākaunui Bay. The outer coast with bluffs hewn by coastal erosion displaying the volcanic layering stacked up behind beach deposits.

2.5.3.2 Aesthetic values including memorability and naturalness

We agree that naturalness is positively influenced by legible natural landforms above the inlet and toward the outer coast. Also the considerable presence of indigenous vegetation, and the natural tidal processes and patterns of the outer coast and the inlet contribute important naturalness. The informality of much of the exotic and native cover contribute high naturalness.

The roading around the inlet edge, substantial blocks of forestry, and the railway line cutting across the western hillslopes reduce the naturalness. However, the rail route has enabled travellers to pass through on the winding route and to overview the of the coast and Inlet, which contributes particular naturalness and



memorability to the trip. A power line is highlighted through the exotic forestry on the sand barrier due to vegetation setbacks, further modifying naturalness

For Manawhenua, the outer lands including the promontory BB, the forest blanketed sand barrier, and, the ocean coast from Pūrākaunui Bay and Māpoutahi around Blueskin Cliff to Doctors Point, contribute high pupuri / memorability.

We agree that this area generally contributes positively to the memorability of the wider Pūrākaunui – Blueskin landscape. This is based on the coherent drowned valley inlet lands with an intimate scale, and with built elements mainly subservient to the natural elements, the sand spit linkage lands, and, the contrasting wild outer cliff-backed coast on which Māpoutahi headland is a distinctive and memorable landform.

2.5.3.3 Transient values

Transient values include tidal rhythms, natural light effects, plus marine and birdlife of the inlet, bay and ocean coasts. The sound (and sight) of occasional trains are also a transient element.

2.5.3.4 Wild or scenic values

There are wild and scenic characteristics associated with the outer lands, the beach and cliffs from Doctors Point around in to Pūrākaunui Bay. The sheltered inlet has scenic value and moderate wild value.

In terms of values associated with sensory attributes overall, we agree that they are at least medium - high

2.5.4 **Associative Attributes**

We agree the Pūrākaunui SNL demonstrates the following associative attributes:

2.5.4.1 Shared and recognised values

The area is highly accessible, by road, coastal walks and was traditionally well-viewed from the Main Trunk Rail. We agree that this area is valued by locals and visitors for its natural landscape qualities. The area forms part of the setting for the popular recreation destinations associated with the coast from Pūrākaunui and around Blueskin Cliff to Doctors Point. The area is significantly recognised by takata whenua.

2.5.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori, including their expression as cultural landscapes and features.

The area forms part of the important cultural coastal landscape of Pūrākaunui – Hikaroroa – Huriawa to the north. From the elevated lands above down to Inlet waters below, from sand barrier inland to Osborne, the



area includes a complex of Native Reserves. Wāhi tūpuna include Māpoutahi Pā, Mateawheawhe the battle site in Pūrākaunui Bay, and the Pūrākaunui inlet (kāika, whaling station and urupā). (Refer Map sheet 6, wāhi tūpuna 14, 16, 17 and 18).

2.5.4.3 Historical and heritage associations

This area has high significance as the site of a pre-European battle. Pūrākaunui Inlet was also the site of whaling activity. The Main Trunk Rail Line winds around above the ocean coast and Inlet which provided a valued passenger experience.

We agree that the Pūrākaunui SNL has high associative values.

2.5.5 Summary

Pūrākaunui SNL

	Mike Moore	Di Lucas
Biophysical attributes	Medium - High	Medium - High
Sensory attributes	Medium - High	High
Associative attributes	High	High
OVERALL JUDGEMENT	SNL	SNL

The witnesses agree that the area identified as Pūrākaunui SNL has at least medium – high biophysical and sensory values, and, high associative values. Overall, it is our assessment that an SNL overlay will appropriately recognise the contribution to the wider Pūrākaunui landscape of these Inlet and coastal lands.

2.5.6 SNL values to be protected

We agree that the ‘description of area’ and ‘values to be protected’ statements in Appendix A3.3.3 of the 2GP (relating to the Heyward Coast SNL) require amendment. This is because the spatial extent of the SNL has been reconfigured and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP appendix A3.3.3 in this regard. We note however, that the statement of ‘values to be protected’ will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, we include a suggested statement for the Pūrākaunui SNL as follows:



2.5.7 Pūrākaunui Significant Natural Landscape

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:

Biophysical values

- The natural science values of the geodiversity, including the listed geo-preservation sites.
- Indigenous biodiversity and habitat for indigenous wildlife.
- Natural character values of the coastal environment.
- The extent, integrity and natural character of the natural landscape elements.

Associative values

- Historic and cultural landscape values for takata whenua, including associated with wāhi tūpuna as listed in Appendix A4 (2GP).
- Legacies of early European settlement including historic buildings and structures, plus shelter and amenity plantings.
- Heritage landscape qualities and the legibility of the previous more intensive dairy farming land use.

Sensory values

- Legibility of the natural landform and associated visual coherence of the landscape i.e. patterns of land use reflecting the topography.
- Low impact of built elements, earthworks, and exotic tree plantings, and the significant relative dominance of natural landscape elements.
- Naturalness of the Inlet slopes, the ridgeline and the coastal landforms.
- The extent and quality of views across the landscape from public roads and tracks.
- Naturalness attributes of the rural coastal landscape which contributes to the Inlet setting, provides backdrop and containment to the settlement of Osborne, is part of the wider setting of the settlement of Pūrākaunui, and, contributes to the coastal landscape between Potato Point and Doctors Point.



2.6 Mt Cargill ONL

2.6.1 Spatial Extent of ONL

The witnesses agree that the summit lands and more natural slopes including at least 10 named peaks from Mopanui in the north to Mihiwaka, west beyond Mt Cargill, and down to Martins Hill above Blanket Bay in the Inner harbour, are appropriately together addressed as the Mt Cargill ONL.

Whilst entirely inland, at Mihiwaka and Mopanui the Mt Cargill ONL adjoins both the Heyward Coast ONL which reaches down to outer and Harbour coasts, and the West Harbour SNL which extends down to the Inner Harbour.

2.6.2 Biophysical Attributes

We agree the Mt Cargill landscape demonstrates the following biophysical attributes:

2.6.2.1 Natural Science factors, including geological, topographical, ecological and dynamic components, and as mātauraka Māori.

The area is part of a complex volcanic landscape, and the suite of peaks involve the final eruptive phase of the Dunedin volcanic complex (refer Geology Map and Legend, sheets 2-3). This area encompasses many of the higher hills defining the northern crater basin of Dunedin and the Otago Harbour, comprising geodiversity that defines much of the city's setting.

Involving the northwest crater summit to the Dunedin shield volcano, with the final eruption some 10 m years ago forming a crater rim about 1000 metres high, Mt Cargill stands as the tallest remnant at 676 m. A specific group of six domes, including Mihiwaka, Mt Kettle, Mt Cutten and Mopanui, are recognised as the best example of a dome group from that late phase extrusion, and together identified as North Dunedin Phonolite Domes geopreservation sites (refer Map sheet 4, Place name 57). A localised geopreservation site, the Mt Holmes Organ Pipes, of columnar jointed basalt, provides some volcanic formation detail (Place name 56).

The area contains some significant areas of biodiversity importance. It also includes mid-elevation areas much of which is still farmed, is regenerating to scrub / forest, or has been planted in exotic forestry.

Areas of recognised important biodiversity value include Mihiwaka (subalpine vegetation), Grahams Bush (podocarp, kamahi, broadleaved forest remnants), Mt Cargill Scenic Reserve (alpine / subalpine vegetation, Broadleaved Kanuka forest), Mt Pleasant Scenic Reserve (Broadleaved Podocarp forest), and Silver Beech forest (Mt Cargill Reserve - one of only four remaining remnants in the Dunedin Ecological District). There is *Ozothamnus/Dracophyllum* shrubland at Mt Cargill and Mihiwaka.



2.6.2.2 The presence of water

Water bodies are not a significant element of this upland area. However, the frequent fog provides a shroud of moisture which is harvested by vegetation resulting in a 'cloud forest' across the upper slopes, with abundant moss and fern cover under a thick low canopy.

2.6.2.3 Vegetation

As described above this area contains significant vegetation assemblages.

The witnesses agree that the various volcanic landforms displayed above the harbourside settlements, rising up to a complex suite of cones forming the summit, and with diverse natural vegetation clothing the summits and catchments, mean that this elevated landscape is appropriately rated as having at least high biophysical attributes.

2.6.3 **Sensory Attributes**

We agree the Mt Cargill landscape demonstrates the following sensory attributes:

2.6.3.1 Legibility or expressiveness

Legibility or expressiveness - how obviously the feature or landscape demonstrates its formative processes

The physical formative processes of volcanism and subsequent erosion responding to altitudinal and climatic nuances, native plant communities, succession, and, the land use history of reverting farmland, are all legible in the landscape.

2.6.3.2 Aesthetic values, including memorability and naturalness

There are areas of strongly expressed naturalness, due to the suite of volcanic landforms, the indigenous shrubland and forest-covered reserves, and where vegetation management follows landform and altitudinal patterns. Naturalness values are reduced in some areas by modifications such as quarries, forestry and utility structures. Overall however, the area contributes a prominent rural and natural setting, backdrop and outlook to urban areas and to the harbour environs including from Peninsula lands opposite.

There are distinctive and memorable landforms including the Mt Cargill – Mihiwaka - Mopanui skyline, and the area includes some of Dunedin's principal topographical landmarks (e.g. Mt Cargill / Mihiwaka). The summit complex involves high memorability for Manawhenua as evidenced by the wahi tūpuna status.

2.6.3.3 Transient values



Transient values relevant to this area include the common cloud cap on the hilltops and seasonal snow on the high hills, and as a visual focus during sunrise and sunset

2.6.3.4 Wild or scenic values

There are wilderness values associated with the high hills with considerable areas under native vegetation cover, are highly valued so close to a major urban area. The area generally contributes a wild and scenic rural / natural setting to built settlements around the harbour and urban Dunedin.

The witnesses assess that due to the contribution to the harbour city setting, with the sensory attributes of this Mt Cargill landscape having such naturalness, memorability, aesthetic, wild and scenic value, it is appropriately rated at least high overall.

2.6.4 **Associative Attributes**

We agree the Mt Cargill ONL demonstrates the following associative attributes:

2.6.4.1 Whether the values are shared and recognised

This area is generally valued for its natural / rural landscape character, its prominence as viewed from populated areas, the natural experiences it provides and the recreational opportunities so close to urban areas. The area has been within a Landscape Conservation Area in the 2006 Dunedin City District Plan for many years. It contains naturally vegetated landmark features including Mt Cargill and Mihiwaka.

2.6.4.2 Cultural and spiritual values for Kāi Tahu

Cultural and spiritual values for Kāi Tahu identified by working, as far as practicable, in accordance with tikaka Māori, including their expression as cultural landscapes and features:

- Wāhi tūpuna include the series of peaks from Mihiwaka to Mt Cargill that are important cultural identity markers.
- A demonstration of connections between significant places is recognised in the wāhi tūpuna addressing views from Ōtākou Marae that includes views across the Harbour to Mihiwaka, more than 8 km away.

2.6.4.3 Historical and heritage associations

- In places a 19th century dairy farming landscape is still legible in paddock layouts, exotic shelter plantings, old buildings and stone walls giving the area a heritage character.
- The original main northward road from Dunedin crosses this area.

We agree that associative values / attributes are high overall.



2.6.5 Summary

Mt Cargill ONL

	Mike Moore	Di Lucas
Biophysical attributes	High	High
Sensory attributes	High	Very High
Associative attributes	High	High
OVERALL JUDGEMENT	ONL	ONL

The witnesses agree that this complex volcanic landscape has such high biophysical, sensory and associative values such that it would be appropriately rated as ONL.

2.6.6 ONL values to be protected

We agree that the 'description of area' and 'values to be protected' statements in Appendix A3.3.2 of the 2GP (relating to the Flagstaff-Mt Cargill SNL) require amendment and expansion. This is because we have identified a new ONL and because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP appendix A3.3.2 and the drafting of a new appendix relating to the proposed Mt Cargill ONL. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, we include a suggested statement for the Mt Cargill ONL as follows:

2.6.7 Mt Cargill Outstanding Natural Landscape

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:

Biophysical values

- The extent, integrity and natural character of the natural landscape elements.
- The naturalness of the landforms and their uncluttered character.
- Indigenous biodiversity and habitat for indigenous wildlife.
- Natural vegetative cover and associated natural ecosystems.



