# Dunedin City Coastal Section Natural Landscape Units and Natural Features identified for assessment

Code	Natural Landscape Unit	Natural Feature identified for	
		consideration	
DL1	Pleasant River Estuary		
DL2	Tumai	DL2/F1. Cornish Head / Matanaka Sea	
		Caves	
DL3	Waikouaiti / Karitane	DL3/F1. Karitane Peninsula	
DL4	Seacliff		
DL5	Blueskin Bay	DL5/F1. Warrington Spit / Rabbit Island	
DL6	Purakaunui	DL6/F1. Mapoutahi	
DL7	Heyward Coast	DL7/F1. Potato Point	
		DL7/F2. Heyward Point / Aramoana	
		Cliffs	
DL8	Lower Otago Harbour	DL8/F1. Aramoana Salt Marsh	
		DL8/F2. Harwood stranded sea cliffs	
DL9	Upper Otago Harbour	DL9/F1. Goat Island	
		DL9/F2. Quarantine Island	
DL10	Outer Otago Peninsula	DL10/F1. Taiaroa Head	
DL11	Papanui Inlet / Okia	DL11/F1. Pyramids	
DL12	Cape Saunders Coast	DL12/F1. Wharekakahu Island	
DL13	Allans Beach / Hoopers Inlet		
DL14	Southern Otago Peninsula	DL14/F1. Lovers Leap and the Chasm	
		DL14/F2. Sandfly Bay Dunes	
DL15	Smaills / Tomahawk		
DL16	Ocean Beach	DL16/F1. White Island	
DL17	Tunnel Beach Coast	DL17/F1. Tunnel Beach sandstone	
		features	
		DL17/F2. Blackhead organ pipes	
DL18	Kaikorai / Green Island	DL18/F1. Green Island	
DL19	Brighton	DL19/F1. Brighton Uplifted Marine	
		Terrace	

DL20	Brighton – Taieri Mouth	
DL21	Taieri River Gorge	DL21/F1. Lower Taieri River Gorge
DL22	Henley	

**DL1. Pleasant River Estuary** 



Pleasant River Estuary occupies a valley within low coastal hills between State Highway 1 and the coast, and is protected from the ocean by a marram grass covered sand spit extending from the northern shore. The surrounding hill country (typically gently sloping on top, falling more steeply to the estuary) is comprised of sedimentary rock and reaches elevations of around 60 – 80m, suggesting eroded marine terraces. The hills are generally under pasture cover and devoid of trees, although patches of indigenous scrub survive in a few places.

The estuary, which has various arms and a number of tributaries, is flanked by saltmarsh and characterized by sinuous river channels winding through shallower sand flats. Its inland extent is characterized by increased modification in the form of drainage and reclamation for improved pasture. The rural, undomesticated character of the

surrounding hills is being modified by housing associated with the Tumai Coastal Sanctuary on the true right.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The estuary is a regionally significant saltmarsh wetland and habitat for waders and waterfowl as well as terrestrial invertebrates.</li> <li>Legibility and expressiveness values are reduced by the railway, drainage and agricultural development at the western end of the unit but are high at the mouth and eastern end.</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is modified throughout by agricultural land use and more recent housing development, but still strongly expressed in the natural estuary patterns (channels / sand banks / saltmarsh) and the coherence of the hill forms under pasture cover. The area has moderate – high natural landscape character near the open coast, grading to low – moderate values in its upper (inland) reaches.</li> <li>The area is unspectacular but has remoteness qualities at the eastern end and a relatively strongly expressed character based on the subdued relief, the natural functioning of the estuary and the uniformity of the pasture covered hills</li> </ul>	Medium
Transient values	Transient values associated with tidal rhythms and presence of birdlife / other wildlife will be significant in this area	High
Shared and recognised values	<ul> <li>The estuary is a Coastal Protection Area in the Otago Regional Plan Coast, noted for Kai Tahu cultural and spiritual values and Estuarine values. It is also recognised as a regionally significant wetland in the Otago Regional Plan: Water, an 'area of significant conservation value' in the Dunedin City District Plan and as an 'area of significant nature conservation value' in the Waitaki District Plan.</li> <li>Shared values associated with this landscape are assessed as moderate</li> </ul>	High - medium
Tangata whenua values	Te Hakapupu (Pleasant River) estuary is a place of significance to local Maori. This significance relates in particular to its history as a place of occupation and because of its importance as habitat for birds and fish. The values listed include Waahi Tapu and / or Waiwhakaheke, Waahi Taoka, Mahika kai, Kohanga,	High

	Trails and Cultural materials.	
Historic heritage values	There is one localised Category 1 Historic Place on the north-east side of the estuary (sandspit). This is a large archaeological site of outstanding archaeological significance. It is described as 'one of several moarich sites along the east coast of Southern New Zealand, dating to the Archaic phase of New Zealands prehistory' and 'a temporary camp site, occupied repeatedly during the 14 <sup>th</sup> – 16 <sup>th</sup> centuries'.	High - medium

Rating	Comments / Reasons	Outstanding
High - medium	Pleasant River Estuary has high – medium natural character values, particularly at its eastern (mouth) end and includes a regionally significant wetland. It is a place of significance to local Maori and there is a highly significant archaeological site on the spit. Aesthetic values range from low – moderate at the more modified western end to high – moderate at the more remote ocean end. Overall, landscape values are assessed as High – medium.	No

# Natural features assessed

(none)

DL2. Tumai



The Tumai Coast runs from Pleasant River mouth to Cornish Head. It is comprised of low (up to approximately 100m) dissected hills comprised of sedimentary rock which slope toward the coast and terminate in cliffs up to approximately 40m high. Different rock strata can be identified in the cliff faces and in places there are off shore reefs present. The land rises at the southern end at Cornish Head where there is an impressive rock slump. At this southern end too, there is a large complex of sea caves reputed to be the largest in the southern hemisphere.

The land is under pasture and in a few places there are patches of scattered indigenous forest. There is no road access and no buildings within the identified coastal environment. At Matanaka the coastal landscape abuts the historic farm buildings built by Jonny Jones and the oldest such buildings in New Zealand.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Cornish Head rock slump is listed in the inventory of important geological sites and landforms in the Otago region.</li> <li>The Matanaka sea caves are a significant natural feature.</li> <li>This area has a highly legible landform, expressive of coastal erosive processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Despite modification of the vegetation by farming naturalness values are medium - high based on lack of buildings and highly coherent coastal landforms</li> <li>This coast with its cliffs, ocean facing aspect, and inaccessibility has isolation qualities. Its highly coherent landform makes it memorable although with its relatively subdued topography it lacks the drama of other parts of the Otago coast.</li> </ul>	High - medium
Transient values	Transient values associated with sea states and the occasional presence of wildlife will be significant in this area	High - medium
Shared and recognised values	<ul> <li>The Cornish Head rock slump is listed in the inventory of important geological sites and landforms in the Otago region.</li> <li>There is surprisingly little recognition of the significance of the sea cave complex at Matanaka</li> <li>Cornish Head is recognised as an ONFL in the Otago Regional Plan: Coast as an 'outstanding coastal headland.</li> <li>In general however, the coast has low levels of accessibility and is little known.</li> </ul>	Medium
Tangata whenua values	<ul> <li>The south face of Matainaka (Cornish Head) was the site of an ancient Waitaha settlement and urupa (KTKO, 2006)</li> <li>No particular significance recorded generally.</li> </ul>	Medium
Historic heritage values	No values noted generally, but the Coastal Environment is directly adjacent to and closely associated with, the Matanaka Farm Historic Reserve, containing the oldest farm buildings in New Zealand.	Medium - low

Rating	Comments / Reasons	Outstanding
Medium - high	The Tumai coast has high legibility and expressiveness values and includes geomorphological features of significance at Matanaka (see D2 / F1). Aesthetic values are assessed as high – medium based on highly coherent coastal landforms. Modest shared and recognised values reflect its inaccessibility. Overall, landscape values are assessed as High - medium	No

### Natural features assessed

Matanaka

DL2 / F1. Matanaka



The landscape feature assessed is the Cornish Head headland including the rock slump on the southern face and the sea cave complex. The extent of the caves up the coast has determined the northward boundary. The Matanaka Historic Reserve, containing the earliest farm buildings in New Zealand is adjacent to this area (outside the coastal environment).

This headland is comprised of sedimentary rock with volcanic material coinciding with the summit of the hill. The rock slump is a large scale and distinctive landform feature on the south side and the sea caves are located over a 2km stretch on the eastern side. Some of these caves extend hundreds of meters inland and some are linked via intersecting passages. A reef protects the cave entrances at low tide.

The headland is under pasture cover and there are no buildings located within the coastal environment.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Cornish Head rock slump is listed in the inventory of important geological sites and landforms in the Otago region as a good example of a rock slump on a cliffed coastline.</li> <li>The Matanaka sea caves are a significant and most impressive natural feature.</li> <li>This area has a highly legible landform, expressive of coastal erosive processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Although the headland is modified by pastoral farming including farm tracks natural character values are high based on a highly coherent landform and the lack of any built structures.</li> <li>The headland is memorable for its slump forms</li> <li>The Sea caves are highly memorable and spectacular features</li> </ul>	High
Transient values	<ul> <li>Transient values associated with sea states and the occasional presence of wildlife are significant in this area</li> </ul>	High - medium
Shared and recognised values	<ul> <li>The Cornish Head rock slump is listed in the inventory of important geological sites and landforms in the Otago region.</li> <li>There is surprisingly little recognition of the significance of the sea cave complex at Matanaka</li> <li>Cornish Head is recognised as an ONFL in the Otago Regional Plan: Coast as an 'outstanding coastal headland.</li> </ul>	High - medium
Tangata whenua values	The south face of Matanaka (Cornish Head) was the site of an ancient Waitaha settlement and urupa (KTKO, 2006)	High - medium
Historic heritage values	The Coastal Environment is directly adjacent to and closely associated with, the Matanaka Farm Historic Reserve, containing the oldest farm buildings in New Zealand.	High

Rating	Comments / Reasons	Outstanding
High	Matanaka with its rock slump landform and impressive complex of sea caves has highly significant geomorphological and aesthetic values. Whilst these are its core values, its proximity to the Matanaka Historic Reserve also gives it heritage significance. Overall, landscape values are assessed as high and outstanding.	Yes

#### DL3. Waikouaiti / Karitane



#### **Character Description**

This is a coastal lowland landscape associated with the Waikouaiti River mouth and encompassing the Waikouaiti River Estuary and associated flats, Waikouaiti and Karitane beaches, Hawksbury Lagoon and Karitane headland. The settlements of Waikouaiti and Karitane are within or adjacent to the coastal environment in this area. The low lying coastal environment is comprised of gravel, sand and silt and is flanked by raised marine terraces of similar material overlain by loess. The main landform feature, the Karitane headland, is made up of sedimentary geology and is a tombolo, linked to the mainland by the beach.

To the north, Hawksbury Lagoon is a wildlife refuge now significantly modified by drainage, causeways and the adjacent railway and urban development. Its extent is now much reduced by the development of the Waikouaiti Racecourse and it has serious water quality issues.

The crescent shaped Waikouaiti Beach runs from the River mouth to Cornish Head and its adjacent dunelands have been significantly modified by forestry as well as a large scale poultry farm.

The Waikouaiti River Estuary too has been considerably modified by agricultural development pushing in from its margins. It does however retain saltmarsh and has recognised conservation values.

