Natural Features and Natural Landscapes - Waitaki District Section

Landscape character unit	ONF to be assessed
WL1. Waitaki Delta	WL1/F1. Waitaki River mouth
WL2. Oamaru	
WL3. Cape Wanbrow	WL3/F1. Cape Wanbrow Wave cut notch and
	fossil beach.
WL4. Awamoa	
WL5. Kakanui	
WL6. Waianakarua	WL6/F1. Bridge Point
WL7. Hampden	WL7/F1. Moeraki Boulders
WL8. Moeraki	WL8/F1. Kataki Point
WL9. Kataki Beach	
WL10. Shag Point	
WL11. Shag River Estuary	
WL12. Goodwood	WL12/F1. Bobbys Head
WL13. Pleasant River Estuary	

WL1. Waitaki Delta



This unit extends from the Otago Region and Waitaki District boundary at the Waitaki River, approximately 20km along the coast to the northern end of Oamaru. This area is the southern part of the outwash fan of the Waitaki River, and the unit extends northwards from the river mouth into the Canterbury Region as well. The coast is erosional and is characterised by a gravel beach backed by a steep consolidated gravel cliff. Nearer the river mouth the delta land surface is lower and there is no coastal cliff. In places, where streams reach the coast, there are steep sided minor ravines that run back from the coast. The land behind is farmed to the clifftop and characterised by pasture, crops and lineal exotic shelter trees. Farm buildings are scattered about but not generally close to the coastal edge. There are a number of gravel extraction sites close to the coast.

In the absence of topographical features, the coastal environment has been identified approximately 100m back from the top of the cliff to recognise that coastal influences and qualities extend a small way inland.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 At the macro scale the eroding delta landform is expressive of its formative processes. Due to modification by farming there is now low legibility of natural vegetation patterns The meeting of the Waitaki River with the ocean has significant expressiveness values. River mouth wetlands have important habitat values. Whilst values are higher at the Waitaki River mouth, in general, the unit has highly modified vegetation and moderate natural science / legibility / expressiveness values overall. 	Medium
Aesthetic values (naturalness / memorability) Wild and scenic	 Landforms generally reflect natural coastal processes but the landscape behind the cliff is highly modified. Memorability is medium / high due to the strongly defined landform and meeting of the Waitaki River with the ocean. Wild and scenic values are medium - low due to the high level of modification and low physical relief. 	Medium - low
Transient values	Various moods associated with different weather and sea states.	Medium
Shared and recognised values	 Waitaki River mouth wetlands are identified as an 'area of conservation merit' in the Waitaki District Plan. Low shared values generally for this highly modified flat rural coastline. The Waitaki River is identified as a natural feature / landscape of regional significance in the Canterbury Regional Landscape Study Review 2010. The Waitaki River is zoned 'rural scenic' in the Waitaki District Plan. 	Medium - low
Tangata whenua values	 The Waitaki River is subject to a Statutory Acknowledgement There are important archaeological sites at the Waitaki River Mouth dating from the Archaic (Moa Hunter) phase of Maori culture Mimi hanui is the sea beach from Waitaki Mouth ti Oamaru. Medium values overall 	Medium
Historic heritage values	There are important archaeological sites at the Waitaki	Medium

River Mouth dating from the Archaic (Moa Hunter) phase of Maori culture. More generally, no particular values of note.	- low
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Rating	Comments / Reasons	Outstanding
Low -	The Waitaki Delta unit has a large scale legible landform but is otherwise	No
medium	highly modified. Overall, shared and recognised, tangata whenua and historic heritage values are no more than medium.	

Natural features assessed

• Waitaki River mouth

WL1/F1. Waitaki River mouth



The Waitaki River defines the northern boundary of both the Otago Region and Waitaki District and the river mouth feature is defined as the riverbed within the Otago Region coastal environment, along with associated wetland areas. It is assessed on the basis that the Waitaki River is identified as a natural feature or landscape of regional significance in the Canterbury Regional Landscape Study Review 2010, and is zoned 'Rural Scenic' in the Waitaki District Plan.

The Waitaki River mouth is described as a low – mid energy hapua with dynamic mixed sand – gravel spits enclosing a predominantly freshwater lagoon. The vegetation cover is predominantly exotic and dominated by Willow. The freshwater flow extends strongly offshore for some distance.