Sensory values

- Legibility of the natural landform and associated visual coherence of the landscape i.e. patterns of land use reflecting the topography.
- Low impact and scarcity of built elements, lights, earthworks or exotic tree plantings, and the significant relative dominance of natural landscape elements.
- Naturalness of ridgelines and other elevated land.
- Qualities of wilderness and isolation.
- The natural darkness of the night sky.
- The extent and quality of views across the landscape from public roads and tracks..
- The natural science values of the listed geo-preservation sites.

Associative values

- Recognised signature value of the volcanic cones, including Mt Cargill and Mihiwaka, to the identity of Dunedin City.
- Landscape values associated with wāhi tūpuna as listed in Appendix A4 (2GP).
- Legacies of early European settlement including historic buildings and structures and shelter and amenity plantings.
- Heritage landscape qualities and the legibility of the previous more intensive dairy farming land use.



2.7 West Harbour SNL

2.7.1 Spatial Extent of the West Harbour SNL

This area encompasses the Otago Harbour facing mid – lower slope areas between the Mt Cargill ONL and the township and settlement zone areas on the north-western side of Otago Harbour. In the south-west, it includes the summit of Signal Hill and to above Black Jacks Point. In the north-east, it extends around above Port Chalmers to meet the Heyward Coast ONL at Deborah Bay. The area included forms much of the immediate landscape context to the west harbour settlements including Ravensbourne, St Leonards, Roseneath, Sawyers Bay and Port Chalmers, and meets the harbour waters at Kilgours Point.

Reasons for Landscape Status

2.7.2 Biophysical Attributes

This area forms part of the Otago Harbour eroded volcanic caldera landscape from Deborah Bay in the north-east to urban Dunedin in the south-west. The vegetation cover is mixed including pasture, regenerating indigenous forest and exotic woodlots and scrub.

We agree the West Harbour SNL demonstrates the following biophysical attributes:

2.7.2.1 Important Natural Science Factors

Important natural science factors (including geological, topographical, ecological and dynamic components, and as mātauraka Māori) are:

- This area is part of an eroded volcanic landscape, the origins of which are legible in topography showing landforms from three different eruption phases. Signal Hill and Martins Hill form promontories displaying the final eruptive phase, with lower landforms from earlier phases.
- Burns Park (Signal Hill, including Stevenson's Bush) is an area of Significant Biodiversity Value in the 2GP.

2.7.2.2 The presence of water

Streams from the volcanic cone lands above flow through to the harbour below. Whilst predominantly separated from Harbour waters by settlements, the area forms part of the landscape context to the north-west side of the Otago Harbour.

2.7.2.3 Vegetation

The vegetation cover is mixed including pasture, regenerating indigenous forest and exotic woodlots and scrub.



We agree that the area has medium – high values associated with biophysical attributes. This rating reflects the contribution to the legible volcanic landforms of the harbour landscape and, the presence of areas of regenerating indigenous forest but also the considerable modification to the natural vegetation patterns in some areas.

2.7.3 Sensory Attributes

We agree the West Harbour SNL demonstrates the following sensory attributes:

2.7.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes:

We agree that the physical formative processes of volcanism and erosion and the land use history of reverting farmland is legible in the landscape. Landform coherence is reduced by incoherent vegetation patterns in places.

2.7.3.2 Aesthetic values including memorability and naturalness

We agree that there are areas of strongly expressed naturalness i.e. the indigenous forest-covered reserves, and where vegetation patterns are coherent with the landform. In places however, naturalness values are modified by incoherent patterns of vegetation on the landform. The area contributes a rural / natural setting to urban areas / settlements and the harbour context.

The natural vegetative cover evident on various slopes provides visual connectivity from mountain slopes above down over the mid and lower slopes and toward the Harbour waters, with some connectivity continuing down to Kilgours Point by Roseneath. The degree of natural connectivity provides important aesthetic value including naturalness, and that contributes to overall memorability.

We agree that the most memorable features of the wider harbour landscape are the higher summit areas contained within the Mt Cargill ONL but that this West Harbour SNL area contributes positively to memorability where there is indigenous vegetation or where vegetation patterning is more naturalistic with greater connectivity.

2.7.3.3 Transient values

We agree that transient values associated with the West Harbour SNL are not particularly significant but include lighting effects on the hillslopes.



2.7.3.4 Wild or scenic values

The area contributes an attractive rural scenic setting to the north-western side of Otago Harbour and to the built settlements around the harbourside and complements and contributes to the scenic qualities of the Mt Cargill ONL above. The natural linkages downslope and toward harbour waters contribute to the scenic value.

In terms of values associated with sensory attributes overall, due to the contribution to the harbour basin landscape in total and to the built city's context, we agree that they are at least medium - high.

2.7.4 **Associative Attributes**

We agree the West Harbour SNL demonstrates the following associative attributes:

2.7.4.1 Shared and recognised values

We agree that this area is visually prominent from around the harbour and valued for its natural / rural landscape character. It contains Signal Hill – a city landmark. The rural / natural landscape values of much of the area have been recognised as a Landscape Conservation Area in the 2006 Dunedin District Plan. It is recognised as an important rural / natural foreground to the ONL above.

2.7.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features

There are no wāhi tūpuna sites recognised within this area itself, but those present within the harbour landscape more widely include Kōpūtai (Port Chalmers – cliffs and caves and canoe landing site) and the harbour (mahika kāi / transport).

2.7.4.3 Historical and heritage associations

There are no historic / heritage associations of any particular note.

We agree that the West Harbour SNL has medium - high associative values – largely on the basis of its shared and recognised values (i.e. contribution to amenity values and naturalness as viewed from the settlements and roads around the harbour).



2.7.5 Summary

West Harbour SNL

	Mike Moore	Di Lucas
Biophysical attributes	Medium - High	Medium - High
Sensory attributes	Medium - High	Medium - High
Associative attributes	Medium - High	Medium - High
OVERALL JUDGEMENT	SNL	SNL

The witnesses agree that the West Harbour landscape has medium - high values across all attribute groups. We assess the area as contributing importantly to the values of the wider harbour landscape and cityscape, and overall it is our assessment that an SNL overlay is appropriate.

2.7.6 SNL Values to be Protected

We have differentiated this area from the Mt Cargill ONL (discussed above) and from the Flagstaff Mt Cargill SNL in the 2GP. Accordingly, we agree that the 'description of area' and 'values to be protected' statements in Appendix A3.3.2 of the 2GP (relating to the Flagstaff-Mt Cargill SNL) require amendment and expansion. This is because we have identified a new ONL (Mt Cargill) and specifically addressed the west harbour area as its own SNL, also because, in our assessments, the description and values statements could be more completely and usefully expressed. We consider that our assessment and description of the biophysical, sensory and associative attributes above will inform the redrafting of 2GP appendix A3.3.2 and the drafting of a new appendix relating to the proposed West Harbour SNL. We note however, that the statement of 'values to be protected' will necessarily be expressed differently from the assessment and description of landscape attributes above – which has been for the purpose of assessing landscape status. As a tentative starting point, we include a suggested statement for the West Harbour SNL as follows:

2.7.7 West Harbour Significant Natural Landscape

VALUES TO BE PROTECTED

The following features and characteristics have been identified as important to protect:

Biophysical values

- Indigenous biodiversity and habitat for indigenous wildlife.
- The extent, integrity and natural character of the natural landscape elements.
- The regenerating forest and vegetative connectivity.
- The integrity of the natural landforms.
- Waterway and vegetation linkages to harbour waters.



Sensory values

- Legibility of the natural landform and associated visual coherence of the landscape i.e. patterns of land use reflecting the topography.
- Low impact of built elements, earthworks, and exotic tree plantings, and the significant relative dominance of natural landscape elements.
- Naturalness of elevated landforms.
- Landform and vegetative altitudinal connectivity.
- The extent and quality of views across the landscape from public roads and tracks.
- Naturalness attributes of the rural landscape which provides backdrop and containment to the discrete harbourside settlements.
- Naturalness of the foreground to the Mt Cargill ONL above.
- Naturalness of linkages to and toward the harbour.

Associative values

- Legacies of early European settlement including historic buildings and structures and shelter and amenity plantings.
- The contribution of the rural / natural character of the area to the amenity values of the harbour landscape.



2.8 Flagstaff-Mt Cargill SNL (portion covered by the appeal area)

2.8.1 Spatial Extent of the Flagstaff – Mt Cargill SNL (portion covered by the appeal area)

The area covered by the PCT appeal includes an area within the North-East valley catchment that we do not include within either the Mt Cargill ONL or the West Harbour SNL and which we assess as being appropriately included within the 2GP Flagstaff Mt Cargill SNL. The extent of the Flagstaff-Mt Cargill SNL extends well beyond the appeal area, however, the part included in the appeal and addressed here, is defined by the boundary of the Mt Cargill ONL to the north, the extent of the appeal area to the west, and the current 2GP SNL boundary around its lower boundary. The ridgeline of Signal Hill is adopted as the boundary with our proposed West Harbour SNL to the south-east.

Reasons for Landscape Status

2.8.2 Biophysical Attributes

This area covers the higher and mid-slopes defining North-east Valley and the smaller valley behind Logan Park. It excludes the higher slopes of Mt Cargill and the indigenous forest-covered slopes on its southern face (which are within the Mt Cargill ONL). It involves eroded volcanic landforms and the area is drained by Lindsay Creek (North-east Valley) and Ōpoho Creek in the Logan Park catchment. There is urban development within the valley floor areas which extends up the sunny north-west facing slopes (not within the mapped SNL). Otherwise, the landscape is rural – largely pastoral but with significant areas of regenerating indigenous forest, as well as exotic scrub and forestry.

We agree the West Harbour SNL demonstrates the following biophysical attributes

2.8.2.1 Important Natural Science Factors

Important natural science factors (including geological, topographical, ecological and dynamic components, and as mātauraka Māori) are:

There are no recognised geopreservation sites or sites of significant biodiversity value but the area has a distinctive volcanic landform and there are numerous areas of regenerating native forest.

2.8.2.2 The presence of water

The valleys are focussed on small streams which extend beyond the SNL.

2.8.2.3 Vegetation

The vegetation cover is mixed including pasture, regenerating indigenous ecosystems, and, exotic woodlots and scrub.



We agree that the area has medium – high values associated with biophysical attributes. This rating reflects the contribution to the legible volcanic landforms to the Dunedin landscape and, the presence of areas of regenerating indigenous forest but also the considerable modification to the natural vegetation patterns in some areas.

2.8.3 Sensory Attributes

We agree that this part of the Flagstaff-Mt Cargill SNL demonstrates the following sensory attributes:

2.8.3.1 Legibility or expressiveness

Legibility or expressiveness – how obviously the feature or landscape demonstrates its formative processes:

We agree that the physical formative processes of volcanism, erosion, the natural forest cover, and, the land use history of farming and reverting farmland are legible in the landscape. Landform coherence is reduced by incoherent vegetation patterns in places.

2.8.3.2 Aesthetic values including memorability and naturalness

We agree that there are areas of strongly expressed naturalness i.e. the regenerating indigenous forest covered areas, and where vegetation patterns are coherent with the landform. In places however, naturalness values are significantly modified by incoherent patterns of vegetation on the landform, and quarrying. The area contributes a rural / natural setting to North-east Valley in particular, and urban Dunedin more generally

We agree that the most memorable features of the wider North-east Valley landscape are the higher summit areas contained within the Mt Cargill ONL but that this part of the Flagstaff-Mt Cargill SNL contributes positively to memorability where there is indigenous vegetation, some natural connectivity, or where vegetation patterning is more naturalistic. A memorable feature of the landscape is the juxtaposition of rectilinear paddock boundaries (expressed by hedgerows) on the gently rounded topography.

2.8.3.3 Transient values

We agree that transient values associated with this part of the Flagstaff-Mt Cargill SNL are not particularly significant but include lighting effects on the hillslopes.

2.8.3.4 Wild or scenic values

The area contributes an attractive rural scenic setting to North-east Valley and urban Dunedin and complements and contributes to the scenic qualities of the Mt Cargill ONL above.