At the southern end, the settlement of Karitane generally occupies raised marine terraces, but extends onto the Karitane headland. Karitane Beach is flanked by a low coastal escarpment.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Despite significant modification both Hawksbury Lagoon and the Waikouaiti River Estuary are regionally significant wetlands.</li> <li>Karitane tombolo is listed in the Otago inventory of important geological sites and landforms as a 'well defined landform of scientific / educational value'.</li> <li>In general, legibility and expressiveness values are significantly modified by human development e.g. wetland drainage and agricultural use</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Overall, this area has high levels of modification that detract from its aesthetic values. Other than Huriawa (Karitane) peninsula there are no particularly memorable features.</li> <li>Some wild and scenic seascape values associated with the beaches and headland.</li> </ul>	Medium
Transient values	There are transient values associated with wildlife within the estuarine areas	Medium
Shared and recognised values	<ul> <li>Hawksbury Lagoon and Waikouaiti River Estuary are recognised in the Otago Regional Plan: Coast as Coastal Protection Areas for Kai Tahu cultural and spiritual values as well as Estuarine values (including habitat value for birdlife)</li> <li>Ellison saltmarsh, Hawksbury Lagoon, McGregor Swamp and McLachlan Rd Marsh are all recognised</li> </ul>	High - medium

	<ul> <li>as Regionally significant wetlands in the Otago Regional Plan: Water</li> <li>Karitane Headland is recognised in the Otago Regional Plan: Coast as Coastal Protection Areas for Kai Tahu cultural and spiritual values, and also as an ONFL</li> <li>The landscape values of the beaches and headland are generally recognised, with less popular appreciation for the estuarine areas.</li> <li>Karitane is a surf break of national significance.</li> </ul>	
Tangata whenua values	<ul> <li>This is a very significant area being the locale for the Puketeraki Marae and an important area of Maori occupation. There were Kaika and Pa sites at Karitane and the estuarine areas were important food gathering areas. Recognised values include Pa Tawhito (ancient pa sites), Kaika (settlement site), Wahi taoka (treasured area), Wahi tapu (Sacred place) and Wahi pakanga (battle sites).</li> <li>Te Tauraka Poti (Merton Tidal Arm) is an important mahika kai and has a Statutory Acknowledgement under the Ngai Tahu Claims Settlement Act.</li> <li>Matanaka (Hawksbury Lagoon) has mahika kai and wahi taoka values.</li> </ul>	High
Historic heritage values	<ul> <li>This is an important area historically being the site of one of the earliest enduring European settlements in Otago and the site of a whaling station. These values however, are not particularly legible in the landscape.</li> <li>Karitane is the site of Sir Truby King's house – of cultural significance.</li> <li>The Waikouaiti Beach spit was where Taoka laid siege to the Huriawa Pa. It was also the site of miners camps on their way to the goldfields via the Pig route.</li> </ul>	High

Rating	Comments / Reasons	Outstanding
Medium	The Waikouaiti / Karitane landscape unit contains some regionally significant wetlands as well as a significant headland feature at Karitane (see D3 / F1). It also has important tangata whenua and historic heritage values. On the whole however, the beach and estuarine landscapes are considerably modified and this unit has been assessed as having medium landscape values.	No

### Natural features assessed

• Karitane Peninsula

DL3 / F1. Karitane Peninsula



The Karitane Peninsula is an eroded headland of sedimentary rock connected to the mainland by beach deposits. It is the site of various pa and a whaling station. It is largely grass covered although residential development has encroached onto its landward end.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Karitane tombolo is listed in the Otago inventory of important geological sites and landforms as a 'well defined landform of scientific / educational value'.</li> <li>The Otago Regional Plan: Coast identifies it as an important source of fossils and as important bird habitat (off-shore stacks)</li> <li>The landforms are highly expressive of coastal erosive processes.</li> </ul>	High

Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>The naturalness of the headland has been modified to an extent by housing at its western end, but it is a striking and highly memorable landform.</li> </ul>	High
Transient values	Transient values associated with sea states and the occasional presence of wildlife are significant in this area	High - medium
Shared and recognised values	<ul> <li>Recognised as an ONFL in the Otago Regional Plan Coast.</li> <li>The Peninsula is a favorite subject of scenic photographs.</li> </ul>	High
Tangata whenua values	<ul> <li>There were various pa on the headland. Values associated with the headland include Pa Tawhito (ancient pa sites), Kaika (settlement site), Wahi taoka (treasured area), Wahi tapu (Sacred place) and Wahi pakanga (battle sites).</li> </ul>	High
Historic heritage values	<ul> <li>There was a whaling station on the peninsula in the 1830's         <ul> <li>40's, although no traces of it are discernable now.</li> </ul> </li> <li>The site is very significant in terms of pre-European history</li> </ul>	High

Rating	Comments / Reasons	Outstanding
High	Karitane peninsula has high geological, geomorphological and habitat values, and high tangata whenua and historic heritage values. It also scores highly in terms of aesthetic memorability and shared and recognised values. Despite encroachment by housing at its western end, it has been assessed as a natural feature with high and outstanding landscape values.	Yes

DL4. Seacliff



The Seacliff coastal landscape extends from Puketeraki in the north to Warrington in the south. It is comprised of gentle hill slopes meeting the sea in low cliffs or more gentle coastal scarps, generally with a rocky beach. In places there are reefs extending from the shore. The railway and coast road traverse the slopes but above the extent of the coastal environment. The settlement of Seacliff is also beyond the coastal environment. The geology is complex with a mix of more stable volcanic substrate and less stable sedimentary rock formations. Landslide features can be seen in numerous places. The land is mainly under pasture cover but with patches of native bush and exotic woodlots scattered throughout. Houses and farm buildings are present but mainly above the coastal environment.

### **Values Assessment**

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>There are no natural science values of particular note</li> <li>The landforms are expressive of the unstable geology</li> </ul>	Medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is medium – high. The area is modified by agriculture but there are few structures and vegetation patterns generally reinforce the natural landform. The landscape is generally expressive of the natural processes of coastal erosion and land sliding.</li> <li>This is a pleasant agricultural coastal landscape, not especially dramatic. Moderate – high memorability values.</li> </ul>	High - medium
Transient values	These could include the occasional presence of wildlife along the coast and various moods associated with different sea states.	Medium
Shared and recognised values	<ul> <li>There is a Coastal Protection Area identified at Puketeraki in the Otago Regional Plan Coast – listed for its Kai Tahu Cultural and spiritual values.</li> <li>This coast is generally experienced from the coast road or railway and is valued as a foreground to expansive seascape vistas</li> </ul>	High - medium
Tangata whenua values	<ul> <li>There are a cluster of significant Kai Tahu sites at the northern end of this area including:         <ul> <li>Kawhatuahaere (Coastal rock stacks) – Wahi taoka, Urupa, Pa tawhito and Wahi tapu values</li> <li>Te Awa Koeo (Brinns Point) – ancient fortified settlement site, kaika and urupa</li> <li>Te Awa Kai Pawa (Green Point) – ancient fortified settlement site, kaika and urupa</li> </ul> </li> </ul>	High - medium
Historic heritage values	There are historic values associated with Seacliff and the former Lunatic Asylum as well as the former main transportation routes northwards from Dunedin but these are beyond the coastal environment.	Medium - low

# Overall landscape values rating

Rating	Comments / Reasons	Outstanding
High -	There are no natural science values of particular significance along the	No
medium	Seacliff Coast. The northern end of the unit has some significant cultural	
	values. Aesthetic values are assessed as high – medium. Overall,	
	landscape values are assessed as high – medium.	

# Natural features assessed

(none)

DL5. Blueskin Bay



Blueskin Bay is a large estuary at the mouth of the Waitati River and Careys Creek, and is protected from the open ocean by a sand spit extending from its northern shore. The bay is shallow, characterized by sand flats and channels. Near the mouth, Rabbit Island is a low sandy flat that extends above mean high water springs. Orokonui Estuary is a small arm of the main estuary at its south-west corner. Alluvial fans are present at the mouths of the Watati River and Careys Creek but in other areas, the shoreline of the estuary is characterized by a low scarp which usefully defines the extent of the coastal environment.

Blueskin Bay is very modified by settlement and transportation infrastructure. At the northern end of the sand spit is the settlement of Warrington whilst the township of Waitati is located on flats at the mouth of the Waitati River. Scattered residential development extends from Waitati around the southern shoreline to Doctors Point and

there is also significant residential development extending westward along the northern shore from Warrington. There is another small node of settlement at Evansdale near the mouth of Careys Creek. The inland sides of the estuary are also significantly impacted by roads and the railway, which have been constructed along the shoreline or which cut across areas of existing or historic saltmarsh. A sewage treatment plant has been developed on the sand spit.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Blueskin Bay quaternary tidal flats and coastal features (tidal flats, low bluffs and cuttings) are recognised in the Otago inventory of important geological sites and landforms as being of international importance.</li> <li>Estuarine values – habitat for birds, flatfish and shellfish (Otago Regional Plan: Coast)</li> <li>Legibility and expressiveness values are modified by the development around the estuary edge</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Natural character values now significantly modified by agricultural and urban development as well as transportation infrastructure but still strongly expressed below mean high water springs.</li> <li>A pleasant rather than highly memorable or scenic landscape</li> </ul>	Medium
Transient values	<ul><li>Occasional presence of wildlife</li><li>Tidal rhythms</li></ul>	Medium
Shared and recognised values	<ul> <li>Rabbit Island is recognised as an ONFL in the Otago Regional Plan Coast</li> <li>Blueskin Bay and Orokonui Inlet are recognised as Coastal Protection Areas in the Otago Regional Plan: Coast for their Kai Tahu cultural and spiritual values and estuarine values.</li> </ul>	High - medium
Tangata whenua values	<ul> <li>O Kahau (Warrington) is the site of an ancient Waitaha settlement.</li> <li>O tama kai papa (Blueskin Bay) has mahika kai values.</li> <li>There is evidence of settlement on Rabbit Island</li> <li>Warrington Beach was a cross-roads for foot travelers heading inland or along the coast.</li> </ul>	High - medium
Historic heritage values	The Otago Acclimatisation Society released rabbits on Rabbit Island in 1866 for people to shoot.	Medium - low

Rating	Comments / Reasons	Outstanding
Medium	Blueskin Bay has important geomorphological, wildlife habitat and	No
	tangata whenua values but also has high levels of modification. Overall, landscape values are assessed as medium.	
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### Natural features assessed

• Warrington Spit / Rabbit Island

DL5 / F1. Warrington Spit / Rabbit Island



The Warrington spit and Rabbit Island are depositional features separating the estuary from the open ocean. At various times the spit has been connected to the island. The spit is characterized by an aggrading beach on the ocean side, and marram grass covered dunes with scattered groups of exotic trees on the estuary side. A sewage treatment plant, vehicular track and surf club building have been developed on it. Rabbit Island is un-modified by structures but also has exotic trees present. There are large areas of salt marsh on its western side.

### **Values Assessment**

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Blueskin Bay quaternary tidal flats and coastal features (including the spit and island) are recognised in the Otago inventory of important geological sites. and landforms as being of international importance. Best Holocene and good Late Pleistocene section in Otago. Important location of many carbon dated shells to construct NZ's sea level curve. An extremely well defined landform of scientific / educational and scenic value.</li> <li>These features are highly expressive of natural marine erosional and depositional processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>The spit and Island are highly expressive of natural coastal processes but natural character values are reduced by the sewage treatment plant and by exotic vegetation</li> <li>Moderate memorability / scenic values</li> </ul>	High - medium
Transient values	<ul> <li>The occasional presence of wildlife</li> <li>Dynamic shoreline forms</li> <li>Tidal rhythms</li> </ul>	High
Shared and recognised values	<ul> <li>Rabbit Island is recognised as an ONFL in the Otago Regional Plan Coast</li> <li>The Blueskin Bay edge of the spit and the edge of Rabbit Island is recognised as an Area of Significant Conservation Value in the Dunedin City District Plan</li> <li>Both spit and island are valued as recreational coastal destinations in part due to landscape attributes.</li> </ul>	High - medium
Tangata whenua values	<ul> <li>O Kahau (Warrington) is the site of an ancient Waitaha settlement.</li> <li>There is evidence of settlement on Rabbit Island</li> <li>Warrington Beach was a cross-roads for foot travelers heading inland or along the coast.</li> </ul>	High - medium
Historic heritage values	Rabbits were released by the Otago Acclimatisation Society on Rabbit Island for sport shooting in 1866.	Medium - low

# Overall landscape values rating

Rating	Comments / Reasons	Outstanding
High -	Warrington Spit and Rabbit Island have significance in terms of	No
medium	geological and tangata whenua values but natural character values are reduced by structures and / or exotic vegetation. Overall, landscape values are expressed as high – medium.	

DL6. Purakaunui



Purakaunui Inlet is a drowned volcanic valley separated from the ocean by a large sand barrier. This unit is defined by (but does not include) Potato Point on the eastern side, and the cliffed headland at the mouth of Blueskin Bay estuary on the western side. It encompasses Purakaunui Beach and Mapoutahi promontory. Around much of the inlet edge the coastal environment boundary can be defined by a low coastal scarp.

The settlement of Purakaunui nestles around a number of small bays on the eastern shore of the inlet. Houses and boatsheds extend within the coastal environment in this area. Elsewhere the land surrounding the inlet is generally under pasture cover although there is typically indigenous scrub present on the coastal escarpment. The inlet itself is shallow and characterized by sand flats and channels. There are areas of salt marsh around the margins. Along the western shore, Osbourne Road has been developed on a reclaimed bench and in places cuts across salt marsh or the inlet bed.