Values Assessment

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 The meeting of the Waitaki River with the ocean has significant expressiveness values but vegetation cover is highly modified. River mouth wetlands have important habitat values. 	Medium - high
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are high in terms of landforms but low in terms of vegetation cover. Medium – high overall. Memorability is high for the interface of a powerful river and the ocean. Wildness values are high. Scenic values less so due to modified vegetation cover / patterns. Overall aesthetic values – medium high 	Medium - high
Transient values	Various moods associated with different river and sea conditions.	High
Shared and recognised values	 Waitaki River mouth wetlands are identified as an 'area of conservation merit' in the Waitaki District Plan. The Waitaki River is identified as a natural feature / landscape of regional significance in the Canterbury Regional Landscape Study Review 2010. The Waitaki River is zoned 'rural scenic' in the Waitaki District Plan. Moderate shared values as regards landscape and natural qualities. 	Medium - high
Tangata whenua values	 The Waitaki River is subject to a Statutory Acknowledgement. There are important archaeological sites at the Waitaki River Mouth dating from the Archaic (Moa Hunter) phase of Maori culture The river served as a major transportation route and has mahika kai values. 	High
Historic heritage values	 There are important archaeological sites at the Waitaki River Mouth dating from the Archaic (Moa Hunter) phase of Maori culture. No European history of note 	Medium - high

Overall landscape values rating

Rating	Comments / Reasons	Outstanding
Medium -	The Waitaki River mouth has high – medium high values across the	No
high	assessment factors. Modification to the vegetation cover and associated effects on scenic qualities preclude a high or outstanding rating.	

WL2. Oamaru



Character Description

This unit encompasses the coast where it abuts the urban area of Oamaru, including the Port. Most of this area represents the southern end of the Waitaki River mouth delta where it forms a narrow flat between the sea and older uplifted alluvial terraces. Here, the coastline is characterised by a gravel beach backed by a low scarp, in places reinforced by rock riprap. The port area however, is tucked against the northern side of the Cape Wanbrow promontory which is volcanic in origin and in this area the coastal morphology is modified by breakwaters, wharves, and areas of reclaimed land. This area is backed by cliffs and the natural landform has been significantly modified by quarrying. Land use in this unit is urban and the landscape is characterised by roads, railway, industrial yards, stockpiles, and commercial and industrial buildings. The Oamaru historic precinct abuts the coastal area just north of the port.

The coastal environment has been defined to include the visually prominent slopes, the reclaimed land and the scarp behind the port. North of the port it has been defined by the location of the first road running parallel with the coast or 100m back from the coastal scarp, whichever is the closest. This recognises that coastal influences extend a small way inland even in areas of urban development.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Oamaru Harbour is a breeding area for little blue penguin and sooty shearwater and is a roosting area for spotted shag. Legibility / expressiveness values relating to natural landscape values are low due to significant port and urban modification. 	Medium - low
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are very low Wild and scenic and memorability values are low 	Low
Transient values	There are significant transient values associated with the penguin colony in Oamaru Harbour.	Medium - high
Shared and recognised values	 Oamaru Harbour Breakwater is listed as a Coastal Protection area in the Otago Regional Plan Coast for its historic values. Oamaru Harbour is a listed Historic Area Oamaru Harbour is recognised as a marine mammal and bird site in the Otago Regional Plan Coast. This coastline is not generally known for its landscape values 	Medium - high
Tangata whenua values	 There is an important archaeological site at Beach Road in Oamaru dating from the Archaic (Moa Hunter) period of Maori culture Oamaru means place of Maru. 	Medium - high
Historic heritage values	 Oamaru Harbour is a listed historic area by Heritage NZ and is New Zealand's only surviving authentic Victorian / Edwardian deep-water port, paralleling Oamaru's intact colonial architectural inheritance. The harbour has great significance associated with the frozen meat trade There were numerous shipwrecks prior to construction of the breakwater in the mid 1870's. The harbour has been the site for recreational regattas and carnivals since 1885. 	High

 There is an important archaeological site at Beach Road in Oamaru dating from the Archaic (Moa Hunter) period of Maori culture. During World War II a battery was constructed on Cape Wanbrow to protect the harbour. 	
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Ratir	าg	Comments / Reasons	Outstanding
Mediu	um	This unit has significant cultural and historic heritage values as well as some well-known wildlife values but otherwise has mainly low landscape values	No