In terms of values associated with sensory attributes overall, we agree that they are medium – high.

2.8.4 Associative Attributes

We agree that this part of the Flagstaff-Mt Cargill SNL demonstrates the following associative attributes:

2.8.4.1 Shared and recognised values

We agree that this area is visually prominent from North-east Valley and other parts of Dunedin City and valued for its natural / rural landscape character. It contains the west of Signal Hill – a city landmark and recreational focal point and is traversed by North Road. The rural / natural landscape values of much of the area have been recognised as a Landscape Conservation Area in the 2006 Dunedin District Plan.

2.8.4.2 Cultural and spiritual values

Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikaka Māori, including their expression as cultural landscapes and features

There are no wāhi tūpuna sites recognised within this area itself. However it forms a foreground to valued peaks, including Mt Cargill.

2.8.4.3 Historical and heritage associations

There are no historic / heritage associations of any particular note.

We agree that this part of the Flagstaff-Mt Cargill SNL has medium - high associative values – largely on the basis of its shared and recognised values (i.e. contribution to amenity values as viewed from the settlements and roads around the harbour).

2.8.5 Summary

West Harbour SNL

	Mike Moore	Di Lucas
Biophysical attributes	Medium - High	Medium - High
Sensory attributes	Medium - High	Medium - High
Associative attributes	Medium - High	Medium - High
OVERALL JUDGEMENT	SNL	SNL



The witnesses agree that this portion of the Flagstaff-Mt Cargill SNL has medium - high values across all biophysical, sensory and associative attribute groups. We assess the area as contributing importantly to the values of the wider Dunedin landscape, and as a foreground to the Mt Cargill ONL, and overall it is our assessment that an SNL overlay is appropriate.

2.8.6 SNL values to be protected

We have differentiated this area from the Mt Cargill ONL (discussed above) and from the West Harbour SNL and consider that this is appropriately described and managed in the 2GP as part of the wider Flagstaff-Mt Cargill SNL. We agree that the 'description of area' and 'values to be protected' statements in Appendix A3.3.2 of the 2GP (relating to the Flagstaff-Mt Cargill SNL) require amendment. This is because we have reclassified parts of the SNL as separate ONL and SNL and because, in our assessments, the description and values statements could be more completely and usefully expressed. However, given that the majority of the remnant Flagstaff-Mt Cargill SNL is beyond the scope of the appeal area, we do not address changes to the description or value statements here.



3. THE EXTENT OF THE RURAL RESIDENTIAL 1 AND 2 ZONES WITHIN THE PROPOSED PCT ONL

- 3.1.1 This task is limited spatially to the PCT map Attachment 2 pONL area (refer Map sheet 12). The assessment of proposed RR zones is undertaken in the context of the ONL, ONF and SNL we have agreed to as set out in the commencement of this JWS. Whilst witnesses agree that limited built development may be appropriate in some of the RR zoned areas, this does not include agreement that the 2GP planning provisions for these areas are adequate with regard to managing landscape effects with respect to design controls and building proliferation.

To locate the 15 sites assessed, refer Map sheet 13. Each site is numbered as per text below, and the Proposed Landscape Overlays are named and outlined.

3.2 Otago Peninsula ONL and Peninsula Harbourside SNL

- 3.2.1 There is a 2GP RR22 zone located at Portobello that is within the proposed Peninsula Harbourside SNL and extends into the Otago Peninsula ONL. The witnesses agree that it would be inappropriate to have the RR zone within the ONL or within the higher parts of the SNL (i.e. the areas that are included in the current 2GP SNL). The lower lying areas are already RR in character with no more capacity for development and the more elevated landscape overlay areas do not have absorption capacity for likely rural residential development. We agree that this zone should be reduced in extent to include only the lower lying area (refer map sheet 14).
- 3.2.2 There is a 2GP RR 2 zone located at Turnbells Bay which is within the Peninsula Harbourside SNL. The witnesses agree this is inappropriate given there is potential for two additional new houses. The area is visually prominent and there is no scope for acceptable integration with the SNL values. We agree this RR 2 zoning should be deleted and the area become Hill Slopes Rural zone.
- 3.2.3 There is a 2GP RR 2 zone located on Grassy Point, the rural promontory between Company Bay and Broad Bay, and within the Peninsula Harbourside SNL. The area contributes to the lobe of land that is the culmination of the natural ridge extending down from Larnach Castle above, and with some naturalness reaches down toward the harbour waters between settlements either side. This green lobe is important to the SNL. Whilst we recognise this area already has a degree of rural residential character, we understand that the RR2 zone would allow for several additional residences. Due to the importance of retaining legible naturalness and ruralness of the ridge from summit to sea, plus retaining the rural separation between the settlements either side, the RR2 zone is considered inappropriate.
- 3.2.4 There is a 2GP RR 2 zone located between Highcliff and Portobello Roads in the area surrounding The Cove which is within the Peninsula Harbourside SNL and extends into the Otago Peninsula ONL. The witnesses agree that west of The Cove township and settlement zone, (refer Map sheet 15) due to the existing rural residential scale and character the RR zoning is not an issue. However, east of The Cove, rural residential development is inappropriate and would not protect the values and attributes of the landscape overlays and should be deleted.



3.3 West Harbour SNL

- 3.3.1 There is a 2GP RR 2 zone located directly adjacent to the north side of the Sawyers Bay settlement which largely has a West Harbour SNL overlay. The witnesses agree that whilst the area is already partially developed, the RR zone is inappropriate. The natural landscape attributes in this locale contribute to important connections between the volcanic lands above and harbourside slopes below, and incremental built change would not protect these values.
- 3.3.2 There is a 2GP RR 1 zone located at Cleghorn Street within an otherwise unbuilt area zoned Rural which is within both the West Harbour and Flagstaff-Mt Cargill SNL overlays. The RR 1 zone already has a rural residential character. For this reason, the witnesses are agreed that delineating this existing rural residential node is appropriate to provide planning clarity and to deter future built "creep". We note too, that the SNL provisions seek to provide for appropriate control over further development within the RR zone at this location. Ms Lucas seeks assurance that the provisions will be adequate to confine landscape effects.
- 3.3.3 There is a 2GP RR 1 zone located at Curles Point within the West Harbour SNL overlay. The location is part of the scarce connecting lands providing for some naturalness and ruralness to extend from the hills above down to the harbour waters. In the landscape overview, although the Curles Point location already has some rural residential character and little apparent capacity for more development, it is assessed as a significant but vulnerable contributor to the mountain to sea rural/natural landscape link. We agree that the RR zoning could be seen as merely reflecting the existing character however, it would not support the vulnerable SNL attributes in this location and should be deleted.
- 3.3.4 There is a 2GP RR 1 zone located at St Leonard's, which is within the West Harbour SNL overlay. The witnesses agree given the SNL overlay and the zone's prominent location RR zoning would not adequately protect the landscape values and should be deleted.
- 3.3.5 There is a 2GP RR 1 zone located at Burkes, within the West Harbour SNL overlay. The witnesses agree the area is visually prominent and part of the rural/natural context of the upper harbour and settlement backdrops. The witnesses agree that the zoning is not appropriate and should be changed to Hill Slopes Rural.
- 3.3.6 There is a 2GP RR 1 zone located at Ravensbourne, within the West Harbour SNL overlay. The witnesses agree the elevated location above the settlement of Ravensbourne and the SNL values, make further built development inappropriate and would not protect the SNL values. Parts of the area are visually prominent and have high naturalness values. The witnesses agree that RR zoning is inappropriate in this location.
- 3.3.7 There is a 2GP RR 2 zone located in the area between Careys and Deborah Bays and between Blueskin Road and Otago Harbour, which is predominantly within the West Harbour SNL overlay and extends slightly into the Heyward Coast ONL. Whilst the area already has some RR character, the witnesses agree that the area is visually prominent and that the RR 2 zoning of these slopes would not protect the SNL and ONL values. The zone should be deleted.



3.4 Mt Cargill ONL, Flagstaff/Mt Cargill SNL and Pūrākaunui SNL

- 3.4.1 There is a 2GP RR 2 zone located at Cowan Road, partially within the pONL PCT appeal area and that part is within Mt Cargill ONL overlay. Whilst there is some existing rural residential character, to protect the landscape values of this ONL, we consider that further development is not appropriate. Therefore, this RR 2 zoning within the overlay should be deleted.
- 3.4.2 There is a 2GP RR 2 zone located to either side of Campbells Road and extending down to North-east Valley, partially within the pONL PCT appeal area and largely within the Flagstaff/Mt Cargill SNL overlay. The witnesses agree that for the area within the pONL, (which they note involves prominent and bush-covered slopes that contribute high amenity and naturalness to the wider landscape) RR 2 zoning has potential adverse landscape effects. They agree the RR 2 zoning proposed within the pONL would appropriately be deleted.
- 3.4.3 There is a 2GP RR 2 zone located at Blueskin Road, upslope of the Orokonui Eco-sanctuary, which is within both the Mt Cargill and Heyward Coast ONLs. The witnesses agree that to protect the landscape values of these ONLs the RR 2 zoning is inappropriate and should be deleted.
- 3.4.4 There is a 2GP RR 2 zone located at **Osborne**, within the edge of Heyward Coast ONL and the rest is within the Pūrākaunui SNL. The ONL includes the Pūrākaunui Creek corridor from Mihiwaka down to the Inlet. We agree it is appropriate to exclude the stream corridor and its context from the RR zoning, Given that some of the area has a character with capacity to absorb further discrete built development, that there is limited potential for further development, and that adequate controls are expected to be provided by the SNL overlay and RR 2 zoning, we agree that the RR2 zoning is appropriate for part of the area west of the stream corridor. To respect the SNL, we consider that any residential buildings should be provided for only above the 40 m contour, and with conditions ensuring the low-key, well-vegetated character of Osborne, with buildings scarcely evident, would be achieved.



Appendix 1: 2GP Policy 2.4.4.1 (Appeals version)

Policy 2.4.4.1 Identify and assess natural features and natural landscapes based on the following values:

1. natural science factors;
2. aesthetic values and memorability;
3. expressiveness and **legibility**;
4. transient values;
5. whether values are shared and recognised;
6. value to **takata whenua**; and
7. historical associations.



Appendix 2: Proposed Regional Policy Statement for Otago (Council decisions version)

Schedule 3

Criteria for the identification of outstanding natural features, landscapes and seascapes, and highly valued natural features, landscapes and seascapes

The identification of natural features, landscapes and seascapes will be based on, but not limited to, the following criteria:

1. Biophysical attributes
 - a. Natural science factors, including geological, topographical, ecological and dynamic components
 - b. The presence of water including in seas, lakes, rivers and streams
 - c. Vegetation (native and exotic)
2. Sensory attributes
 - a. Legibility or expressiveness—how obviously the feature or landscape demonstrates its formative processes
 - b. Amenity values including memorability and naturalness
 - c. Transient values including presence of wildlife or other values at certain times of the day or year
 - d. Wild or scenic values
3. Associative attributes
 - a. Whether the values are shared and recognised
 - b. Cultural and spiritual values for Kāi Tahu, identified by working, as far as practicable, in accordance with tikanga Māori; including their expression as cultural landscapes and features
 - c. Historical and heritage associations



Proposed Landscape Overlays

Place names

Otago Peninsula

- 1 Pukemata (Harbour Cone)
- 2 Pukekura (Taiaroa Head)
- 3 Peggys Hill
- 4 Pikiwhara / Sandfly Bay dunefields
- 5 Pikiwhara / Sandymount Sea Arch
- 6 Hoopers inlet
- 7 Papanui Inlet

Geopreservation sites include:

- 5 Sandymount / Pikiwhara
 - 4 Sandfly Bay / Pikiwhara
 - 8 Lovers Leap
 - 9 The Chasm
 - 6 Hoopers Inlet
 - 7 Papanui Inlet
 - 10 Otago Peninsula Pyramids
 - 11 Larnach Castle
 - 25 Harwood earth flow & Harwood stranded sea cliffs
- (reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand)

Significant wetlands (Otago Regional Plan: Water) include:

- 7 Papanui Inlet
- 12 Ōkia
- 13 Tomahawk lagoon
- 6 Hoopers Inlet

- 12 Ōkia Flat
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo Papanui Inlet islands