Back from Purakaunui Beach and associated marram covered dunes, the sand flats are under plantation forestry cover. The forestry cover is in two distinct blocks to accommodate a power line.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Coherent drowned valley landform</li> <li>Estuarine habitat values noted in Otago Regional Plan: Coast</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>This is a significantly modified area (by settlement, agricultural land use, roads, railway and boatsheds along foreshore etc) but despite this naturalness ratings are moderately high due to the human features retaining a modest scale appropriate to the natural setting. Vegetation patterns generally reinforce topographical patterns. The village nestles in to its site and the road is narrow and mainly responds to the shoreline forms.</li> <li>Plantation foresty on the beach flats detract from natural values</li> <li>Highly memorable - picturesque sheltered inlet and seaside settlement. Mapoutahi promontory and seaside cliffs are distinctive features</li> </ul>	High - medium
Transient values	<ul><li>Occasional presence of wildlife</li><li>Tidal rhythms</li></ul>	Medium
Shared and recognised values	<ul> <li>Mapoutahi is a Coastal Protection Area in the Otago Regional Plan: Coast (Kai Tahu cultural and spiritual values)</li> <li>Purakanui Inlet is a Coastal Protection Area in the Otago Regional Plan: Coast (Kai Tahu cultural and spiritual values and estuarine values).</li> <li>A popular recreational destination partly on account of its landscape attributes.</li> </ul>	High - medium
Tangata whenua values	<ul> <li>Mapoutahi is an ancient pa site and sacred area – the site of a massacre (Wahi tapu and pa tawhito values)</li> <li>Mateawheawhe (Purakanui Beach) is a battleground and urupa associated with Mapoutahi (Wahi tapu values)</li> <li>There was a settlement at Purakanui Inlet (Kaika and urupa values)</li> <li>Purakaunui Inlet has Mahika kai values</li> </ul>	High

Historic heritage values	Purakanui Inlet was the site of a whaling station	High
	Significant pre European history – as above	

Rating	Comments / Reasons	Outstanding
High - medium	Purakaunui has some high – medium natural science values and very significant tangata whenua and historic heritage values. Despite significant modification it has high – medium aesthetic values due to the generally harmonious integration of human elements. Overall, landscape values are assessed as high – medium.	No

# Natural features assessed

Mapoutahi

DL6 / F1 Mapoutahi



Mapoutahi is a rugged promontory of volcanic origin defining the western end of Purakaunui Beach. There are no structures other than some wooden steps and the vegetation cover is rough grassland, regenerating native scrub and some scattered Pine and Macrocarpa trees.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>A volcanic headland feature expressive of coastal erosive processes.</li> <li>No particular natural science significance recorded</li> </ul>	High - medium
Aesthetic values	Vegetation patterns reflect human modification but	High

(naturalness / memorability) Wild and scenic	naturalness is still high.  • A dramatic and memorable coastal headland with high scenic values.	
Transient values	<ul> <li>Occasional presence of wildlife</li> <li>Various moods associated with different sea states.</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Mapoutahi is a Coastal Protection Area in the Otago Regional Plan: Coast (Kai Tahu cultural and spiritual values)</li> <li>Mapoutahi is within a popular coastal recreational area appreciated for its landscape values.</li> </ul>	High - medium
Tangata whenua values	<ul> <li>Mapoutahi is an ancient pa site and sacred area – the site of a massacre (Wahi tapu and pa tawhito values)</li> <li>Mateawheawhe (Purakanui Beach) is a battleground and urupa associated with Mapoutahi (Wahi tapu values)</li> </ul>	High
Historic heritage values	Significant pre European history – as above	High

Rating	Comments / Reasons	Outstanding
High	A distinctive coastal feature with moderately high natural character values. Highly significant culturally / historically and is assessed as outstanding primarily on this basis.	Yes

**DL7. Heyward Coast** 



This landscape character unit extends from Potato Point in the west to Heyward Point and the Aramoana cliffs in the east. It encompasses a sequence of volcanic rock headlands separated by sand beaches, dunes and flats i.e. Long Beach, Whareakeake Beach and Kaikai Beach. There is a distinctive pattern to this landscape with headlands being characterized by cliffs, stacks and reefs and the beaches being backed by dunes and wetlands. The beaches are aggrading leaving stranded marine cliffs.

The land is generally under pasture cover with some patches of native forest and scrub, most notably within the Heyward Point Scenic Reserve. There is a settlement at Long Beach, a few cribs at Whareakeake and a house and farm shed on Potato Point but otherwise (apart from the lighthouse on Heyward Point), the landscape is devoid of significant structures.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Heyward Point Scenic Reserve is significant for its coastal native forest remnants and habitat values</li> <li>Heyward Point is a Seal breeding site.</li> <li>Aramoana – Heyward Point lava flows are listed in the Otago inventory of important geological sites and landforms as a well exposed stratigraphic sequence of lava flows</li> <li>There are significant wetlands at Kaikai and Whareakeake Beaches.</li> <li>This is a highly legible eroded volcanic coastal landscape, expressive of its formative processes</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Although modified by agriculture naturalness values are high due to low impact of structures (excluding Long Beach settlement) the presence of areas of native bush and scrub and a highly coherent landform under pasture cover.</li> <li>The cliffs and headlands are dramatic</li> <li>The landscape as a whole is coherent and memorable.</li> </ul>	High
Transient values	<ul> <li>Common presence of seals at Heyward Point</li> <li>Occasional presence of wildlife generally</li> <li>Moods associated with various sea states</li> <li>Lighting effects on the highly coherent landform.</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Kaikai Beach and Heyward Point (including the Aramoana cliffs) are recognised as an ONFL in the Otago Regional Plan: Coast</li> <li>Heyward Point Scenic Reserve is recognised as an Area of Significant Conservation Value in the Dunedin City District Plan</li> <li>Whareakeake Marsh and Jenning Creek Marsh (Kaikai Beach) are regionally significant wetlands in the Otago Regional Plan: Water.</li> <li>A popular recreational destination based to a significant extent on its landscape values.</li> <li>Whareakake is a surf break of national significance.</li> </ul>	High
Tangata whenua values	<ul> <li>Wharauwerawera (Long Beach) was a settlement site (Wai repo and Mahika kai values)</li> <li>There was an ancient settlement and pa at Whareakeake, which was the site of a pounamu manufacturing operation. Whareakeake was the site of a battle with Europeans (Pa tawhito, Kaika and Urupa values)</li> <li>There is a Statutory Acknowledgement in place for Whareakeake (Place name)</li> </ul>	High
Historic heritage values	Whareakeake was the site of a fight between Maori and the crew of the brig Sophia	High - medium

<ul> <li>Long beach was a popular camping and picnic destination for Dunedin families from @ 1900. Later developed as a crib settlement</li> </ul>	
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Rating	Comments / Reasons	Outstanding
High	The Heyward Coast unit is a highly expressive eroded volcanic coastal landscape with significant natural and aesthetic values. It also has important tangata whenua and historic heritage values. Overall, landscape values have been assessed as high and outstanding.	Yes

# Natural features assessed

- Potato Point
- Heyward Point / Aramoana cliffs

#### **DL7 / F1 Potato Point**



#### **Character Description**

Potato Point is a rounded promontory separating Purakanui Beach and Long Beach. It is of volcanic geology with a cliffed shoreline and offshore reefs. It is generally under pasture cover but has scattered native forest cover in places. One house and a farm building are present on its upper north-east facing slopes. The township of Purakaunui extends onto its lower south-west slopes.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>A coherent natural landform expressive of its volcanic history and of erosive coastal processes.</li> </ul>	High - medium
	<ul> <li>Some remnant indigenous vegetation including nationally uncommon and locally threatened species</li> </ul>	

	(Olearia fragrantissima and Fierce Lancewood).	
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>High naturalness despite agricultural modification due to coherent natural landform, presence of indigenous forest patches and low impact of structures</li> <li>Reasonably memorable for its asymmetrical rounded form and undomesticated character.</li> </ul>	High
Transient values	<ul> <li>Occasional presence of wildlife</li> <li>Moods associated with variable sea states</li> <li>Lighting effects on the landform</li> </ul>	High - medium
Shared and recognised values	<ul> <li>None noted</li> <li>Values associated with undomesticated rural / coastal landscapes</li> </ul>	Medium
Tangata whenua values	<ul> <li>The name – Potato Point refers to a rock pinnacle on the northern side of the headland and refers to a Maori chief.</li> <li>No particular significance noted</li> </ul>	Medium
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
High - medium	Potato Point is a feature which contributes to the natural character of the coastal environment but its natural, aesthetic and cultural values are insufficient to justify outstanding natural feature status. Overall, landscape values are assessed as high – medium.	No

DL7 / F2 Heyward Point / Aramoana Cliffs



This feature is a headland of volcanic geology at the termination of the major ridgeline on the northern side of Otago Harbour. The headland is characterized by impressive cliffs up to 180m in height. At the Aramoana end the cliffs are bordered by a sandy beach and there are stacks and reefs off Heyward Point itself. Behind the cliffs the land is mainly under pasture cover but there is a significant area of indigenous forest within the Heyward Point Scenic Reserve. There is a small lighthouse on Heyward Point but otherwise, no structures of significant scale.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Heyward Point Scenic Reserve is significant for its coastal native forest remnants and habitat values</li> <li>Heyward Point is a Seal breeding site.</li> <li>Aramoana – Heyward Point lava flows are listed in the Otago inventory of important geological sites and landforms as a well exposed stratigraphic sequence of lava flows</li> <li>This is a highly legible eroded volcanic coastal landscape, expressive of its formative processes</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are high based on highly coherent natural landform, minimal impact of structures and the presence of native forest and scrub.</li> <li>Memorability / wild and scenic values are high due to the dramatic cliffs, presence of wildlife, expansive coastal views</li> </ul>	High
Transient values	<ul> <li>Common presence of seals and occasional presence of wildlife generally</li> <li>Moods associated with various sea states</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Heyward Point and Aramoana cliffs (along with Kaikai Beach) are recognised as an ONFL in the Otago Regional Plan: Coast</li> <li>Heyward Point Scenic Reserve is recognised as an Area of Significant Conservation Value in the Dunedin City District Plan</li> <li>Heyward Point and the Aramoana Beach (adjacent to the cliffs) are recognised coastal recreational destinations – largely on account of their landscape and natural character attributes.</li> </ul>	High
Tangata whenua values	<ul> <li>The wider coastline was an area of settlement generally</li> <li>There was a traditional foot track along the top of the cliffs</li> </ul>	Medium
Historic heritage values	None specifically noted	Low

Rating	Comments / Reasons	Outstanding
High	This feature is significant primarily for its geological, ecological and aesthetic values. Overall, landscape values are assessed as high and outstanding.	Yes

**DL8. Lower Otago Harbour** 



The lower Otago Harbour unit extends from Aramoana at the Harbour heads, to Port Chalmers and Portobello Bay. It is separated from the upper harbour by Quarantine and Goat Islands, and Portobello Peninsula (not included in this unit). Taiaroa Head is a defining feature at the heads but is discussed separately. The geology of the area is volcanic, with marine deposits at Aramoana, Harwood and Harington Point, including dunes. There is a large salt marsh at Aramoana. The coastal environment is defined by a coastal scarp which is largely continuous around the present or historical shoreline.

The lower harbour is characterized by large sand flats and defined channels including the main harbour shipping channel which is maintained by dredging. There are jetties, boatsheds, navigational structures and groynes in various areas, and around much of the shoreline rock walls retain harbourside roads. The mole is a significant structure which has had a major influence on shoreline forms.

Port Chalmers is the major settlement in this landscape and is a working port with large wharf areas, areas of reclaimed land, large sheds, stacked containers and stockpiles. Carey's Bay adjacent, is also dominated by built elements but these are smaller in scale. Moored boats are significant features in the Port Chalmers, Careys Bay, Deborah Bay area. Other smaller scale settlements around the lower harbour are Aramoana, Harwood, Otakou and Harington Point. Despite the considerable amount of settlement, the context for the lower harbour is rural land, mainly under pasture cover but including exotic woodlots and areas of indigenous forest and scrub.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Harwood stranded sea cliffs are listed in the Otago inventory of important geological sites and landforms.</li> <li>The Aramoana salt marsh and adjacent terrestrial environment is of recognised international / national importance for its largely intact vegetation sequence from tidal – dry land including a dune slack</li> <li>The Aramoana tidal flats are a very significant wader habitat and the area is important nationally as a fish breeding and nursery area.</li> <li>Natural patterns and processes are still moderately strongly expressed despite modification (e.g. dredging / mole construction).</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>This landscape is significantly modified but natural patterns and processes are still important. With the exception of Port Chalmers, the scale of built elements is such that natural elements are still generally dominant.</li> <li>Whilst the sheltered harbour is not 'wild' it is scenic and the interplay of natural and cultural factors makes for a visually interesting landscape (although it is also 'scruffy' in places)</li> </ul>	High - medium
Transient values	<ul> <li>Common presence of harbour birds and occasional presence of marine mammals</li> <li>Tidal rhythms and various moods associated with different weather conditions</li> </ul>	High - medium

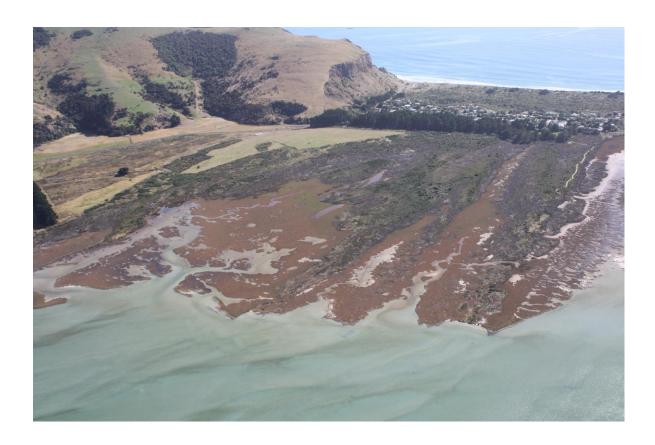
Shared and recognised values	<ul> <li>Aramoana is a Coastal Protection Area in the Otago Regional Plan: Coast – for Kai Tahu cultural and spiritual values and estuarine values.</li> <li>The terrestrial environment adjacent to the Aramoana salt marsh is recognised as an area of significant conservation value in the Dunedin City District Plan and the Aramoana Saltmarsh is listed as a Regionally Significant Wetland in the Otago Regional Plan: Water.</li> <li>The Otago Harbour historic walls are listed as a Coastal</li> </ul>	High - medium
	<ul> <li>Protection Area in the Otago Regional Plan: Coast and as heritage structures in the Dunedin City District Plan.</li> <li>The lower harbour between the main shipping channel and Otago Peninsula shoreline is a Coastal Protection Area in the Otago Regional Plan: Coast for Kai Tahu cultural and spiritual values and estuarine values. It is noted as a significant cockle habitat and as having midden values.</li> <li>The Pilot houses on Aramoana Spit are listed heritage features in the Dunedin City District Plan</li> <li>The Spit is a surf break of national significance.</li> </ul>	
Tangata whenua values	<ul> <li>The harbour is a significant mahika kai</li> <li>This area was an area of significant settlement with numerous kaika and urupa sites on both western and eastern shores.</li> <li>The salt marsh and spit at Aramoana has mahika kai and kaika values</li> <li>Otaheiti (Acheron Point) was a pa site and the home of Taiaroa (Pa tawhito and urupa values)</li> <li>Koputai (Port Chalmers) – cliffs and caves in this area are of cultural significance. There was also a canoe landing site (Wahi tapu, Wahi kohatu and tauraka waka values).</li> <li>The Otakou Marae is a centre of cultural importance (Wharenui Tamatea, whare karakia, and urupa values)</li> </ul>	High
Historic heritage values	<ul> <li>This area was an important area of pre European settlement and of early European / Maori contact. The treaty of Waitangi was signed at Otakou in 1840.</li> <li>There was an important whaling station at Wellers Rock in the 1830's</li> <li>The 'City of Otago' (at Te Raone) was burned in 1831 following the Whareakakae affray.</li> <li>In the 1850's wind-blown sand buried the Maori village of Te Ruatitiko at Te Rauone.</li> <li>The harbour and Port Chalmers was a significant historic gateway to Otago and the South Island.</li> <li>Aramoana has significance in the nation's history as the subject of protests over a proposed Aluminium smelter and for the 1990 massacre.</li> </ul>	High

Rating	Comments / Reasons	Outstanding
High -	The lower Otago Harbour landscape has very significant cultural and	No
medium	historic values. It also has significant natural values in places. Whilst it is	
	highly modified it visually interesting and memorable. Overall, landscape	
	values are assessed as high – medium	

### Natural features assessed

- Aramoana Salt Marsh
- Harwood stranded sea cliffs

DL8 / F1 Aramoana Salt Marsh



This feature incorporates the Otago Harbour flats and a dune system on the south-western side of the Aramoana township. The area identified is the area under natural vegetative cover.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Aramoana salt marsh and adjacent terrestrial environment is of recognised international / national importance for its largely intact vegetation sequence from tidal – dry land including a dune slack</li> <li>The Aramoana tidal flats are a very significant wader habitat and the area is important nationally as a fish breeding and nursery area.</li> </ul>	High

	The natural patterns and processes are highly legible.	
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>High naturalness values based on natural landforms and vegetation sequences</li> <li>A memorable wetland landscape</li> </ul>	High
Transient values	<ul> <li>Common presence of harbour birds</li> <li>Tidal rhythms and various moods associated with different weather conditions</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Aramoana is a Coastal Protection Area in the Otago Regional Plan: Coast – for Kai Tahu cultural and spiritual values and estuarine values. It is also recognised as a regionally significant wetland in the Otago Regional Plan: Water.</li> <li>The terrestrial environment adjacent to the Aramoana salt marsh is recognised as an area of significant conservation value in the Dunedin City District Plan.</li> <li>Protected as a Conservation Area.</li> </ul>	High
Tangata whenua values	The salt marsh and spit at Aramoana has mahika kai and kaika values	High
Historic heritage values	None known specifically relevant to the conservation area except for usage associated with mahika kai	Medium - low

Rating	Comments / Reasons	Outstanding
High	The Aramoana saltmarsh is a coastal wetland of international / national significance which also has high aesthetic and cultural values. Overall, landscape values are assessed as high and outstanding.	Yes

DL8 / F2 Harwood stranded sea cliffs



This feature is listed and mapped in the Otago inventory of important geological sites and landforms and is located south of Harington Point Road near Harwood. It is described as a 'well preserved and easily accessible example of an ancient coastal cliff-line stranded by build-up of Holocene terrace in front'. In places there are exposed rocky cliffs whilst in others just a scarp form

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>This feature is listed in the Otago inventory of important geological sites and landforms as a site of regional importance.</li> </ul>	High - medium

	Where there are rocky cliffs, legibility is high but where these are absent – much lower.	
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Whilst expressive of past coastal processes, this feature has low memorability values</li> <li>Naturalness values are modified by its agricultural setting</li> </ul>	Medium - low
Transient values	None relevant	Low
Shared and recognised values	This feature is not widely known or recognised	Low
Tangata whenua values	None known	Low
Historic heritage values	None known	Low

Rating	Comments / Reasons	Outstanding
Medium -	Whilst this feature has scientific significance it has low landscape values	No
low	more generally – assessed as Medium – low overall.	

**DL9. Upper Otago Harbour** 



The upper Otago Harbour is defined as the harbour-head area to and including, Goat and Quarantine Islands and Portobello Peninsula. The harbour is a drowned valley of volcanic origins. Marine sediments underlie the harbour-head flats. For most of this area the Coastal environment is defined by a coastal scarp around the shore but it also includes a large area of urban Dunedin where this is subject to coastal hazard risk (i.e. low lying and reclaimed areas at the head of the harbour).

The harbour is characterized by sand banks and channels including the Victoria channel which is maintained by dredging and edged by a rock wall. The channels are marked by navigational posts and lights. Most of the shoreline is modified by reclamation and rock walls associated with the railway or roads. In places these cut across embayments, with tidal flows maintained via culverts or bridges. In some areas reclamation has been carried out to provide for parks. The current shoreline at Dunedin has been significantly

modified by reclamation. The Water of Leith is the main inflow of fresh water to the harbour, entering at Dunedin.

Urban Dunedin, including the port area, is at the head of the harbour but there are also other settlements, including Ravensbourne, St Leonards, Sawyers Bay and Port Chalmers on the north-western side, and Portobello, Broad Bay and Macandrew Bay on the south-eastern side. In the vicinity of these settlements there are typically jetties and boatsheds. Rural land (mainly under pasture cover but also with significant areas of exotic woodlots or native bush and scrub) provides the landscape context for these settlements and the harbour generally.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Goat and Quarantine Islands have ecological values for remnant and regenerating native bush</li> <li>Natural values associated with natural shorelines are much modified</li> </ul>	Medium - low
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness varies from high - medium around the islands to very low around the harbour head.</li> <li>Despite significant modification the area still has medium amenity values overall</li> </ul>	Medium
Transient values	<ul> <li>Reasonably common presence of marine birds and occasional presence of marine mammals.</li> <li>Tidal rhythms.</li> </ul>	Medium
Shared and recognised values	<ul> <li>Goat and Quarantine Islands are recognised as ONFL's in the Otago Regional Plan: Coast and as Areas of Significant Conservation Value in the Dunedin City District Plan. They are also recognised for their historic area values in the Dunedin City District Plan.</li> <li>The Harbour rock walls are listed as a Coastal Protection Area in the Otago Regional Plan: Coast.</li> <li>The harbour is a feature appreciated for its natural landscape values.</li> </ul>	Medium
Tangata whenua values	<ul> <li>Rakiriri (Goat Island) is a significant site. An important landmark and according to tradition, the abode of Takaroa (Wahi tapu values)</li> <li>The Andersons Bay Inlet area is of significance to Taranaki Iwi as a site where Maori prisoners were used to build roads and the causeway (Wahi tapu values)</li> </ul>	High - medium

	<ul> <li>Puketahi (Sunshine Hill) is an important site – the start of a trail south along coastal beaches from the harbour and a temporary camp site (Tauraka waka, Ara tawhito and Nohoaka values)</li> <li>Toitu Stream was the main landing place for waka at the time of early European settlement (Tauraka waka, Ara tawhito and Nohoaka values)</li> <li>The harbour was / is significant as a food source and transportation route (Mahika kai, Kaika, Wahi taoka, Ara tawhito and Tauraka waka values)</li> </ul>	
Historic heritage values	There are very significant historic values associated with the harbour head area as the area of the early settlement of Dunedin	High

Rating	Comments / Reasons	Outstanding
Medium	The Upper Otago Harbour is a significantly modified landscape of variable aesthetic quality. Whilst it has significant cultural and historic values, its overall landscape values have been assessed as medium.	No

### Natural features assessed

- Goat Island
- Quarantine Island

DL9 / F1 Goat Island - Rakiriri



Goat Island – Rakiriri is the smaller of the two mid Otago Harbour islands and along with Quarantine Island and Portobello Peninsula, part of a ridge running across the centre of the harbour. Goat Island is covered in indigenous bush. Two flattened areas retained by rock walling date from its use for quarantine purposes. A pylon is located on its summit.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Goat Island has ecological values for remnant / regenerating native bush. Good example of Ngaio / Kohuhu forest. Pest free – plant life in better condition than mainland sites.</li> <li>One of few areas in the harbour with a natural rocky</li> </ul>	High

Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>shoreline.</li> <li>The island is a breeding site for Shags</li> <li>High legibility and expressiveness values</li> <li>High naturalness values given its natural shoreline and indigenous bush cover – reduced to some extent by the presence of the pylon on its summit.</li> <li>High - moderately memorable. An important natural element in the harbour landscape.</li> </ul>	High
Transient values	Common presence of marine birds and occasional presence of marine mammals.     Tidal rhythms.	High - medium
Shared and recognised values	<ul> <li>Goat Island is recognised as an ONFL in the Otago Regional Plan: Coast and as an Area of Significant Conservation Value in the Dunedin City District Plan. It is also recognised for its historic area values in the Dunedin City District Plan.</li> <li>Scenic Reserve / Historic Area status</li> <li>A significant harbour landmark</li> </ul>	High
Tangata whenua values	<ul> <li>Rakiriri (Goat Island) is a significant site. An important landmark and according to tradition, the abode of Takaroa (Wahi tapu values)</li> <li>There is a Statutory Acknowledgement in place for Rakiriri (Place name)</li> </ul>	High
Historic heritage values	The island was used for quarantine purposes to house the single men – Flattened areas and rock walling remains associated with this.	High

Rating	Comments / Reasons	Outstanding
High	Goat Island – Rakiriri has highly significant cultural and historic values and high natural and aesthetic values. Overall, landscape values are assessed as high and outstanding.	Yes

DL9 / F2 Quarantine Island - Kamau Taurua



Quarantine Island is the larger of the two mid Otago Harbour Islands. It is comprised of volcanic rock from earlier eruptive phases of the Dunedin volcano and its elongated shape reflects its origins as part of a ridge running through the middle of what is now the harbour. The island is predominantly under pasture cover 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 its use as a quarantine station, along with other relics dating from this period of its history. There is a jetty and some historic hulks in the bay nearest the buildings. Two pylons are present on its western end.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Island has ecological values for regenerating native bush. Pest free – plant life in better condition than mainland sites.</li> <li>One of few areas in the harbour with a natural rocky shoreline.</li> <li>The island is a breeding site for Shags.</li> <li>Legibility and expressiveness values reduced by modification to vegetation patterns but still high – medium.</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are high – medium based on the natural shoreline, presence of bush and coherent landform. The pylons, buildings and other structures reduce these values to some extent</li> <li>Whilst not particularly 'wild', memorability and scenic values are high given its historic character and sense of place.</li> </ul>	High
Transient values	<ul> <li>Common presence of marine birds and occasional presence of marine mammals.</li> <li>Tidal rhythms.</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Recognised as an ONFL in the Otago Regional Plan:         Coast and as an Area of Significant Conservation Value         in the Dunedin City District Plan. It is also recognised for         its historic area values in the Dunedin City District Plan.</li> <li>Historic Area status</li> <li>An important harbour landmark</li> </ul>	High
Tangata whenua values	There is a Statutory Acknowledgement in place for Kamau Taurua (Place name) – means 'a place to set nets'.	High
Historic heritage values	The island was used for quarantine purposes and one barracks building and other relics remain.	High

Rating	Comments / Reasons	Outstanding
High	Quarantine Island – Kamau Taurua has significant historic and cultural values and high or high - moderate natural and aesthetic values. It has a strong sense of place and overall landscape values are assessed as high and outstanding, largely on account of its cultural / historic significance.	Yes

**DL10. Outer Otago Peninsula** 



This landscape unit extends from Harington Point, around the tip of Otago Peninsula to Te Whakarewaiki Point, north of Victory Beach. It encompasses Pilots Beach and Taiaroa Head, and a number of small beaches on the ocean side of the peninsula including Penguin Beach, Pipikaretu Beach and Ryans Beach. The geology of the area is volcanic with cliffed headlands and reefs along with more recent marine deposits in the form of beaches and dunes in the bays. In the main, the land is pasture covered but there are also areas of indigenous bush as well as marram dominated dune areas. There is a cluster of structures and associated development at Taiaroa Head but otherwise structures are mainly insignificant

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>There are highly significant natural values at Taiaroa Head (see D10 / F1)</li> <li>The beaches in this area are significant habitat for Yellow eyed Penguin and the coast generally is habitat for seals and sea lions.</li> <li>Pilots Beach is an important habitat for Little Blue Penguins, seals and sea lions</li> <li>The landscape is highly expressive of its natural formative processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are generally high – reduced by the structures and associated development at Taiaroa Head to some extent</li> <li>The rugged headlands, exposed coast and expansive views make for high wild and scenic, and memorability values.</li> </ul>	High
Transient values	<ul> <li>Highly significant values associated with the presence of wildlife</li> <li>Various moods associated with different weather and sea state conditions</li> </ul>	High
Shared and recognised values	<ul> <li>A widely known natural history tourist destination</li> <li>The area is part of the Otago Peninsula ONFL in the Otago Regional Plan: Coast</li> <li>The area is included in the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan. Retention of this status is recommended in the LMA Review (Boffa Miskell, 2007).</li> <li>Coastal Protection Areas are identified in the Otago Regional Plan: Coast at Taiaroa Head / Pilots Beach, Pipikaretu Point and Te Whakarekaiwi Point – all for Kai Tahu cultural and spiritual values.</li> <li>Areas of significant conservation value are recognised in the Dunedin City District Plan at Taiaroa Head, Pilots Beach and adjacent coast, and Pipikaretu Beach.</li> </ul>	High
Tangata whenua values	<ul> <li>Pukekura (Taiaroa Head) was a pa site and kaika (Pa tawhito and kaika values)</li> <li>The land at the eastern end of the Otago Peninsula was highly significant to Maori and was reserved from sale of the Otakou block in 1844 (Pa tawhito, Tuahu, Wahi pakanga, Urupa, Kaika, Wahi taoka, Mahika kai, Ingoa tawhito and Mana values).</li> </ul>	High
Historic heritage values	<ul> <li>Pukekura was an important pa in the context of southern south island history</li> <li>The Hahahui II was wrecked at Ryans Beach in 1943.</li> <li>Taiaroa Head has significant heritage values associated</li> </ul>	High

with its military history – e.g. the presence of the Armstrong Disappearing gun. There are also gun emplacements and other military relics in the wider area.  Taiaroa Head lighthouse and Fog station are heritage structures Pilot's Beach was the site of Whaling activity	
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	Rating	Comments / Reasons	Outstanding
ı	High	The Outer Otago Peninsula unit has high values across all the	Yes
		assessment factors. Its overall landscape values are assessed as high	
		and outstanding.	