- 14 Poatiri (Mt Charles)
- 15 Papanui Beach
- 16 Te Pahi (Allans Beach)
- 17 Ocean Grove
- 52 Muaupoko

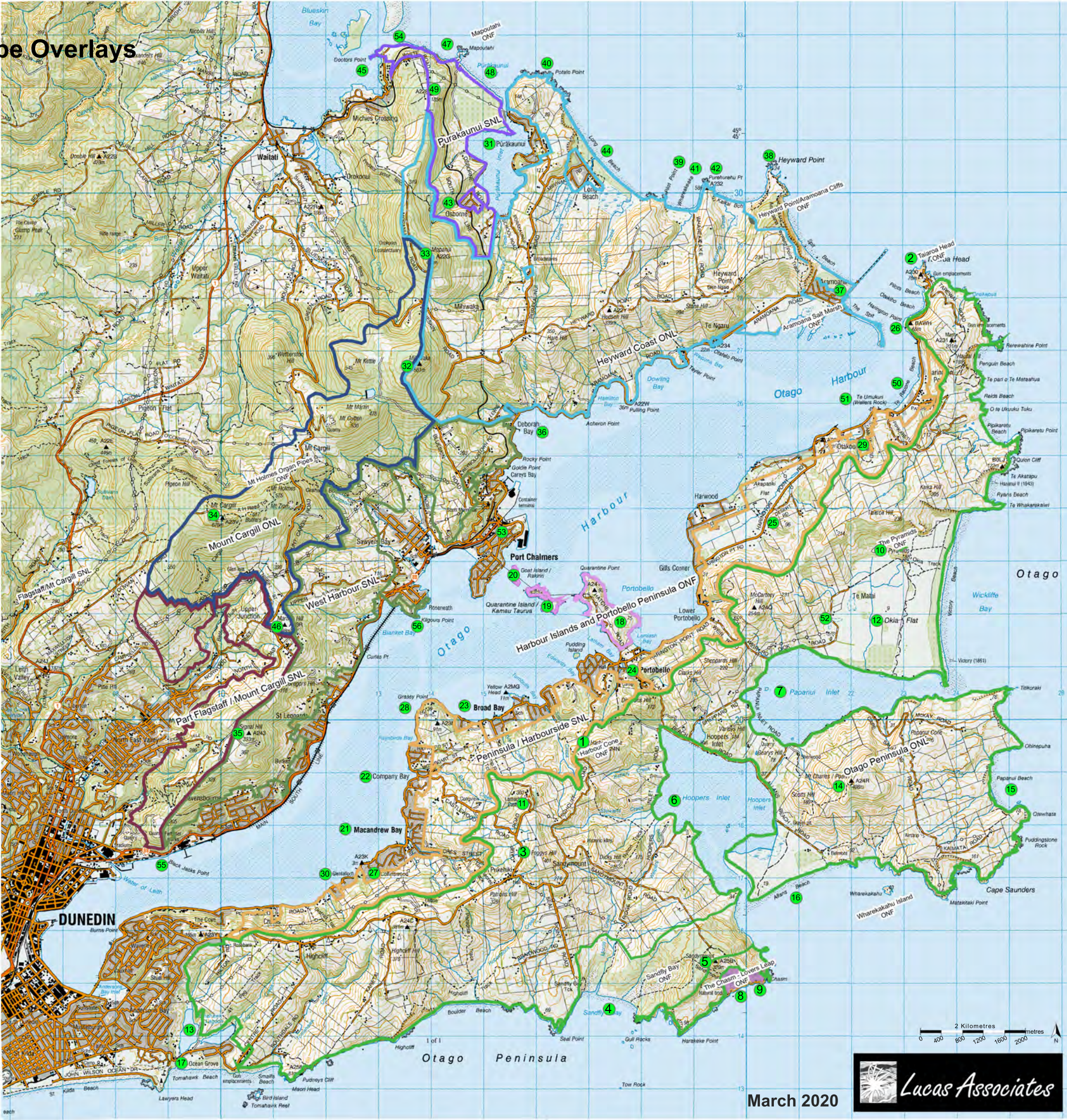
Harbourside

- 18 Portobello Peninsula
- 51 Te Umukuri / Wellers Rock
- 28 Grassy Point

Settlements include:

- 21 Macandrew Bay
- 22 Company Bay
- 23 Broad Bay
- 24 Portobello
- 25 Harwood
- 26 Harington Point
- 27 Collinswood Bush
- 29 Ōtākou Marae
- 30 Glenfalloch
- 50 Te Rauone Beach

- 19 Kamau Taurua (Quarantine Island)
- 20 Rakiriri (Goat Island)



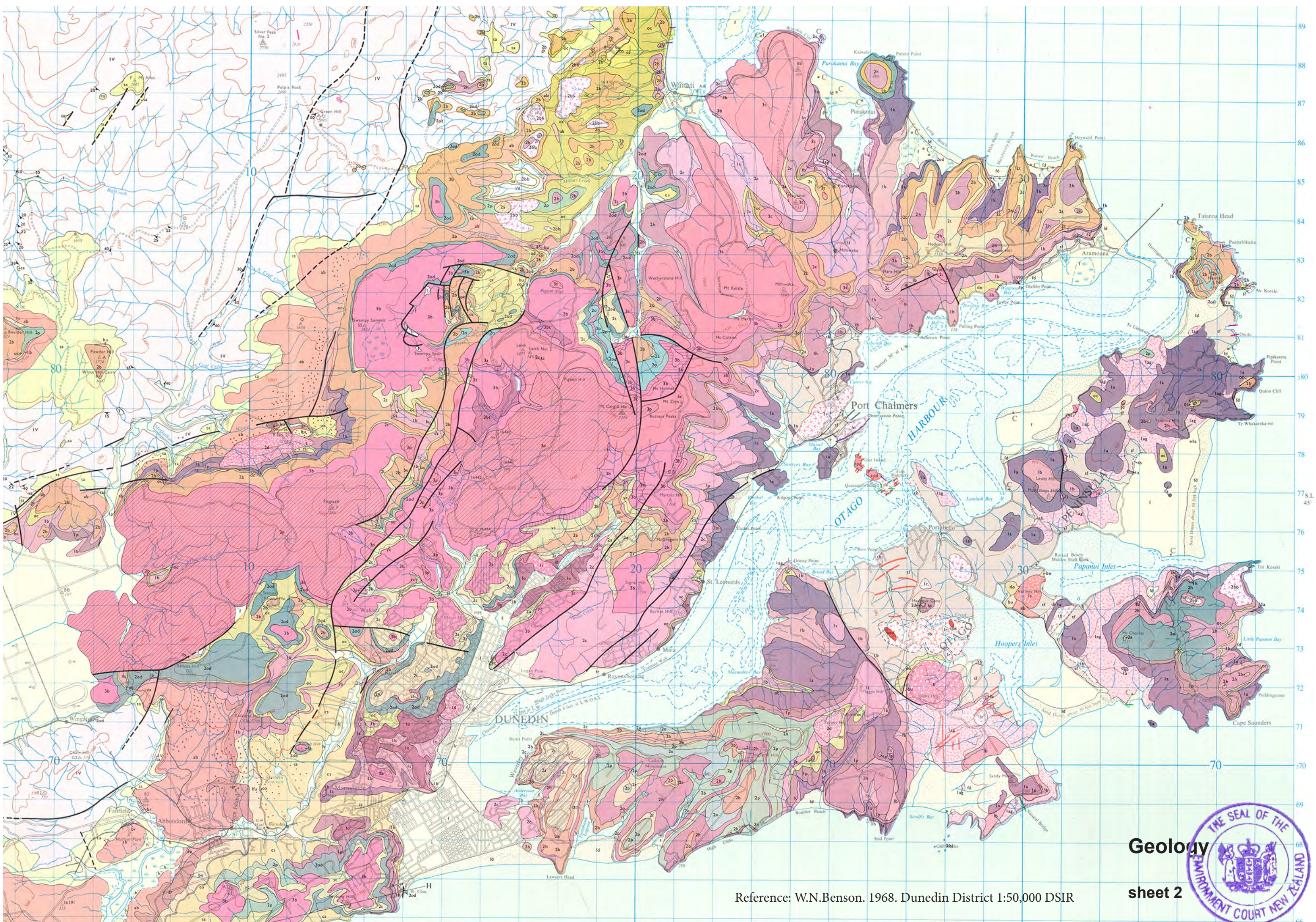
- 31 Pūrākaunui
- 32 Mihiwaka
- 33 Mopanui
- 34 Mt Cargill
- 35 Signal Hill
- 36 Deborah Bay
- 37 Aramoana
- 38 Heyward Point
- 39 Pilot Point
- 40 Potato Point
- 41 Whareakeake
- 42 Purehurehu
- 43 Osborne
- 44 Wharewerawera (Long Beach)
- 45 Doctors Point
- 46 Martins Hill
- 47 Māpoutahi
- 48 Pūrākaunui Bay
- 49 BB
- 53 Kōpūtai (Port Chalmers)
- 54 Blueskin Cliff
- 55 Black Jacks Point
- 56 Kilgours Point



March 2020

Print @ A3

sheet 1

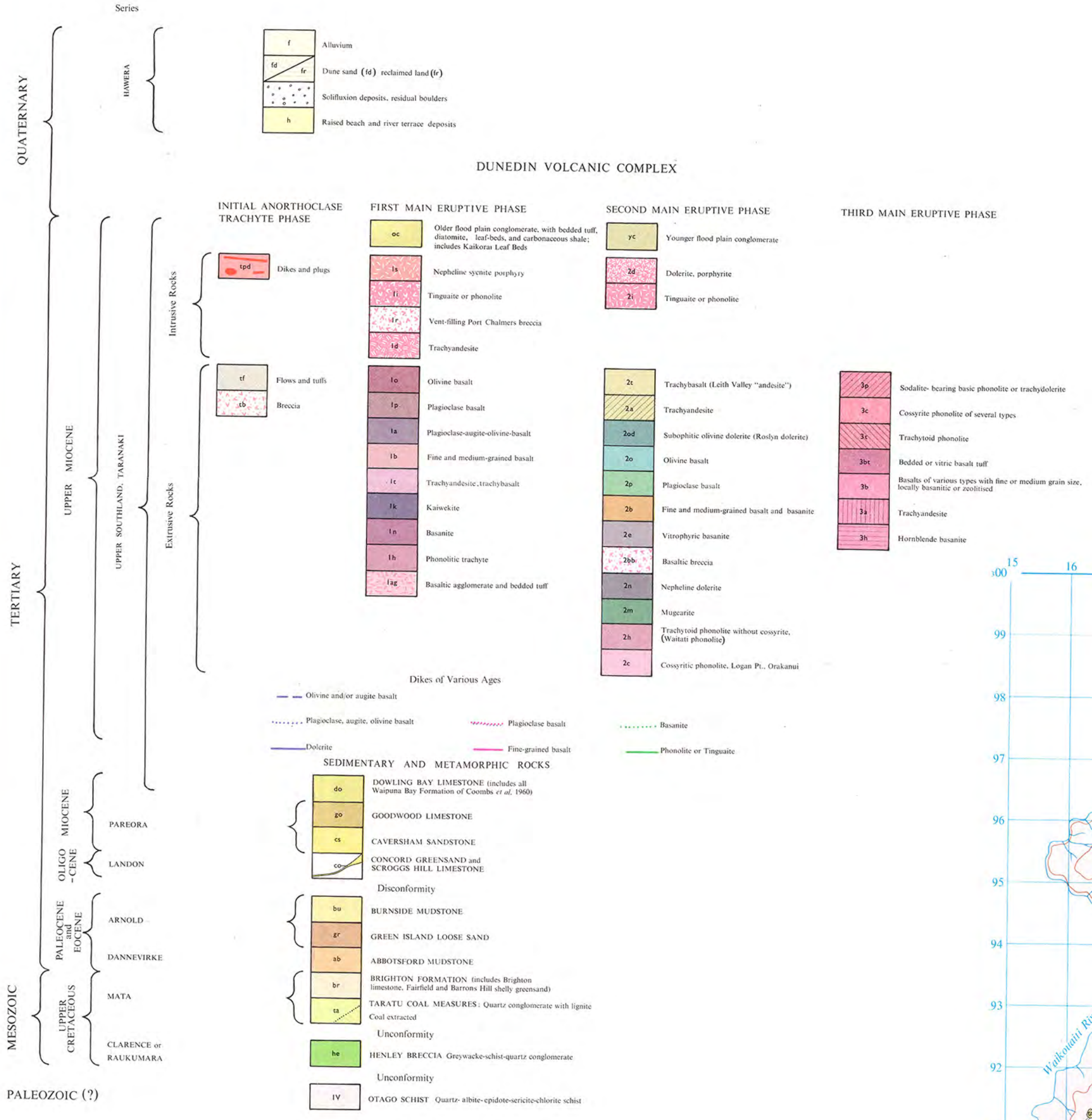


Reference: W.N.Benson. 1968. Dunedin District 1:50,000 DSIR

Geology
sheet 2



THE W. N. BENSON GEOLOGICAL MAP OF DUNEDIN DISTRICT



Geopreservation Sites

- 4 Sandfly Bay / Pikiwhara
- 8 Lovers Leap
- 9 The Chasm
- 6 Hoopers Inlet
- 7 Papanui Inlet
- 10 Otago Peninsula Pyramids
- 11 Larnach Castle
- 25 Harwood stranded sea cliffs
- 55 Harwood earth flow
- 53 Sandymount terracettes
- 54 Sandymount lime kiln
- 31 Pūrākaunui Inlet
- 32 Mihiwaka / North Dunedin phonolite domes
- 33 Mopanui / North Dunedin phonolite domes
- 56 Mt Holmes organ pipes
- 57 North Dunedin phonolite domes
- 58 Aramoana-Heyward Point lava flows
- 59 Blueskin Bay Quaternary tidal flats and coastal features
- 60 Hare Hill / North Dunedin phonolite domes

(reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand)



Place names

- 1 Pukemata (Harbour Cone)
- 2 Pukekura (Taiaroa Head)
- 3 Peggys Hill
- 4 Pikiwhara / Sandfly Bay dunefields
- 5 Pikiwhara / Sandymount Sea Arch
- 6 Hoopers inlet
- 7 Papanui Inlet

Significant wetlands (Otago Regional Plan: Water) include:
7 Papanui Inlet
12 Ōkia
13 Tomahawk lagoon
6 Hoopers Inlet

- 12 Ōkia flat
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo Papanui Inlet islands
- 14 Poatiri (Mt Charles)
- 15 Papanui Beach
- 16 Te Pahi (Allans Beach)
- 17 Ocean Grove
- 52 Muaupoko

Harbourside
18 Portobello Peninsula
51 Te Umukuri / Wellers Rock
28 Grassy Point

- Settlements include:
- 21 Macandrew Bay
 - 22 Company Bay
 - 23 Broad Bay
 - 24 Portobello
 - 25 Harwood
 - 26 Harington Point
 - 27 Collinswood Bush
 - 29 Ōtākou Marae
 - 30 Glenfalloch
 - 50 Te Rauone Beach

- 19 Kamau Taurua (Quarantine Island)
- 20 Rakiriri (Goat Island)

- 34 Mt Cargill
- 35 Signal Hill
- 36 Deborah Bay
- 37 Aramoana
- 38 Heyward Point
- 39 Pilot Point
- 40 Potato Point
- 41 Whareakeake
- 42 Purehurehu
- 43 Osborne
- 44 Wharewerawera (Long Beach)
- 45 Doctors Point
- 46 Martins Hill
- 47 Māpoutahi
- 48 Pūrākaunui Bay
- 49 BB
- 53 Kōpūtai (Port Chalmers)
- 54 Blueskin Cliff
- 55 Black Jacks Point
- 56 Kilgours Point



Marine Habitat

Place names

Otago Peninsula

- 1 Pukemata (Harbour Cone)
- 2 Pukekura (Taiaroa Head)
- 3 Peggys Hill
- 4 Pikiwhara / Sandfly Bay dunefields
- 5 Pikiwhara / Sandymount Sea Arch
- 6 Hoopers inlet
- 7 Papanui Inlet

Geopreservation sites include:

- 5 Sandymount / Pikiwhara
 - 4 Sandfly Bay / Pikiwhara
 - 8 Lovers Leap
 - 9 The Chasm
 - 6 Hoopers Inlet
 - 7 Papanui Inlet
 - 10 Otago Peninsula Pyramids
 - 11 Larnach Castle
 - 25 Harwood earth flow & Harwood stranded sea cliffs
- (reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand)

Significant wetlands (Otago Regional Plan: Water) include:

- 7 Papanui Inlet
- 12 Ōkia
- 13 Tomahawk lagoon
- 6 Hoopers Inlet

- 12 Ōkia Flat
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo Papanui Inlet islands
- 14 Poatiri (Mt Charles)
- 15 Papanui Beach
- 16 Te Pahi (Allans Beach)
- 17 Ocean Grove
- 52 Muaupoko

Harbourside

- 18 Portobello Peninsula
- 51 Te Umukuri / Wellers Rock
- 28 Grassy Point

Settlements include:

- 21 Macandrew Bay
- 22 Company Bay
- 23 Broad Bay
- 24 Portobello
- 25 Harwood
- 26 Harington Point
- 27 Collinswood Bush
- 29 Ōtākou Marae
- 30 Glenfalloch
- 50 Te Rauone Beach

- 19 Kamau Taurua (Quarantine Island)
- 20 Rakiriri (Goat Island)

Legend:

Reef

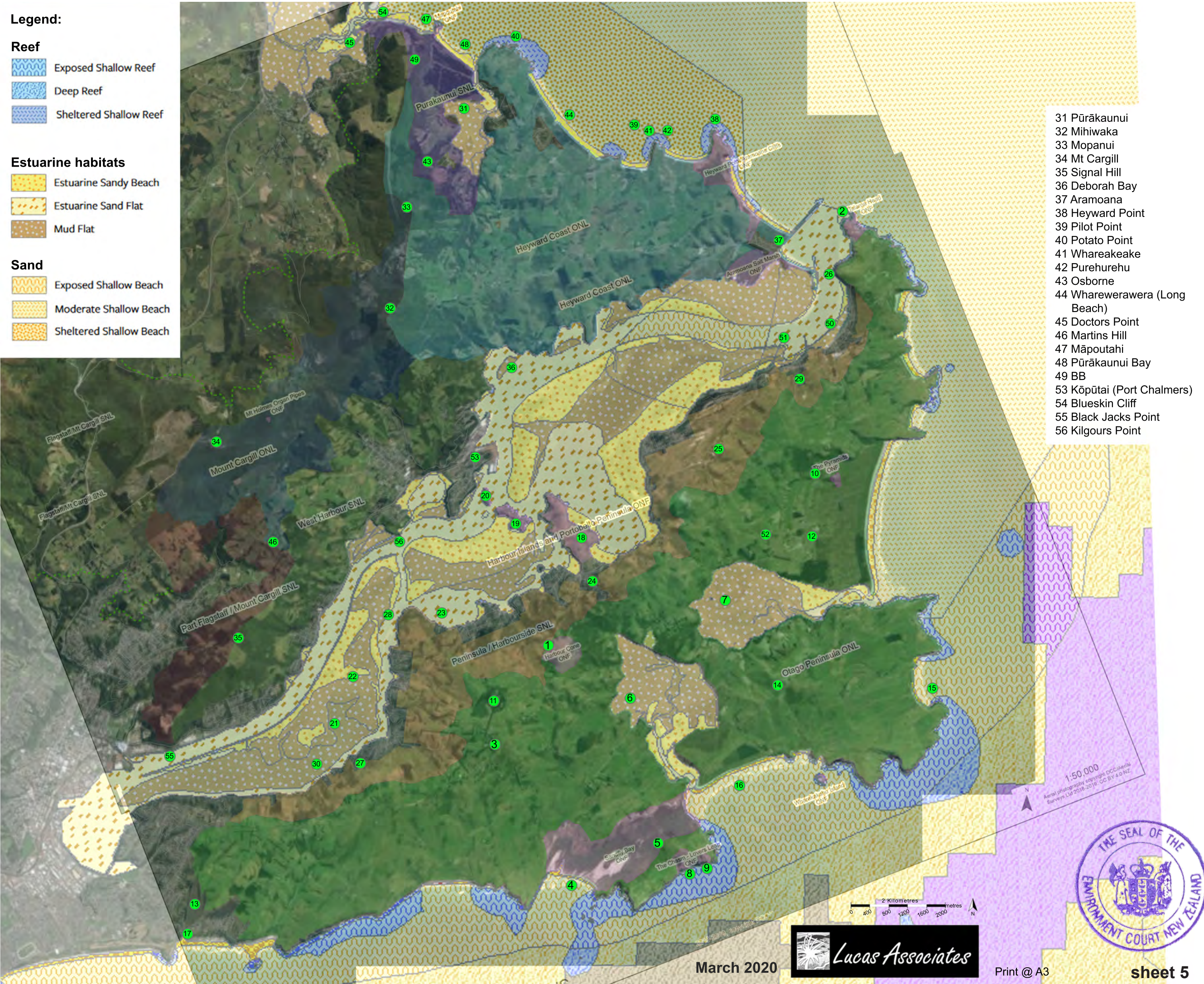
- Exposed Shallow Reef
- Deep Reef
- Sheltered Shallow Reef

Estuarine habitats

- Estuarine Sandy Beach
- Estuarine Sand Flat
- Mud Flat

Sand

- Exposed Shallow Beach
- Moderate Shallow Beach
- Sheltered Shallow Beach



- 31 Pūrākaunui
- 32 Mihiwaka
- 33 Mopanui
- 34 Mt Cargill
- 35 Signal Hill
- 36 Deborah Bay
- 37 Aramoana
- 38 Heyward Point
- 39 Pilot Point
- 40 Potato Point
- 41 Whareakeake
- 42 Purehurehu
- 43 Osborne
- 44 Wharewerawera (Long Beach)
- 45 Doctors Point
- 46 Martins Hill
- 47 Māpoutahi
- 48 Pūrākaunui Bay
- 49 BB
- 53 Kōpūtai (Port Chalmers)
- 54 Blueskin Cliff
- 55 Black Jacks Point
- 56 Kilgours Point