## Natural features assessed

Taiaroa Head

#### DL10 / F1 Taiaroa Head



#### **Character Description**

Taiaroa Head is the outermost point of the Otago Peninsula. It is a rounded Basalt headland with steep cliffs on its ocean facing side. The feature includes Pilots Beach (because of its high natural values and historic linkages with Taiaroa Head) and all the area included within the nature and local purpose reserves.

Taiaroa Head has been the focus of human activity both before and after European settlement and structures that exist today include the lighthouse, the Armstrong Disappearing Gun, Observation Post, Signal Station, Observatory and the Royal Albatross Visitor Centre. As well, there are tracks, roads, parking areas and historic structure remnants. The vegetation cover is mainly grassland.

Criteria	Comments	
Natural science factors / legibility / expressiveness	<ul> <li>Taiaroa Head is the only mainland breeding site for Royal Albatross in the southern hemisphere.</li> <li>Other bird species feed and nest on the headland including shags, sooty shearwaters, gulls, variable oyster catchers and royal spoonbills.</li> <li>Pilots Beach is an important habitat for Little Blue Penguins, seals and sea lions, with leopard seals and elephant seals being rare visitors.</li> <li>The landscape is highly expressive of its natural formative processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic  Transient values	<ul> <li>Whilst the headland has a significant overlay of structures, these are dominated by the strength of the natural elements and patterns.</li> <li>Wild and scenic, and memorability values are very high – associated with the rugged landforms, exposed position and expansive sea views.</li> <li>Highly significant values associated with the presence of wildlife</li> </ul>	High High
	<ul> <li>Various moods associated with different weather and sea state conditions</li> </ul>	
Shared and recognised values	<ul> <li>A widely known natural history tourist destination</li> <li>The area is part of the Otago Peninsula ONFL in the Otago Regional Plan: Coast</li> <li>The area is included in the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan.</li> <li>Included within a Coastal Protection Areas are in the Otago Regional Plan: Coast.</li> <li>Areas of significant conservation value are recognised in the Dunedin City District Plan at Taiaroa Head and Pilots Beach.</li> </ul>	High
Tangata whenua values	<ul> <li>Pukekura (Taiaroa Head) was a pa site and kaika (Pa tawhito and kaika values)</li> <li>The headland has great significance to Kai Tahu.</li> </ul>	High
Historic heritage values	<ul> <li>Pukekura was an important pa in the context of southern south island history.</li> <li>Taiaroa Head has significant heritage values associated with its military history – e.g. the presence of the Armstrong Disappearing gun. There are also gun emplacements and other military relics in the wider area.</li> <li>There is also significant history associated with its use for navigational purposes. Relevant features include the lighthouse and Fog station as well as an early sea wall</li> <li>At one time there was a resident population of approximately 100 people on the headland. Facilities included a school, post office and a small stone goal.</li> </ul>	High

	•	Pilot's Beach was the site of Whaling activity and takes its name from the days when pilot boats were launched from there.	
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Rating	Comments / Reasons	Outstanding
High	Taiaroa Head (Pukekura) has widely recognised natural habitat and wild and scenic aesthetic values. It is also of great cultural and historic significance. Overall, landscape values are assessed as high and outstanding.	Yes

DL11. Papanui Inlet / Okia



This unit comprises Papanui Inlet and Okia Flat along with the immediate cliff and hill margins that are within the coastal environment. Okia Flat is a large area of aggrading beach dunes which have stranded marine cliffs and stacks – the Pyramids being the most notable example. Papanui Inlet is a shallow estuary characterized by sand flats and channels. There are two small islands near its western end.

In general, the vegetation character of Okia flat changes from more to less modified, with increasing proximity to Victory Beach. At its western end the land is predominantly under improved pasture whilst the areas nearer the beach are now protected as a reserve and are being allowed to naturally regenerate. There are exotic woodlots of varying scale scattered around on the flats.

There are no buildings within the coastal environment with the exception of a few farm sheds and inlet edge cribs on the northern side, and a small crib settlement (including boat sheds) on the steep southern shores of the inlet. Narrow metalled roads run around the western shores of the inlet, in places cutting off areas of salt marsh which have typically been drained.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Papanui Inlet is listed in the Otago inventory of important geological sites and landforms as 'an excellent example of a drowned valley forming a tidal inlet'.</li> <li>The Pyramids (abandoned marine stacks) are listed in the Otago inventory of important geological sites and landforms.</li> <li>Papanui Inlet has significant estuarine values – habitat for birds, nursery for flat fish and has a significant population of cockles.</li> <li>Okia flat dune hollows are significant wetlands and habitat for nationally or internationally rare or threatened plant species</li> <li>Victory Beach / Okia is important habitat for Yellow-eyed Penguins, seals and sea lions</li> <li>High legibility and expressiveness values – coastal erosion and deposition.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness, memorability and wild and scenic values are high within Okia Reserve and on the ocean coast. The scale of the beach and the flats supports qualities of wilderness / isolation.</li> <li>Values are reduced in western parts of the unit by the effects of roading, agricultural development and buildings.</li> <li>Overall – high aesthetic values</li> </ul>	High
Transient values	<ul> <li>Common presence of wildlife e.g. Yellow-eyed Penguins and Sea Lions.</li> <li>Tidal rhythms in the inlet</li> </ul>	High
Shared and recognised values	<ul> <li>Papanui Inlet and Victory Beach are recognised as a Coastal Protection Area in the Otago Regional Plan: Coast. The inlet edge is also recognised as an area of significant conservation value in the Dunedin City District Plan.</li> <li>The ocean coast (excluding the inlet) is recognised as part of the Otago Peninsula ONFL in the Otago Regional Plan Coast.</li> </ul>	High

	<ul> <li>Okia Flat Wetland Management Area, Papanui Inlet Saltmarsh and the Te Matai Marsh Complex are recognised as Regionally Significant Wetlands.</li> <li>Okia, Victory Beach and the Pyramids are valued recreational locations</li> <li>Within the Peninsula Coast Outstanding Landscape in the Dunedin District Plan.</li> </ul>	
Tangata whenua values	<ul> <li>Okia wetland has Mahika kai and Waahi taoka values</li> <li>Okia was the site of an ancient settlement</li> <li>Tuhiraka and Katakakitaka tePiro o Kapo (islands in Papanui Inlet) are culturally significant (Wahi tapu values)</li> </ul>	High
Historic heritage values	<ul> <li>The steamship Victory was wrecked on Victory Beach in 1861 – Boiler house is still visible at low tide</li> <li>Important archaeological sites near the mouth of the inlet</li> </ul>	High - medium

Rating	Comments / Reasons	Outstanding
High	The Papanui Inlet / Okia unit has landscape values that are generally higher on the ocean side / eastern parts and less impressive around the more modified inlet edge / western parts. Even so, it has significant values across all the assessment factors and overall landscape values are assessed as high and outstanding.	Yes

## Natural features assessed

• Pyramids

## **DL11 / F1 Pyramids**



## **Character Description**

The Pyramids are outcrops of columnar basalt that have been eroded by the sea but which are now stranded far inland by beach aggradation. They are covered in indigenous scrub and bush.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Pyramids (abandoned marine stacks) are listed in the Otago inventory of important geological sites and landforms.</li> <li>High legibility – expressive of volcanism and coastal erosion</li> <li>Floristically rich</li> </ul>	High

Aesthetic values (naturalness / memorability) Wild and scenic	Visually memorable with high natural character values	High
Transient values	Occasional presence of wildlife	Medium
Shared and recognised values	A well-known and valued feature of the Otago Peninsula	High
Tangata whenua values	Wahi tapu values	High
Historic heritage values	None known	Low

Rating	Comments / Reasons	Outstanding
High	The Pyramids have significant natural science, aesthetic, shared and recognised and cultural values. Overall, their landscape values are assessed as high and outstanding.	Yes

**DL12. Cape Saunders Coast** 



This character unit covers the remote south-eastern corner of the Otago Peninsula between Papanui Inlet and Allans Beach. It includes Papanui Beach and Wharekakahu Island. The landform is characterized by Basalt or Breccia cliffs – some very high, with reefs, stacks and sea caves. Behind these, the land is generally a gently sloping, dissected plateau, eventually rising more steeply toward Mt Charles. Back from the coastal edge the land is mainly pasture with native bush and scrub patches. There are no significant structures present apart from the lighthouse structure at Matakitaki Point. The coastal environment has been identified to encompass the visually significant headlands.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The steep coastal cliffs provide nesting habitat for Spotted Shags</li> <li>Cicily and Papanui Beaches are breeding areas for Yellow-eyed Penguin and haul out locations for seals and sea lions.</li> <li>A highly legible landform – expressive of volcanism and coastal erosive processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>High naturalness values associated with powerful and coherent natural landforms and minimal impact of structures.</li> <li>Highly memorable, wild and scenic. Expansive sea views and dramatic coastal landforms.</li> </ul>	High
Transient values	<ul> <li>Presence of wildlife on the beaches and around the cliffs</li> <li>Various moods associated with different weather and sea state conditions</li> </ul>	High
Shared and recognised values	<ul> <li>This area is included within the Otago Peninsula ONFL in the Otago Regional Plan: Coast and the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan.</li> <li>The steep cliffs generally and the area in the vicinity of Cicily Beach are recognised in the Dunedin City District Plan as areas of significant conservation value.</li> </ul>	High
Tangata whenua values	<ul> <li>There was a Ngati Mamoe kaik at Papanui Beach</li> <li>Poatiri (Mt Charles) can be interpreted as the 'fishhook'.</li> <li>May refer to its proximity to important fishing grounds off Papanui Beach.</li> </ul>	Medium
Historic heritage values	Cape Saunders was named by Captain Cook otherwise no known historic values	Medium

## Overall landscape values rating

Rating	Comments / Reasons	Outstanding
High	The Cape Saunders Coast unit has significant natural science, expressiveness, aesthetic and tangata whenua values. It is a highly memorable / wild and scenic landscape and overall, landscape values are assessed as high and outstanding.	Yes

### Natural features assessed

• Wharekakahu Island

DL12 / F1. Wharekakahu Island



Wharekakahu lies some 250m from the shore off Alfred and Cicily Beaches. It is a sparsely vegetated rock stack with steep cliffed sides.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>High habitat values for sooty shearwater, fairy prion and shag</li> <li>Absence of introduced mammals – refuge for indigenous and endemic plants and animals that would otherwise have been eliminated.</li> <li>Haul out site for seals.</li> <li>Highly legible feature – expressive of coastal erosional forces</li> </ul>	High

Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>High naturalness values</li> <li>High memorability and wild and scenic values – rugged coastal island and focal point</li> </ul>	High
Transient values	<ul> <li>Presence of birds</li> <li>Various moods associated with weather and sea states</li> </ul>	High
Shared and recognised values	Recognised as an ONFL in the Otago Regional Plan:     Coast	High
Tangata whenua values	Wahi taoka values	High
Historic heritage values	None known	Low

Rating	Comments / Reasons	Outstanding
High	Wharekakahu has very high natural character and aesthetic values. Overall, its landscape values are assessed as high and outstanding.	Yes

**DL13. Allans Beach / Hoopers Inlet** 



This unit encompasses the drowned volcanic valley of Hoopers Inlet and the sand barrier that has built up at its entrance edged by Allans Beach. The inlet itself is a shallow estuary with sand flats and channels, and with salt marsh areas around its edges. A low scarp defines the extent of the coastal environment. The sand barrier grades from the sweep of Allans Beach, through marram and scrub covered dunes to an area of pasture or exotic woodlot to a large saltmarsh wetland.

The land back from the inlet edge is generally under pasture cover but there are areas of native scrub or bush as well as exotic trees, typically macrocarpa. The estuary-head areas are modified by roads running around the inlet edge and in places cutting off embayments via causeways. There are a number of boat sheds dotted along the shoreline and some on-going reclamation adjacent to the inlet's south-eastern shore.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Hoopers Inlet is listed in the Otago inventory of important geological sites and landforms as an excellent example of a drowned valley forming a tidal inlet.</li> <li>The inlet has noted estuarine values as habitat for birds and as a nursery for flatfish</li> <li>Allans Beach is habitat for Yellow-eyed and Little Blue Penguins, and a sea lion haul out area.</li> <li>High legibility and expressiveness values – coastal erosion and deposition</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness, memorability and wild and scenic values are high at Allans Beach and the Hoopers Inlet swamp.</li> <li>Values are reduced in the inlet head areas by the effects of roading, agricultural development and buildings around the more gentle inlet.</li> <li>The contrast between the sheltered more modified inlet and the wild and scenic ocean coast is interesting</li> <li>Overall – high aesthetic values</li> </ul>	High
Transient values	<ul> <li>Common presence of wildlife</li> <li>Tidal rhythms on the inlet (when not blocked at the entrance)</li> <li>Various moods associated with different weather and sea states on Allans Beach.</li> </ul>	High
Shared and recognised values	<ul> <li>Hoopers Inlet is recognised as a Coastal Protection Area in the Otago Regional Plan: Coast and the inlet edge is an area of significant conservation value in the Dunedin City District Plan</li> <li>The ocean coast (excluding Hoopers Inlet) is included as part of the Otago Peninsula ONFL in the Otago Regional Plan: Coast</li> <li>Hoopers Inlet swamp Is a Regionally Significant wetland (Otago Regional Water Plan) and an area of significant conservation value in the Dunedin City District Plan</li> <li>This area is within the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan</li> <li>Allans Beach Recreation Reserve is an area of significant conservation value in the Dunedin City District Plan.</li> <li>A valued recreational and tourist destination for its scenic and natural values</li> </ul>	High
Tangata whenua values	Kai Tahu cultural and spiritual values noted for Hoopers Inlet (Puke to roto) in the Otago Regional Plan: Coast	High - medium
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
High	The Allans Beach / Hoopers Inlet unit has recognised and significant natural values. Naturalness and associated aesthetic values are reduced somewhat around the more modified inlet edge areas but the area is still considered highly scenic and aesthetic values are rated high generally. Whilst cultural and historic values are less significant than in other parts of the peninsula coast, overall landscape values are assessed as high and outstanding.	Yes

## Natural features assessed

(none)

**DL14. Southern Otago Peninsula** 



This landscape character unit stretches from Maori Head in the west, to the mouth of Hoopers Inlet in the east. This south facing coastal section encompasses high, cliffed coastlines at both ends, as well as a lower, less rugged section between Boulder Beach and Sandfly Bay. The coastal environment has been identified to include the sand dunes extending right over the hilltop at Sandymount. The geology is volcanic with basalt cliffs, shore platforms, erosional features and sea stacks (including Gull and Tow Rocks).

There is a considerable amount of native scrub on the steep coastal faces and in the more stable sandy areas, Dune areas at Boulder Beach and Sandfly Bay are largely under marram grass cover. Apart from penguin hides at Sandfly Bay, and a farm shed and viewing platforms at Sandymount, there are no structures of significance present.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Lovers' Leap volcanic section and sea arch is listed in the Otago inventory of important geological sites and landforms – well exposed volcanic section and spectacular sea arch.</li> <li>Sandfly Bay lag surface, venifacts and earthflow is listed in the Otago inventory of important geological sites and landforms – excellent example of a multicoloured coastal sand dune system with lag surfaces and actively forming ventifacts. Good example of an earth flow.</li> <li>Boulder Beach and Sandfly Bay are important habitats (including breeding areas) for wildlife – yellow-eyed penguin, little blue penguin, seals and sea lions, sooty shearwater</li> <li>The cliffs provide habitat for rare or restricted coastal vegetation and jeweled gecko habitat</li> <li>A highly legible natural landscape – expressive of processes of volcanism and coastal erosion and deposition.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are very high</li> <li>This coastline scores highly for wild and scenic, and memorability values</li> </ul>	High
Transient values	<ul> <li>Common presence of wildlife</li> <li>Various moods associated with different weather and sea state conditions</li> </ul>	High
Shared and recognised values	<ul> <li>This coast is included as part of the Otago Peninsula ONFL in the Otago Regional Plan: Coast</li> <li>This area is within the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan</li> <li>Areas of significant conservation value in the Dunedin City District Plan include – Boulder Beach, Sandfly Bay, Sandymount and Boulder Beach / Highcliff.</li> <li>A valued recreational and tourist destination for its scenic and natural values</li> </ul>	High
Tangata whenua values	<ul> <li>Pikiwhara (Sandymount) was the site of a pa, kaik and urupa including the burial site of the chief Taikawa (Pa tawhito, kaika and urupa values).</li> <li>Kai Tahu cultural and spiritual values noted for this coast (Otago Regional Plan: Coast)</li> </ul>	High - medium
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
High	With the exception of historic heritage values, the Southern Otago Peninsula unit has high values across all the assessment factors and its overall landscape values are assessed as high and outstanding.	Yes

# Natural features assessed

- Lovers Leap and the Chasm
- Sandfly Bay sand blow

DL14 / F1 Lovers Leap and the Chasm



This feature encompasses a section of the cliffs south of Sandymount with highly dramatic erosional features in columnar jointed basalt.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Lovers' Leap volcanic section and sea arch is listed in the Otago inventory of important geological sites and landforms – well exposed volcanic section and spectacular sea arch.</li> <li>A highly legible natural landform feature – expressive of processes of volcanism and coastal erosion.</li> </ul>	High
Aesthetic values (naturalness /	Highly dramatic and memorable	High

memorability) Wild and scenic	<ul><li>High naturalness values</li><li>High wild and scenic values.</li></ul>	
Transient values	<ul> <li>Transient values mainly related to various moods associated with weather conditions and to some extent – sea states</li> </ul>	High - medium
Shared and recognised values	<ul> <li>This feature is included within the Otago Peninsula ONFL in the Otago Regional Plan: Coast. Values mentioned specifically mention 'visually impressive landforms including Lovers Leap and the Chasm.</li> <li>Within the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan</li> <li>Within the Sandymount area of significant conservation value in the Dunedin City District Plan.</li> <li>A valued recreational and tourist destination for its scenic and natural values</li> </ul>	High
Tangata whenua values	None noted	Low
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
High	Lovers Leap and the Chasm have very high natural science, aesthetic, and shared and recognised values. Overall, landscape values are assessed as high and outstanding	Yes

# DL14 / F2 Sandfly Bay Dunes



# **Character Description**

The feature assessed is the transgressive dune system extending from Sandfly Beach over the ridge to Hoopers Inlet. The Dunes are vegetated to varying extents from none – indigenous forest cover on the Hoopers Inlet side.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Sandfly Bay lag surface, venifacts and earthflow is listed in the Otago inventory of important geological sites and landforms – excellent example of a multicoloured coastal sand dune system with lag surfaces and actively forming ventifacts. Good example of an earth flow.</li> <li>Sandfly Bay is an important habitat (including breeding</li> </ul>	High

	<ul> <li>areas) for wildlife – yellow-eyed penguin, little blue penguin, seals and sea lions, sooty shearwater</li> <li>A highly legible natural landform feature – expressive of processes of coastal erosion and deposition.</li> </ul>	
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Highly dramatic and memorable</li> <li>High naturalness values</li> <li>High wild and scenic values.</li> </ul>	High
Transient values	<ul> <li>A highly dynamic environment</li> <li>Common presence of wildlife near Sandfly Bay</li> </ul>	High
Shared and recognised values	<ul> <li>This feature is included within the Otago Peninsula ONFL in the Otago Regional Plan: Coast. Values mentioned specifically mention 'regionally significant earthflow at Sandfly Bay'.</li> <li>Within the Peninsula Coast Outstanding Landscape Area in the Dunedin City District Plan</li> <li>Within the Sandfly Bay area of significant conservation value in the Dunedin City District Plan.</li> <li>A valued recreational and tourist destination for its scenic and natural values</li> </ul>	High
Tangata whenua values	None recorded	Low
Historic heritage values	None recorded	Low

Rating	Comments / Reasons	Outstanding
High	The Sandfly Bay dunes have very high natural science, aesthetic, transient and shared and recognised values. Overall, landscape values are assessed as high and outstanding.	Yes

DL15. Smaills / Tomahawk



This landscape character unit is defined by Lawyers Head to the west and Maori Head to the east, encompassing Tomahawk and Smaills Beaches along with the twin lobes of Tomahawk Lagoon, behind Tomahawk Beach. The suburb of Ocean Grove lies between Tomahawk Beach and the lagoon. This coastal landscape is backed by three narrow valleys two of which drain to the lagoon arms and Tomahawk Beach, and the other to Smaills Beach. The geology of the hills surrounding and the headlands, is volcanic and the beaches are backed by dunes.

The lagoon arms are brackish and shallow and there are small marshy areas adjacent in places. Their margins are typically covered in native and exotic scrubland although urban development (involving reclamation) extends to the edge of the upper lagoon

along its southern side. The dunes are covered in marram grass and scattered native scrub. There is also wind shorn native scrub on the headlands.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The lagoon is a regionally significant wetland and habitat for threatened plant species, waterfowl and waders, and native fish and eels.</li> <li>Natural values associated with the lagoon are reduced by agricultural runoff and eutrophic conditions at times.</li> <li>Natural landscape processes and forms are still reasonably legible despite modifications e.g. to the dunes for sports facilities and sand extraction, and the inlet edge for urban development.</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are reduced by modifications to dunes and inlet forms as well as the presence of urban development and runoff effects on lagoon water quality – but still significant on the beaches.</li> <li>Wild and scenic / memorability values are high on the beaches but lower where adjacent urban development is more prominent</li> <li>The lagoon arms within their rural valley setting have high visual amenity values</li> <li>Overall aesthetic values are assessed as High – medium</li> </ul>	High - medium
Transient values	<ul> <li>Associated with the presence of wild life in the lagoon and on the beaches</li> <li>Various moods on the ocean coast associated with weather and sea states</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Tomahawk Lagoon is recognised as a regionally significant wetland (Otago Regional Plan: Water) and its edges are listed as an area of significant conservation value in the Dunedin City District Plan.</li> <li>A native forest remnant adjacent to the lagoon is listed as an area of significant conservation value in the Dunedin City District Plan.</li> <li>High - medium recognition of its landscape values in general</li> </ul>	High - medium
Tangata whenua values	Ocean Grove was a settlement site (Kaika values) and on trails that followed the coast	High - medium
Historic heritage values	World War II gun emplacements are located on the headland between Smaills and Tomahawk beaches.	Medium

Rating	Comments / Reasons	Outstanding
High -	The Smaills / Tomahawk unit retains a significant degree of natural	No
medium	character despite insensitive development in places and has high –	
	medium values across most assessment factors. Overall, landscape	
	values are assessed as high – medium.	

# Natural features assessed

(none)

#### DL16. Ocean Beach



#### **Character Description**

This landscape character unit encompasses the 3.5km long ocean beach, defined by the headland adjacent to the salt water pool at St Clair, and Lawyers Head. Its landward boundary coincides approximately with the extent of the Ocean Beach Domain. Historically this was more or less the area occupied by dunes with areas to the north being swampland. For convenience, White Island is also included within this section but will be discussed separately as a landscape feature (see D16 / F1).

The dunes which would have naturally run the whole length of the beach are now much reduced and modified by developments including the Esplanade sea wall at St Clair, housing, playing fields, dumping of fill, recreational buildings and parking areas, the golf course, the Tahuna sewage treatment plant and John Wilson Drive. The Basalt headland of Lawyers Head retains more of its natural character and a fore-dune is developing in front of the much modified John Wilson Drive.

### **Values Assessment**

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Natural functioning and forms of the dunes is now much modified particularly at the western end of the beach.</li> </ul>	Medium - low
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Low - medium naturalness values overall.</li> <li>The Beach has some memorability and wild and scenic values due to the influence of the open ocean and its long impressive sweep.</li> <li>Aesthetic values associated with the land back from the beach are low due to its incoherent character.</li> </ul>	Medium - low
Transient values	<ul> <li>Variable moods associated with different weather and sea states</li> <li>Occasional presence of marine mammals and common presence of sea birds</li> </ul>	High - medium
Shared and recognised values	A popular coastal recreational destination	Medium
Tangata whenua values	<ul> <li>The dunes were part of a coastal trail. Numerous taonga and artifacts have been found in this area (Ara tawhito values)</li> <li>Lawyers Head was known as Te Ika a Parehika</li> </ul>	High - medium
Historic heritage values	<ul> <li>Managed by the Ocean Beach Domain Board from 1884         <ul> <li>1989. The Board was set up in response to concerns about removal of sand, dumping and flooding of residential areas.</li> </ul> </li> </ul>	Medium

# Overall landscape values rating

Rating	Comments / Reasons	Outstanding
Low -	The Ocean Beach unit is a highly modified area which has been	No
medium	developed without adequate regard to coastal processes. Overall,	
	landscape values are assessed as low – medium.	