March 2020



Print @ A3

sheet 5

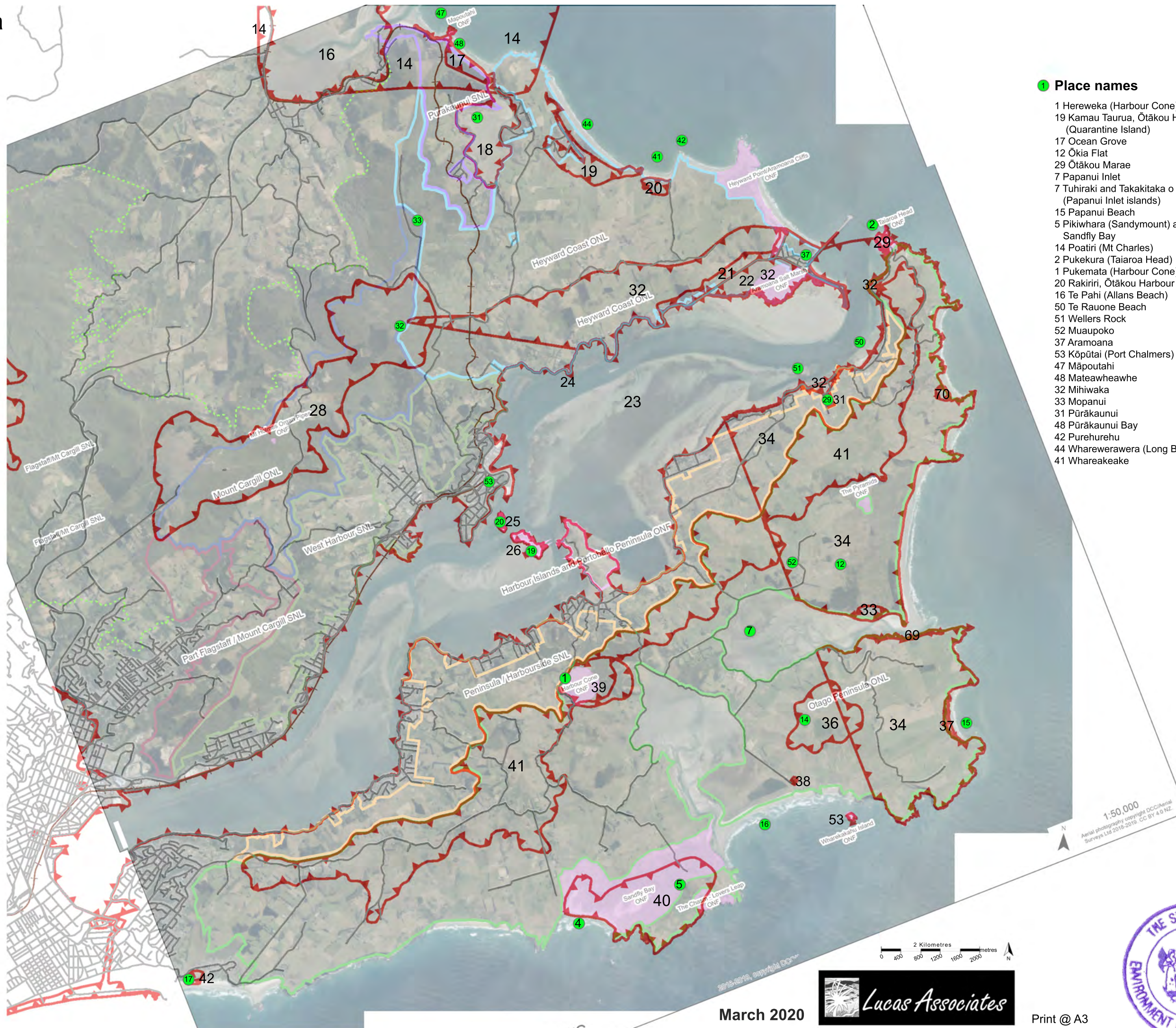
2GP Mapped Areas

- 14 Pūrākaunui to Hikaroroa to Huriawa
- 16 Blueskin Bay
- 17 Māpoutahi and Mateawheawhe (beach at Pūrākaunui Bay)
- 18 Pūrākaunui
- 19 Wharewerawera (Long Beach)
- 20 Whareakeake
- 21 Hill faces near / at Aramoana
- 22 Saltmarsh and spit at Aramoana
- 23 Ōtākou Harbour
- 24 Otaheiti (Acheron Point)
- 25 Rakiriri (Goat Island)
- 26 Kamau Taurua (Quarantine Island)
- 28 Peaks from Mihiwaka and Mt Kettle to Mt Cargill
- 29 Pukekura (Taiaroa Head)
- 31 Ōtākou Marae Reserve
- 32 Views from Ōtākou Marae around Upper Harbour
- 33 Ōkia Flat
- 34 Ōtākou Native Reserve
- 36 Poatiri (Mt Charles)
- 37 Papanui Beach
- 38 Te Pahi
- 39 Pukemata (Harbour Cone)
- 40 Pikiwhara (Sandymount) and Sandfly Bay
- 41 Upper slopes and peaks of Otago Peninsula
- 42 Ocean Grove
- 53 Islands off Southern Coast
- 69 Tau Muraki
- 70 Pipikaretu

(2GP Section 14, Manawhenua and Appendix A4)

1 Place names

- 1 Hereweka (Harbour Cone)
- 19 Kamau Taurua, Ōtākou Harbour (Quarantine Island)
- 17 Ocean Grove
- 12 Ōkia Flat
- 29 Ōtākou Marae
- 7 Papanui Inlet
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo (Papanui Inlet islands)
- 15 Papanui Beach
- 5 Pikiwhara (Sandymount) and 4 Sandfly Bay
- 14 Poatiri (Mt Charles)
- 2 Pukekura (Taiaroa Head)
- 1 Pukemata (Harbour Cone)
- 20 Rakiriri, Ōtākou Harbour (Goat Island)
- 16 Te Pahi (Allans Beach)
- 50 Te Rauone Beach
- 51 Wellers Rock
- 52 Muaupoko
- 37 Aramoana
- 53 Kōpūtai (Port Chalmers)
- 47 Māpoutahi
- 48 Mateawheawhe
- 32 Mihiwaka
- 33 Mopanui
- 31 Pūrākaunui
- 48 Pūrākaunui Bay
- 42 Purehurehu
- 44 Wharewerawera (Long Beach)
- 41 Whareakeake



Proposed Landscape Overlays

Place names

Otago Peninsula

- 1 Pukemata (Harbour Cone)
- 2 Pukekura (Taiaroa Head)
- 3 Peggys Hill
- 4 Pikiwhara / Sandfly Bay dunefields
- 5 Pikiwhara / Sandymount Sea Arch
- 6 Hoopers inlet
- 7 Papanui Inlet

Geopreservation sites include:
5 Sandymount / Pikiwhara
4 Sandfly Bay / Pikiwhara
8 Lovers Leap
9 The Chasm
6 Hoopers Inlet
7 Papanui Inlet
10 Otago Peninsula Pyramids
11 Larnach Castle
25 Harwood earth flow & Harwood stranded sea cliffs
(reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand)

Significant wetlands (Otago Regional Plan: Water) include:
7 Papanui Inlet
12 Ōkia
13 Tomahawk lagoon
6 Hoopers Inlet

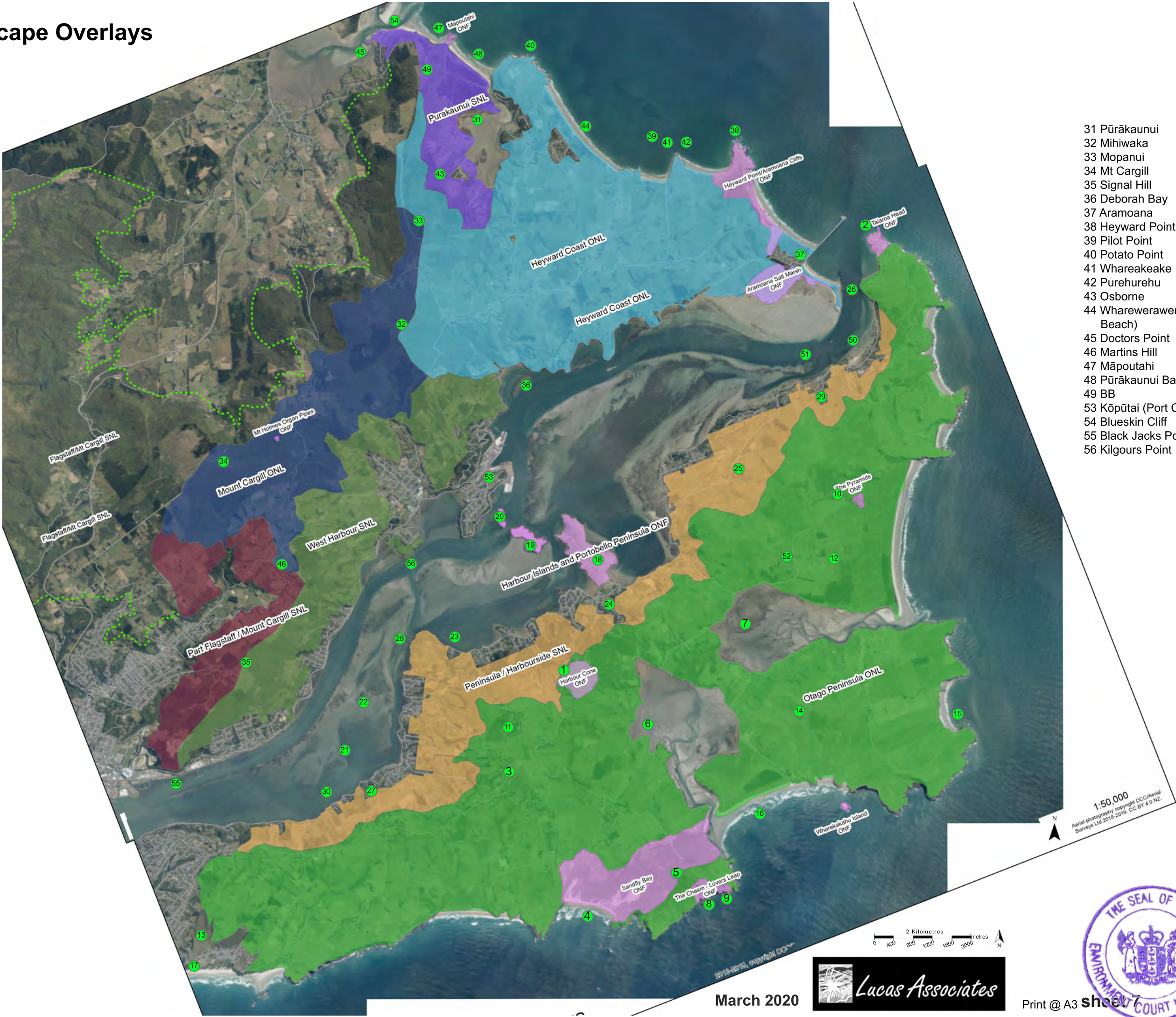
- 12 Ōkia Flat
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo Papanui Inlet islands
- 14 Poatiri (Mt Charles)
- 15 Papanui Beach
- 16 Te Pahi (Allans Beach)
- 17 Ocean Grove
- 52 Muaupoko

Harbourside
18 Portobello Peninsula
51 Te Umukuri / Wellers Rock
28 Grassy Point

Settlements include:
21 Macandrew Bay
22 Company Bay
23 Broad Bay
24 Portobello
25 Harwood
26 Harington Point
27 Collinswood Bush
29 Ōtākou Marae
30 Glenfalloch
50 Te Rauone Beach

19 Kamau Taurua (Quarantine Island)
20 Rakiriri (Goat Island)

- 31 Pūrākaunui
- 32 Mihiwaka
- 33 Mopanui
- 34 Mt Cargill
- 35 Signal Hill
- 36 Deborah Bay
- 37 Aramoana
- 38 Heyward Point
- 39 Pilot Point
- 40 Potato Point
- 41 Whareakeake
- 42 Purehurehu
- 43 Osborne
- 44 Wharewerawera (Long Beach)
- 45 Doctors Point
- 46 Martins Hill
- 47 Māpoutahi
- 48 Pūrākaunui Bay
- 49 BB
- 53 Kōpūtai (Port Chalmers)
- 54 Blueskin Cliff
- 55 Black Jacks Point
- 56 Kilgours Point