## Natural features assessed

White Island

## DL16 / F1 White Island



# **Character Description**

White Island is a small columnar basalt rock stack some 2.5km off Ocean Beach. It is devoid of vegetation and has a rocky reef which extends from its western end.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>White Island is a haul out site for fur seals</li> <li>Highly expressive of volcanism and marine erosion.</li> <li>Of more limited habitat value than other islands given its small size and lack of vegetation</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>High naturalness, memorability and wild and scenic values</li> <li>Its small scale modifies its significance</li> </ul>	High - medium

Transient values	<ul> <li>Occasional presence of wildlife</li> <li>Various moods associated with different sea states</li> </ul>	High
Shared and recognised values	<ul> <li>Recognised as an ONFL in the Otago Regional Plan: coast for Kai Tahu cultural and spiritual values and wildlife habitat values.</li> <li>A well-known landmark from urban Dunedin</li> </ul>	High - medium
Tangata whenua values	Pounuitehine (White Island) has wahi taoka values	High
Historic heritage values	<ul> <li>Reported to have been used for target practice by the military from Forbury Head in the 1880's</li> </ul>	Medium

Rating	Comments / Reasons	Outstanding
High -	White Island is a well-known landmark with some natural habitat and	No
medium	cultural significance. In comparison with other off-shore islands, its	
	limited scale reduces its habitat and visual significance. Overall, its	
	landscape values are assessed as high – medium.	

**DL17. Tunnel Beach Coast** 



This unit is defined by the basalt headlands at Blackhead and St Clair and includes the Caversham sandstone cliff coastline in between which is characterized by spectacular caves, arches and stacks, along with some pocket beaches. The coastal environment is identified as extending to the change in slope above these cliffs. Although there is urban and rural residential development adjacent to this area the land within the coastal environment is largely free of structures and is under pasture cover with areas of native and exotic scrub. The form of Blackhead is now much modified by quarrying activity but there are natural columnar basalt features remaining on the coastal margin.

## **Values Assessment**

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Blackhead organ pipes are listed in the Otago inventory of important geological sites and landforms (see D17/F2)</li> <li>Tunnel Beach sandstone cliffs are listed in the Otago inventory of important geological sites and landforms (see D17/F1).</li> <li>Rare salt tolerant herb vegetation at Tunnel Beach</li> <li>With the exception of Blackhead – this is a highly legible landscape expressive of its geological formation and erosive marine processes.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is high – medium – modified by the quarrying at Blackhead and exotic scrub species.</li> <li>Very high memorability and wild and scenic values – associated with the dramatic coastal landforms and land / sea interface.</li> </ul>	high
Transient values	Various moods associated with different sea states and weather.	High
Shared and recognised values	<ul> <li>This area is recognised as an ONFL in the Otago Regional Plan: Coast</li> <li>The Tunnel Beach area is listed as an area of significant conservation value in the Dunedin City District Plan for its clifftop herb vegetation.</li> <li>A highly valued destination – valued for its scenic attributes</li> </ul>	High
Tangata whenua values	Makereatu (Blackhead) is an ancient ancestral site and was an important stone gathering site (Wahi tapu values).	High
Historic heritage values	<ul> <li>The tunnel at Tunnel Beach was cut by John Cargill (son of Captain William Cargill) for access to the beach for his family.</li> <li>Quarrying at Blackhead began in the 1940's and a covenant to protect the outer headland was agreed in 1991.</li> </ul>	High - medium

Rating	Comments / Reasons	Outstanding
High	The Tunnel Beach Coast unit includes some highly significant geological and geomorphological features and has high – high-medium values across all the assessment factors. The quarrying of Blackhead however, reduces its overall landscape value and landscape values for the unit are assessed as high but not outstanding.	No

## Natural features assessed

- Tunnel Beach sandstone features
- Blackhead organ pipes and Roman baths

**DL17 / F1. Tunnel Beach Sandstone Features** 



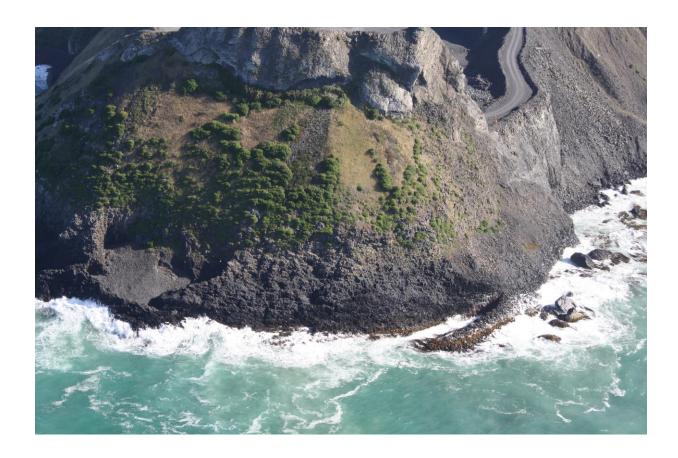
The feature assessed is the sandstone cliff section of the coast excluding the basaltic areas. This coastline is characterized by spectacular caves, arches, stacks, and a few pocket beaches.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Tunnel Beach sandstone cliffs are listed in the Otago inventory of important geological sites and landforms.</li> <li>Rare salt tolerant herb vegetation at Tunnel Beach</li> <li>This is a highly legible landscape expressive of its geological formation and erosive marine processes</li> </ul>	High

Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is high – modified to an extent by exotic scrub species on the slopes above the cliffs</li> <li>Very high memorability and wild and scenic values – associated with the dramatic coastal landforms and land / sea interface</li> </ul>	High
Transient values	<ul> <li>Various moods associated with different sea states and weather.</li> </ul>	High
Shared and recognised values	<ul> <li>This area is recognised as an ONFL in the Otago Regional Plan: Coast</li> <li>The Tunnel Beach area is listed as an area of significant conservation value in the Dunedin City District Plan for its clifftop herb vegetation.</li> <li>A highly valued destination – valued for its scenic attributes</li> </ul>	High
Tangata whenua values	None known	Low
Historic heritage values	<ul> <li>The tunnel at Tunnel Beach was cut by John Cargill (son of Captain William Cargill) for access to the beach for his family.</li> </ul>	High - medium

Rating	Comments / Reasons	Outstanding
High	The Tunnel Beach Sandstone Features have very high memorability / wild and scenic qualities and significant natural science, transient, shared and recognised and historic heritage values. Overall, landscape values are assessed as high and outstanding	Yes

DL17 / F2. Blackhead Organ Pipes



The feature assessed is the end of the Blackhead headland that remains largely in its natural state and which includes columnar basalt (organ pipe) formations including formations known as the 'Roman baths' and the 'Dock'. This area is protected from quarrying by a covenant. It should be noted however, that the identified natural feature does not include those parts of the covenanted area where substantial modification to the landform has occurred.

## **Values Assessment**

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Blackhead organ pipes are listed in the Otago inventory of important geological sites and landforms.</li> <li>Highly legible formations expressive of their geological origins and erosive marine processes</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness, memorability and wild and scenic values are high albeit modified to an extent by the presence of the adjacent quarry and by a rock fall.</li> </ul>	High
Transient values	<ul> <li>Various moods associated with different sea states and weather.</li> <li>The presence of seals and marine birds.</li> </ul>	High
Shared and recognised values	<ul> <li>This area is recognised as an ONFL in the Otago Regional Plan: Coast</li> <li>The values of this headland have been recognised by a protection covenant</li> <li>Public awareness of the feature is modest and access is difficult.</li> </ul>	High - medium
Tangata whenua values	Makereatu (Blackhead) is an ancient ancestral site and was an important stone gathering site (Wahi tapu values).	High
Historic heritage values	None relevant	Low

Rating	Comments / Reasons	Outstanding
High	The Blackhead Organ Pipes are dramatic and memorable formations	Yes
	with high geological and aesthetic values. There are also significant	
	cultural values relating to this headland. Overall, landscape values are	
	assessed as high and outstanding.	

DL18. Kaikorai / Green Island



This character area encompasses Kaikorai Estuary and the sweeping beaches to either side from Ocean View in the west to Blackhead in the east. Whilst the geology of the surrounding hills is sedimentary, the area within the coastal environment is largely sandy marine deposits. Green Island is included in this unit for convenience but is considered separately under D18 / F1.

At the western (Ocean View) end, the beach is backed by marram grass covered dunes with scattered native and exotic scrub. The main road to Brighton runs along the back of the dunes and housing has been developed along this in ribbon form. Small streams cut through in places.

The Kaikorai Estuary is characterized by tidal sandbanks and channels with wetland areas on the margins in places. The natural character of this area has been significantly

modified by roads, bridges, agricultural development and drainage, landfill, restricting its extent, and industrial development.

North of the estuary mouth another long beach is backed by a large area of dune country. This is marram grass covered near the beach but increasingly scrub and forest covered with distance inland. Natural character is modified, particularly nearer the estuary mouth, by sand mining and the development of recreational facilities such as the speedway.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Kaikorai Estuary has a diversity of species and communities which support a diverse bird population. There is a wide variety of estuarine plants. It provides habitat for whitebait and flounder.</li> <li>The dunes near Westwood are an important site for remnant Pingao.</li> <li>Natural forms and processes are significantly modified, particularly around the estuary but also at the rear of the beach areas.</li> </ul>	Medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are generally low – moderate, especially around the estuary and at the back of the dunes.</li> <li>Not especially memorable or scenic. Can be wild due to sea states.</li> <li>Overall – low – medium</li> </ul>	Low - medium
Transient values	<ul> <li>Birdlife on the beaches and in the estuary</li> <li>Tidal rhythms</li> <li>Various moods associated with different weather and sea states on the beaches</li> </ul>	High - medium
Shared and recognised values	<ul> <li>Kaikorai Estuary is recognised as a Coastal Protection Area in the Otago Regional Plan: Coast and a regionally significant wetland in the Otago Regional Plan: Water. The edge of the estuary is an area of significant conservation value in the Dunedin City District Plan.</li> <li>Westwood Recreation Reserve is recognised as an area of significant conservation value in the Dunedin City District Plan.</li> <li>Medium – high popular value associated with this coastal environment generally. A popular recreation destination</li> </ul>	High - medium

Tangata whenua values	<ul> <li>The beach between Blackhead and the Kaikorai Estuary mouth was the site of settlements (Kaika values)</li> <li>Kaikorai Estuary has mahika kai values and is the first known site to be named in Otago – Kaikarae – meaning 'where seabirds are eaten (Mahika kai values)</li> </ul>	High
Historic heritage values	Significant pre European usage / settlement	Medium

Rating	Comments / Reasons	Outstanding
Medium	The Kaikorai / Green Island unit retains some important natural values and has high spiritual and cultural significance to Maori, but overall is highly modified and scenically degraded. Overall, landscape values are assessed as medium.	No

# Natural features assessed

• Green Island

DL18 / F1. Green Island



Green Island is a small basalt island approximately 2km off the coast. It has reefs surrounding and vegetation dominated by Coprosma repens (taupata).

Criteria	Rating	
/ legibility / expressiveness  Also habitat for rare Cooks so seal haul out site.  • A highly legible feature – exp formation, marine erosive pro importance.	Also habitat for rare Cooks scurvy grass and gecko. Fur seal haul out site.  • A highly legible feature – expressive of its geological formation, marine erosive processes and its bird habitat	High
Aesthetic values (naturalness /	High naturalness, memorability and wild and scenic values.	High

memorability) Wild and scenic		
Transient values	<ul> <li>Abundance of birdlife</li> <li>Various moods associated with sea states and weather.</li> </ul>	High
Shared and recognised values	<ul> <li>Recognised as an ONFL in the Otago Regional Plan:         Coast</li> <li>Recognised as an area of significant conservation value in         the Dunedin City District Plan</li> <li>Has nature reserve status</li> <li>An important landmark</li> </ul>	High
Tangata whenua values	Has Wahi taoka values	High
Historic heritage values	No specific values known	Low

Rating	Comments / Reasons	Outstanding
High	Green Island has very high values generally, and particularly as a wildlife haven. Overall, landscape values are assessed as high and outstanding.	Yes

DL19. Brighton



This landscape character unit includes the coastline adjacent to the urban area of Brighton along with the tidal section of Otokia Creek. The coast is characterized by small beaches divided by low rocky headlands with stacks and reefs associated. There is a small marram covered dune system at the mouth of Otokia Creek which has been modified by the development of the Surf Club building and the associated parking area. At the northern end of the unit, the beaches are backed by a steep scarp covered in native and exotic coastal scrub.