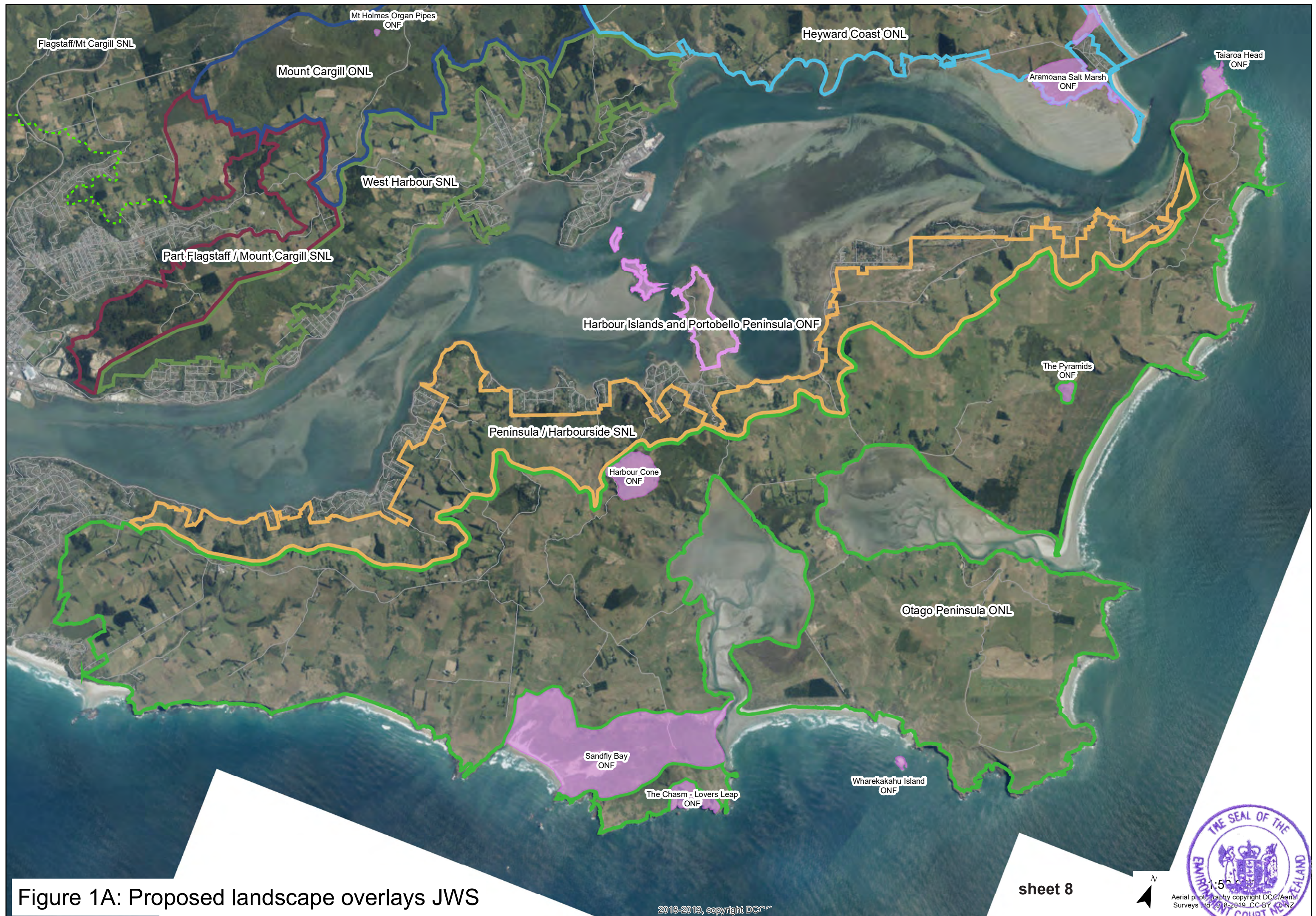


March 2020



Print @ A3 sheet 7





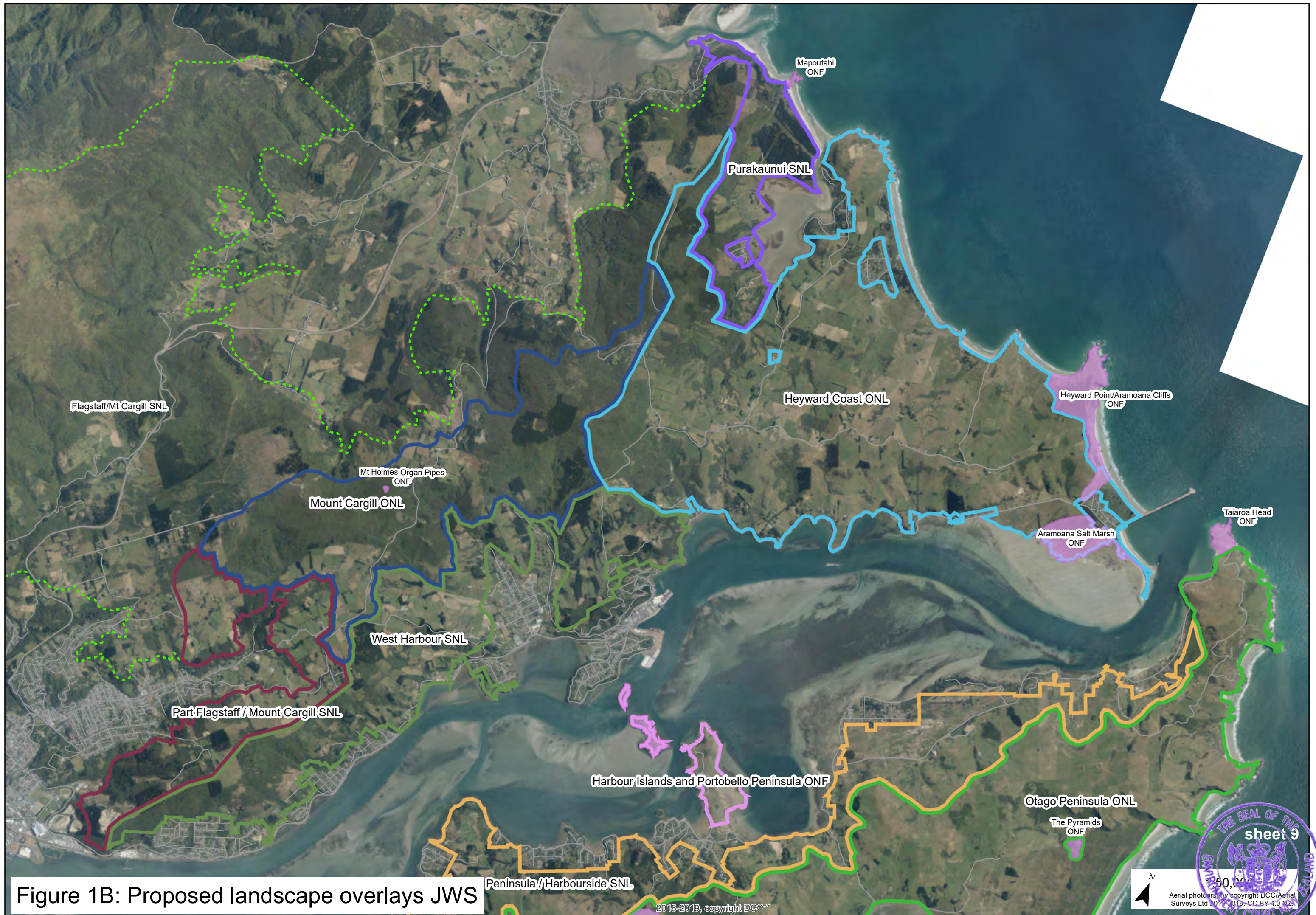


Figure 1B: Proposed landscape overlays JWS

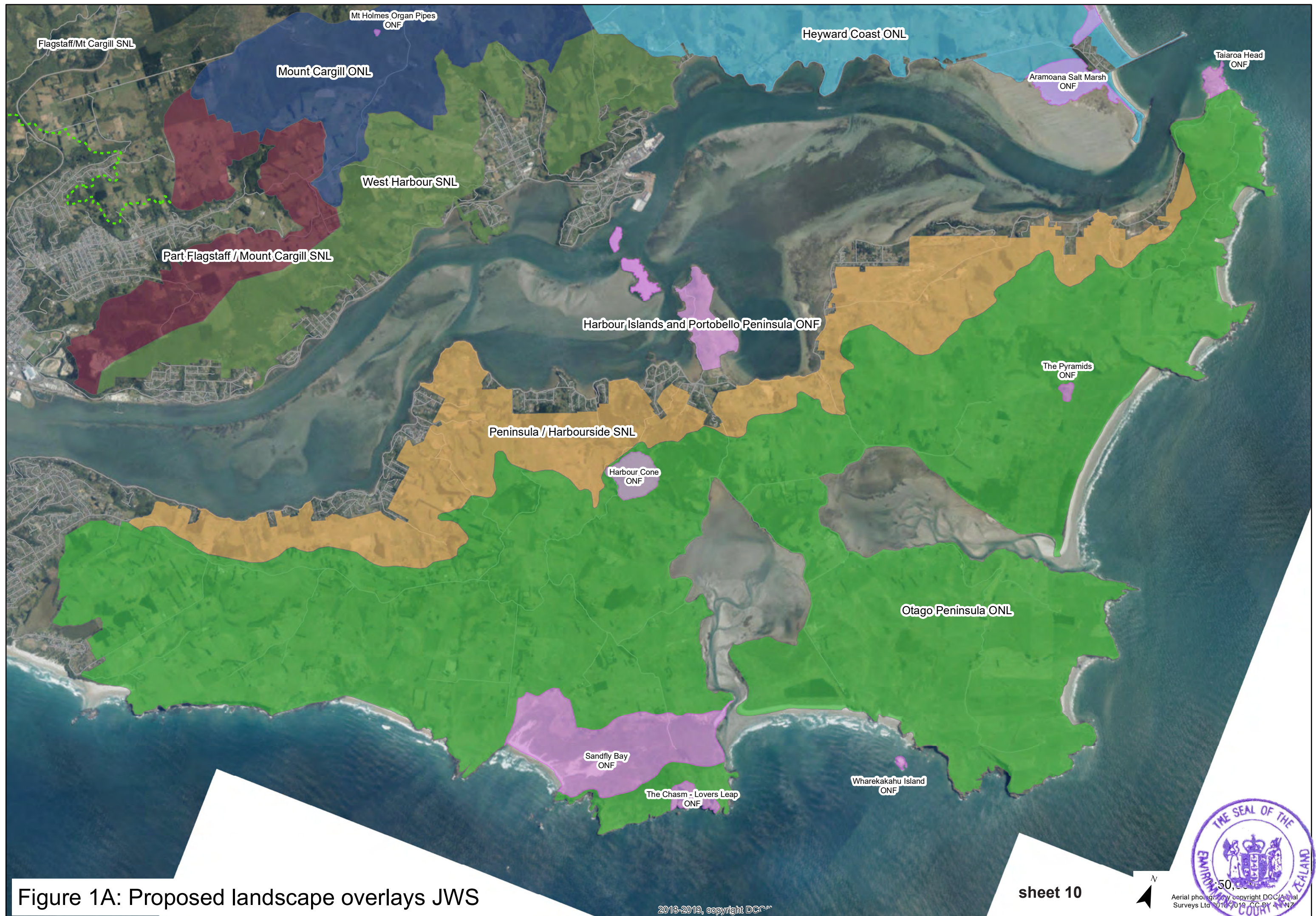


Figure 1A: Proposed landscape overlays JWS

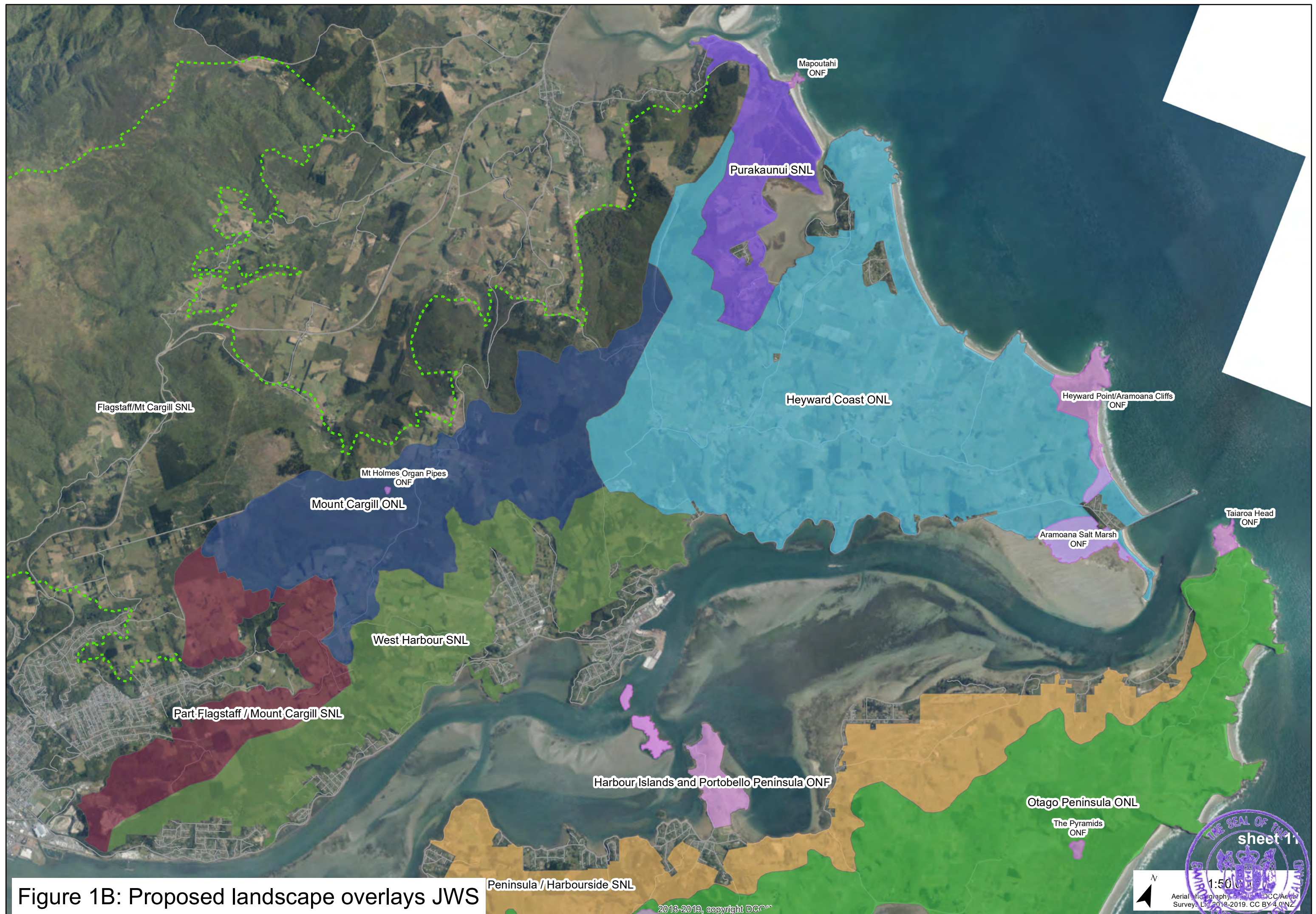


Figure 1B: Proposed landscape overlays JWS

Peninsula / Harbourside SNL

2018-2019, copyright DCC



pONL (PCT)

Place names

Otago Peninsula

- 1 Pukemata (Harbour Cone)
- 2 Puhekura (Taiaroa Head)
- 3 Peggys Hill
- 4 Pikiwhara / Sandfly Bay dunefields
- 5 Pikiwhara / Sandymount Sea Arch
- 6 Hoopers inlet
- 7 Papanui Inlet

Geopreservation sites include:
5 Sandymount / Pikiwhara
4 Sandfly Bay / Pikiwhara
8 Lovers Leap
9 The Chasm
6 Hoopers Inlet
7 Papanui Inlet
10 Otago Peninsula Pyramids
11 Larnach Castle
25 Harwood earth flow & Harwood stranded sea cliffs
(reference: New Zealand Geopreservation Inventory, Geoscience Society of New Zealand)

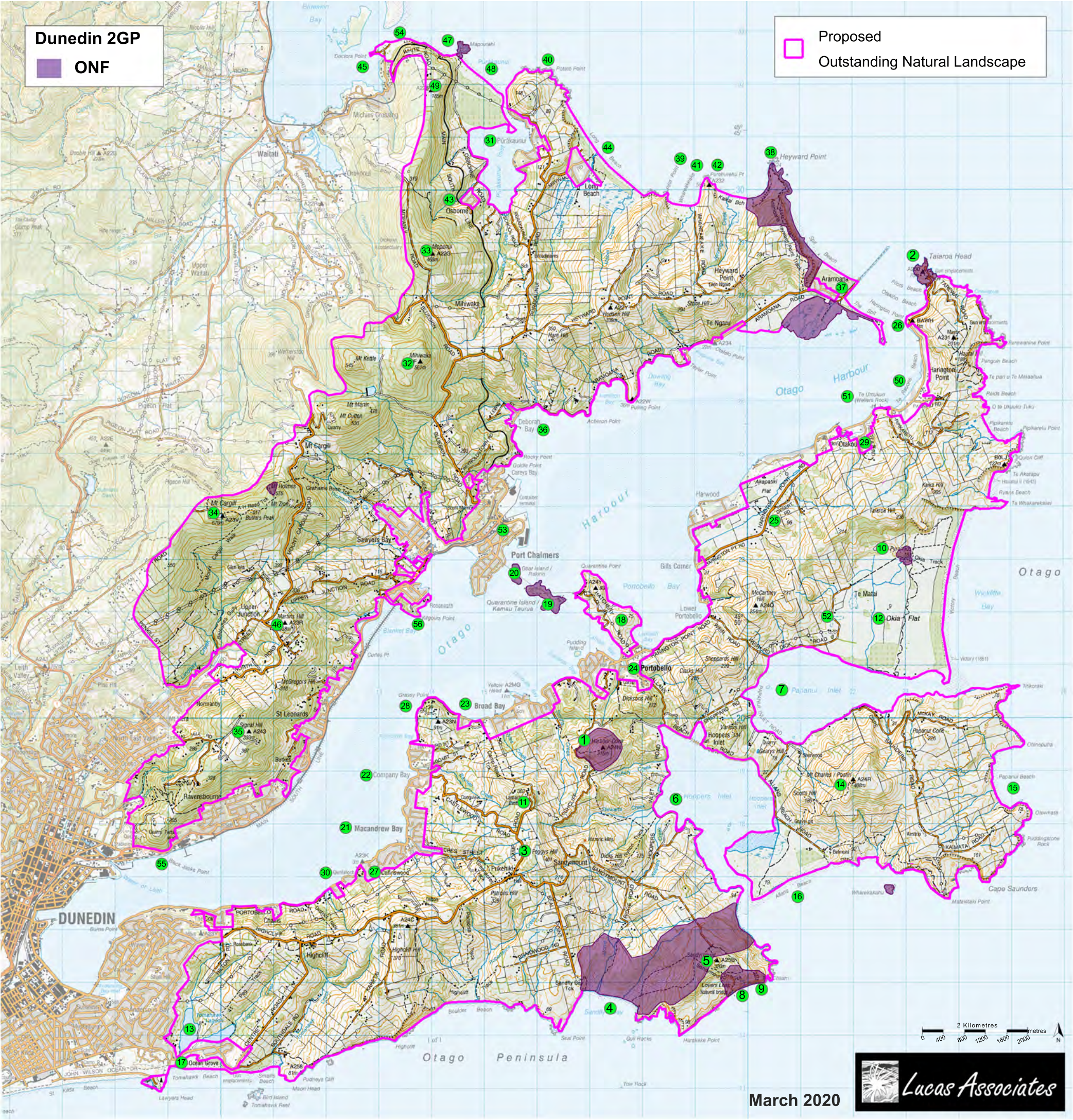
Significant wetlands (Otago Regional Plan: Water) include:
7 Papanui Inlet
12 Ōkia
13 Tomahawk lagoon
6 Hoopers Inlet

- 12 Ōkia Flat
- 7 Tuhiraki and Takakitaka o Te Piro o Kapo Papanui Inlet islands
- 14 Poatiri (Mt Charles)
- 15 Papanui Beach
- 16 Te Pahi (Allans Beach)
- 17 Ocean Grove
- 52 Muaupoko

Harbourside
18 Portobello Peninsula
51 Te Umukuri / Wellers Rock
28 Grassy Point

- Settlements include:
- 21 Macandrew Bay
 - 22 Company Bay
 - 23 Broad Bay
 - 24 Portobello
 - 25 Harwood
 - 26 Harington Point
 - 27 Collinswood Bush
 - 29 Ōtākou Marae
 - 30 Glenfalloch
 - 50 Te Rauone Beach

- 19 Kamau Taurua (Quarantine Island)
- 20 Rakiriri (Goat Island)



- 31 Pūrākaunui
- 32 Mihiwaka
- 33 Mopanui
- 34 Mt Cargill
- 35 Signal Hill
- 36 Deborah Bay
- 37 Aramoana
- 38 Heyward Point
- 39 Pilot Point
- 40 Potato Point
- 41 Whareakeake
- 42 Purehurehu
- 43 Osborne
- 44 Wharewera (Long Beach)
- 45 Doctors Point
- 46 Martins Hill
- 47 Māpoutahi
- 48 Pūrākaunui Bay
- 49 BB
- 53 Kōpūtai (Port Chalmers)
- 54 Blueskin Cliff
- 55 Black Jacks Point
- 56 Kilgours Point

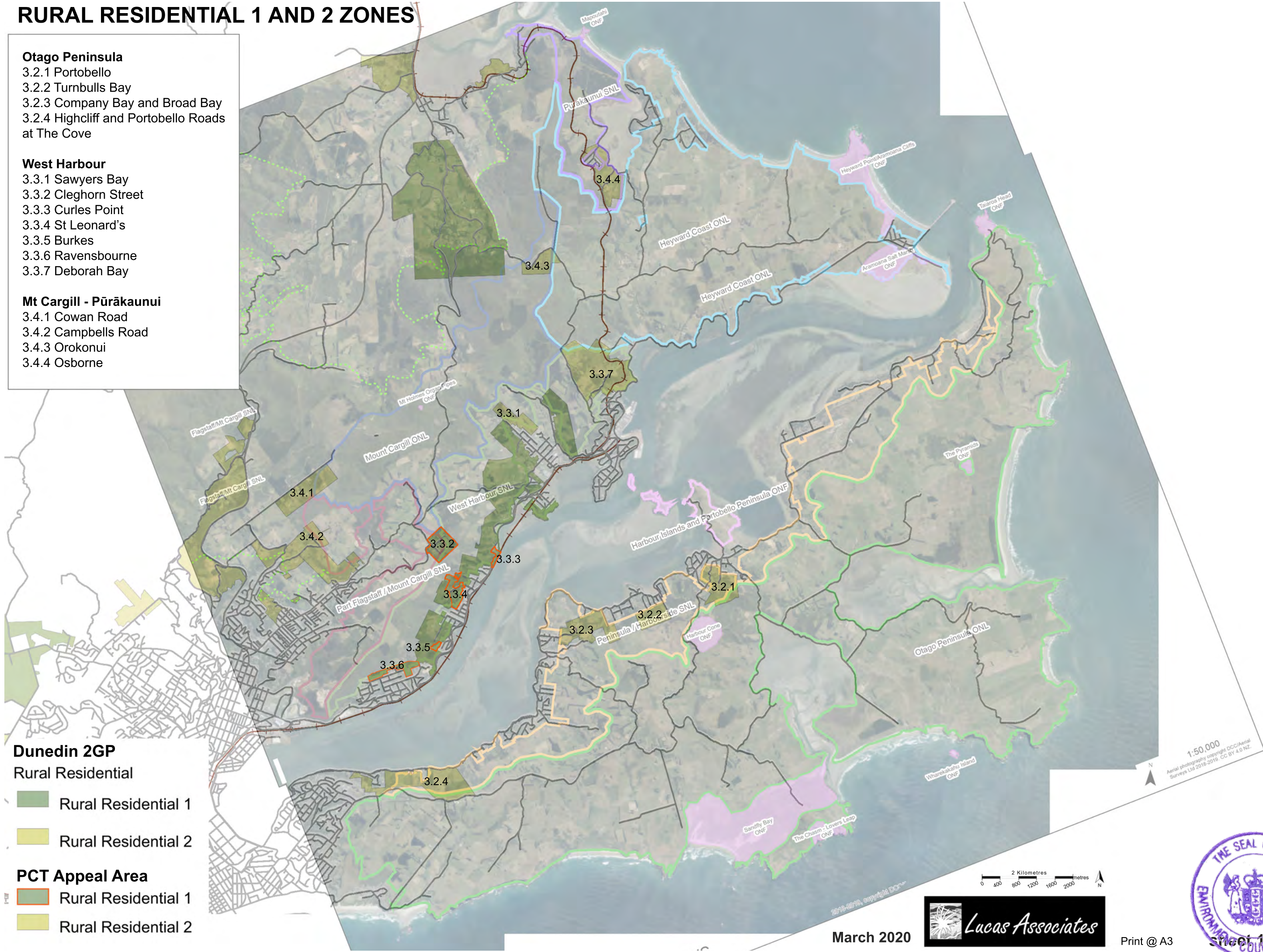


RURAL RESIDENTIAL 1 AND 2 ZONES

- Otago Peninsula**
3.2.1 Portobello
3.2.2 Turnbells Bay
3.2.3 Company Bay and Broad Bay
3.2.4 Highcliff and Portobello Roads at The Cove

- West Harbour**
3.3.1 Sawyers Bay
3.3.2 Cleghorn Street
3.3.3 Curles Point
3.3.4 St Leonard's
3.3.5 Burkes
3.3.6 Ravensbourne
3.3.7 Deborah Bay

- Mt Cargill - Pūrākaunui**
3.4.1 Cowan Road
3.4.2 Campbells Road
3.4.3 Orokonui
3.4.4 Osborne



Dunedin 2GP

Rural Residential

- Rural Residential 1
- Rural Residential 2

PCT Appeal Area

- Rural Residential 1
- Rural Residential 2

March 2020



Print @ A3



Sheet 13

RR 3.2.4 The Cove