Back from the immediate coastal edge, is the main coastal road and the urban area of Brighton. A large area of open parkland occupies the top of the uplifted marine terrace to the south of Brighton Beach. Otokia Creek cuts through the coastal terrace and a

saltmarsh wetland area occupies the floor of the valley to the north of the township. This has been modified by drainage works and agricultural development to some extent.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Brighton uplifted marine terrace is listed in the Otago inventory of important geological sites and landforms as a well preserved late quaternary marine bench uplifted 5m above sea level.</li> <li>Brighton is the northern extent of the Otago coastal schist section – included in the Otago inventory of important geological sites and landforms – cited as New Zealand's best and most accessible exposure of this section of Haast schist.</li> <li>Lower Otokia Creek swamp is a saltmarsh with waterfowl habitat values</li> <li>Legibility and expressiveness of natural patterns and processes is modified by urban development and drainage of the wetlands etc but is still moderate.</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is reduced by urban development and drainage of the wetlands etc but is still moderate due to the power of the coastal processes.</li> <li>The beaches and headlands retain wild and scenic qualities. Memorability is moderate.</li> </ul>	Medium
Transient values	<ul> <li>Occasional presence of wildlife</li> <li>Various moods associated with different weather and sea state conditions.</li> </ul>	High - medium
Shared and recognised values	<ul> <li>There is a Coastal Protection Area recognised in the Otago Regional Plan: Coast for historic values (midden and work floor).</li> <li>Lower Otokia Creek Marsh is recognised in the Otago Regional Plan: Water as a regionally significant wetland.</li> <li>A popular seaside recreational destination in part due to its coastal landscape values</li> </ul>	High - medium
Tangata whenua values	This area was on an important coastal trail. Archaeological sites and umu have been found throughout this coastal area (Aro tawhito, Umu and Mahika kai values).	High - medium
Historic heritage values	<ul> <li>There are archaeological sites registered by Heritage NZ         <ul> <li>midden / work floor.</li> </ul> </li> <li>Brighton was a popular seaside resort town in the late 1800's with a number of large guest houses.</li> </ul>	High - medium

Rating	Comments / Reasons	Outstanding
High -	The Brighton landscape unit has some significant natural and cultural	No
medium	values but its overall landscape values are significantly modified by	
	urban development. Overall, landscape values are assessed as high –	
	medium.	

## Natural features assessed

• Brighton uplifted marine terrace

DL19 / F1 Brighton uplifted marine terrace



This feature is a marine bench at the south side of the beach at Brighton, defined on its northern side by the Otokia Creek. Around its coastal scarp are beaches and Schist reefs and stacks. The terrace top has been developed as recreational parkland.

Criteria	Comments	
Natural science factors / legibility / expressiveness	<ul> <li>Brighton uplifted marine terrace is listed in the Otago inventory of important geological sites and landforms as a well preserved late quaternary marine bench uplifted 5m above sea level. It is near the northern extent of the Otago coastal schist</li> <li>Expressiveness values are reduced by its development as playing fields however its openness makes it legible.</li> </ul>	High - medium

Aesthetic values (naturalness / memorability) Wild and scenic	Naturalness, memorability and wild and scenic values are modified by its development for playing fields	Medium
Transient values	<ul> <li>Various moods associated with different weather and sea state conditions.</li> </ul>	Medium
Shared and recognised values	Minimal public awareness of the ecological significance of this feature	Low
Tangata whenua values	This area was on an important coastal trail. Archaeological sites and umu have been found throughout this coastal area (Aro tawhito, Umu and Mahika kai values).	High - medium
Historic heritage values	There are archaeological sites registered by Heritage NZ – midden / work floor in this vicinity	High - medium

Rating	Comments / Reasons	Outstanding
Medium	The Brighton uplifted marine terrace has significant geological values but is too modified to have more than medium landscape values generally.	No

DL20. Brighton - Taieri Mouth



This landscape character area encompasses a long stretch of coast from Taieri Mouth – Brighton. This area is characterized by a series of coastal terraces of schist geology, with schist exposed in outcrops along the coast. The coastal environment is defined by the top of the first terrace back from the coastal highway. At the southern end there is aeolian and wave deposited sand in the lee of Moturata Island and at the northern end a marram dominated foredune has developed. In between, the coast is characterized by a low cliff with small pocket beaches.

The landscape behind the beaches is characterized by pasture cover with exotic shelter plantings, and where gullies cut through the coastal terrace, by remnant or regenerating indigenous vegetation. The Taieri Mouth – Brighton Road forms a lineal connection running along the beach margin. Apart from rocky promontories at Kuri Bush, the beach is sandy. Residential development is scattered along the road margins, mainly on the

inland side with the exception being around Kuri Bush where cribs have been constructed between the road and the sea. Vegetation along the beach margin is largely marram grass and tree lupin with little evidence of any indigenous vegetation.

### **Values Assessment**

Criteria	Comments	
Natural science factors / legibility / expressiveness	<ul> <li>The Otago coastal schist section – included in the Otago inventory of important geological sites and landforms – cited as New Zealand's best and most accessible exposure of this section of Haast schist.</li> <li>High – moderately expressive of the schist peneplain / coastal interface</li> </ul>	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness values are modified by the agricultural land use and presence of the road and houses, but still moderately high given the generally coherent landform pattern (pattern of bush gullies and pasture spurs)</li> <li>Moderate memorability - subdued topography but wide coastal panoramas</li> <li>The wide scale gives it wild and scenic attributes.</li> </ul>	High - medium
Transient values	<ul> <li>Occasional presence of wildlife</li> <li>Various moods associated with different weather and sea state conditions</li> </ul>	Medium
Shared and recognised values	<ul> <li>Little recognition in statutory documents</li> <li>Moderate public / popular shared values as an attractive coastal drive (on the Southern Scenic Route).</li> </ul>	Medium - low
Tangata whenua values	This area was on an important coastal trail.     Archaeological sites and umu have been found throughout this coastal area (Aro tawhito, Umu and Mahika kai values).	High - medium
Historic heritage values	No particular significance known	Low

Rating	Comments / Reasons	Outstanding
Medium	The Brighton – Taieri Mouth coastline has moderately high aesthetic values and some natural science and cultural significance. Overall, landscape values are assessed as medium.	No

## Natural features assessed

(none)

**DL21. Taieri River Gorge** 



This unit extends from the Taieri Mouth bridge to the Henley bridge and includes the gorge defining slopes either side of the river as well as significant tidal side streams and wetlands. The Taieri River is tidal with significant marine influence right through this gorge. The geology changes from schist to Henley breccia half way through the gorge and this change coincides (more or less) with a change from more natural (lower gorge) to more modified (upper gorge). The Henley end has areas of indigenous forest cover but also a greater influence of forestry and agricultural land use with some wetland areas drained and a road running along the true right bank. The lower gorge is protected to a large degree by the Taieri River Scenic Reserve and has high natural values including areas of significant podocarp forest, impressive rock bluffs and saltmarsh wetland margins.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Taieri River mouth gorge is recognised in the Otago inventory of important geological sites and landforms as an unmodified and well defined coastal gorge.         Manganese deposits at the mouth of the gorge are also listed in this inventory.</li> <li>Takitoa swamp has significant wetland habitat values – for South Island Fernbird and inanga</li> <li>The Rocky Hill Tidal Marshes and Governors Point Swamp have a high diversity of habitat types and recognised ecological values.</li> <li>The gorge landform is powerfully expressive of the processes of faulting and river erosion. Natural vegetation sequences are expressive of the environmental conditions. Expressiveness values are lower in the upper gorge.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is high generally but modified by the influence of agriculture and forestry, particularly in the upstream section, and the presence of weedy species such as gorse</li> <li>A highly memorable gorge landform with wild and scenic qualities where natural vegetation cover is dominant. Values are significantly reduced upstream.</li> </ul>	High - medium
Transient values	Presence of wildlife and tidal rhythms.	High - medium
Shared and recognised values	<ul> <li>Takitoa swamp, Governors Point Swamp and Rocky Hill Tidal Marshes are recognised in the Otago Regional Plan: Water as a regionally significant wetland.</li> <li>The Lower Taieri Gorge is recognised as an ONFL in the Otago Regional Plan: Water and as a potentially outstanding landscape in the Clutha District Plan.</li> <li>The Taieri River Scenic Reserve is listed as an area of significant conservation value in the Dunedin City District Plan and as an area of significant habitat of indigenous fauna in the Clutha District Plan.</li> <li>Generally recognised for its natural and scenic values.</li> </ul>	High
Tangata whenua values	<ul> <li>The Onumia Reserve (land on the true left of the river) was reserved from the Otakou deed of purchase in 1884.</li> <li>Takitoa Swamp has significance to Kai Tahu</li> <li>Te Rereka o Haki te Kura (Maori Leap on the south bank) has Wahi taoka values.</li> <li>Te Rereka o Tuhokairaki (Maori Leap on the north bank) has Wahi taoka values.</li> <li>Pa and Kaika sites including Te Amoka pa (right bank)</li> <li>Taieri River has Wai maori, Wahi paripari, Wahi taoka, Tauraka waka, Ara tawhito and Mahika kai values.</li> </ul>	High

Historic heritage values	•	The Taieri River was an important historic transport route into the hinterland for both Maori and European settlers. Taieri Mouth was an important port – little physical evidence legible now.	High - medium

Rating	Comments / Reasons	Outstanding
High - medium	The Taieri River Gorge unit has high natural, aesthetic and cultural values but overall, has been modified to an extent incompatible with very high or outstanding status. Due to its particular characteristics, the less modified lower gorge has been identified as a Natural Feature for assessment (see D21 / F1). Overall, landscape values are assessed as high – medium.	No

## Natural features assessed

• Lower Taieri River Gorge

**DL21 / F1 Lower Taieri River Gorge** 



This feature encompasses the lower section of the Taieri River gorge from the Taieri Mouth bridge to the end of the schist section and includes the gorge defining slopes either side of the river as well as significant tidal side streams and wetlands. The Taieri River is tidal with significant marine influence right through this gorge. The lower gorge is protected to a large degree by the Taieri River Scenic Reserve and has high natural values including areas of significant podocarp forest, impressive rock bluffs and saltmarsh wetland margins.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>Taieri River mouth gorge is recognised in the Otago inventory of important geological sites and landforms as an unmodified and well defined coastal gorge. Manganese deposits at the mouth of the gorge are also listed in this inventory.</li> <li>The Rocky Hill Tidal Marshes and Governors Point Swamp have a high diversity of habitat types and recognised ecological values.</li> <li>The gorge landform is powerfully expressive of the processes of faulting and river erosion. Natural vegetation sequences are expressive of the environmental conditions.</li> </ul>	High
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Naturalness is high generally but modified by the influence of forestry on skylines and higher slopes in places. The presence of weedy species such as gorse also modifies naturalness in places.</li> <li>A highly memorable gorge landform with wild and scenic qualities.</li> </ul>	High
Transient values	Presence of wildlife and tidal rhythms.	High – medium
Shared and recognised values	<ul> <li>Governors Point Swamp and Rocky Hill Tidal Marshes are recognised in the Otago Regional Plan: Water as a regionally significant wetland.</li> <li>The Lower Taieri Gorge is recognised as an ONFL in the Otago Regional Plan: Water and as a potentially outstanding landscape in the Clutha District Plan.</li> <li>The Taieri River Scenic Reserve is listed as an area of significant conservation value in the Dunedin City District Plan and as an area of significant habitat of indigenous fauna in the Clutha District Plan.</li> <li>Generally recognised for its natural and scenic values.</li> </ul>	High
Tangata whenua values	<ul> <li>The Onumia Reserve (land on the true left of the river) was reserved from the Otakou deed of purchace in 1884.</li> <li>Te Rereka o Haki te Kura (Maori Leap on the south bank) has Wahi taoka values.</li> <li>Te Rereka o Tuhokairaki (Maori Leap on the north bank) has Wahi taoka values.</li> <li>Pa and Kaika sites including Te Amoka pa (right bank)</li> <li>Taieri River has Wai maori, Wahi paripari, Wahi taoka, Tauraka waka, Ara tawhito and Mahika kai values.</li> </ul>	High
Historic heritage values	The Taieri River was an important historic transport route into the hinterland for both Maori and European settlers.  Taieri Mouth was an important port – little physical evidence legible now.	High - medium

	Rating	Comments / Reasons	Outstanding
	High	The Lower Taieri River Gorge has high values across all the assessment factors. Overall, landscape values are assessed as high and outstanding.	Yes
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DL22. Henley



This landscape unit extends along the Taieri and Waipori Rivers as far as the marine influence is significant, and is part of a much wider lower Taieri Plains landscape. The rivers are constrained within stop banks and dairy farming land use has replaced the large wetlands that would have once covered this area. Roads, bridges and scattered buildings are also parts of the riverside landscape.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	<ul> <li>The Waipori Boot Swamp is habitat for rare or threatened species – i.e. Australasian Bittern and Marsh Crake.</li> <li>Natural landscape patterns are now significantly modified by stopbanks, drainage and agricultural development –</li> </ul>	Medium - low

	expressiveness modest.	
Aesthetic values (naturalness / memorability) Wild and scenic	<ul> <li>Despite some remaining wetland areas, naturalness values are low due to the influence of agricultural reclamation and drainage</li> <li>Memorability and wild and scenic values are low</li> </ul>	Low
Transient values	Occasional presence of birdlife	Medium
Shared and recognised values	<ul> <li>The Waipori Boot Swamp is recognised as a regionally significant wetland (ORC) and as an area of significant conservation value in the Dunedin City District Plan.</li> <li>Little popular value ascribed to this landscape</li> </ul>	Medium - low
Tangata whenua values	<ul> <li>Taieri River has Wai maori, Wahi paripari, Wahi taoka, Tauraka waka, Ara tawhito and Mahika kai values.</li> <li>Maitapapa (Henley) and Omoua were the sites of ancient pa, settlement, tauraka waka and urupa (Pa tawhito, kaika and urupa values)</li> </ul>	High - medium
Historic heritage values	<ul> <li>The Taieri Ferry bridge has heritage values</li> <li>An important river crossing point and settlement centre – little historical fabric legible.</li> </ul>	Medium

Rating	Comments / Reasons	Outstanding
Low - medium	Despite some habitat values of significance, the Henley unit is a very modified landscape with generally low or low - medium natural character and aesthetic values. Tangata whenua values are of some importance but overall, landscape values are assessed as low – medium.	No

## **Natural features assessed**

(none)