Natural features assessed

None

WL3. Cape Wanbrow



This unit covers a short section of coast encompassing Cape Wanbrow, a low volcanic and sedimentary promontory reaching an elevation of approximately 130m. The coast here is characterised by cliffs of varying height or native scrub covered escarpments with beaches (sand and rock) below and reefs offshore in places. Above the cliffs, the land is mainly pasture covered although an area at the northern end has recently been cleared of exotic forestry. There are few structures present except for old gun emplacements a lighthouse, penguin viewing hides and a few sheds above Bushy Beach. The coastal environment has been identified to include the visually prominent coastal slopes.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Cape Wanbrow Pleistocene fossil bird bones are listed in the inventory of important geological sites and landforms in the Otago Region. These are fossil rich bird bones deposits of the last Interglacial age and include the oldest known fossil tuatara bones. Cape Wanbrow wave cut notch and fossil beach is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as a spectacular example of a wave cut notch 2m above high tide level, and a raised Pleistocene bench. Oamaru pillow lavas and volcaniclastic rocks are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as one of the best pillow lava flows in the world, within the best exposed sequence through the volcaniclastic deposits of the Oamaru volcano. Old Rifle butts Eocene – Miocene sequence is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as richly fossiliferous, well-exposed sedimentary sequence. Cape Wanbrow provides habitat for Stewart Island shag, sooty shearwater, little blue penguin and spotted shag. It is visited by reef heron, Fiordland crested penguin and Caspian tern and is a haul out site for NZ fur seal. Yellow-eyed penguin breed at Bushy Beach and there are also sooty shearwater and shag present. The geological and coastal erosional processes are highly legible. Expressiveness values are high. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are modified to an extent by farming and forestry land use above the cliffs – moderately high. Wild and scenic and memorability values are moderately high. The relatively subdued relief precludes a higher rating. 	Medium - high
Transient values	 Wildlife is commonly present Various moods associated with different weather and sea states. 	High
Shared and recognised values	 Recognised as a marine mammal and bird site in the Otago Regional Plan: Coast Recognised as an ONFL in the Otago Regional Plan: Coast. Cape Wanbrow has landscape values of local significance. 	Medium - high
Tangata whenua values	 Kai Tahu cultural and spiritual values noted in the Otago Regional Plan: Coast Makotukutuku was a pa situated on Cape Wanbrow 	High

	headland (in the vicinity of bushy beach with an associated kaika). There are wahi tapu and registered archaeological sites in the area.	
Historic heritage values	 There is a WWII gun emplacement on the boundary with the Oamaru landscape unit. 	Medium - low

Rating	Comments / Reasons	Outstanding
High	Cape Wanbrow has high natural science (particularly geological), transient and tangata whenua values. Aesthetic, shared and recognized values have been assessed as less significant. Overall, landscape values are assessed as high but not outstanding.	No

Natural features assessed

• Cape Wanbrow wave cut notch and fossil beach.

WL3/F1. Cape Wanbrow wave cut notch and fossil beach



The Cape Wanbrow wave cut notch and fossil beach is assessed on the basis that it is a legible landscape feature that is included in the 'inventory and maps of important geological sites and landforms in the Otago region'. The feature discussed wraps around Cape Wanbrow and is described as a spectacular example of a wave cut notch 2m above high tide level, and a raised Pleistocene bench. A walking track provides access from the Bushy Beach road end.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Cape Wanbrow wave cut notch and fossil beach is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as a spectacular example of a wave cut notch 2m above high tide level, and a raised Pleistocene bench. 	High

	 This feature is highly legible and expressive of its formative processes 	
Aesthetic values (naturalness / memorability) Wild and scenic	 High naturalness values Wild and scenic values are high, memorability values are more moderate. 	Medium - high
Transient values	 Various moods associated with different weather and sea states. 	High
Shared and recognised values	 This feature is recognised in the inventory of important geological sites and landforms in the Otago Region but has no recognition in statutory documents and tourist publications. 	Medium - Iow
Tangata whenua values	None noted	Low
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
Medium - high	This feature is an important geological site and has high legibility / expressiveness, naturalness and transient values. It is not considered to have high memorability values and has low shared and recognised values. Overall, its values are not sufficient to warrant outstanding status.	No

WL4. Awamoa



Character Description

The Awamoa unit extends from just south of Cape Wanbrow in the north, to just north of Kakanui in the south. This is an area of low lying, gently undulating topography underlain by sedimentary, with some volcanic rock. At the northern end the coast is characterised by a low coastal terrace comprised predominately of Late-Pleistocene coastal deposits fronted by a sandy beach. A scarp separates the terrace from the beach with some limited foredune development at the mouth of occasional small streams. These are dominated and modified by marram. At the southern end there are low limestone cliffs with coves, sandy beaches, and subtidal reefs.

Above the coastal scarp, the landscape is rural, characterised by pasture, horticulture, exotic shelter trees and scattered rural buildings. In sections, the coast has been eroded to the extent that roads have wholly or partially disappeared and are now closed. The

coastal environment has been identified to include the sea facing slopes of the gentle terrace forms behind the coastal scarp.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Awamoa Creek Miocene fossils are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'diverse early Miocene (Altonian stage) macrofauna. Gees Point Oligocene molluscan fossils are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'diverse Oligocene (Whaingaroan) molluscan fauna with unique hardground early Miocene hardground'. The natural landform is generally coherent under pasture or crop cover. Vegetation patterns are highly modified. Coastal erosion processes are vividly expressed where roads are being cut away. Overall, legibility and expressiveness values are medium – high. 	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are modified by roads and agricultural and horticultural land use. This is a gentle, fertile domesticated coastal landscape with moderate amenity values. It is not wild but has scenic values. Memorability is moderate. 	Medium
Transient values	Various moods associated with different weather and sea states.	Medium
Shared and recognised values	 No values recognised particularly in Statutory documents Some reference to coastal views in the tourist promotional literature Generally valued locally for its horticultural / coastal / limestone landscape character. 	Medium
Tangata whenua values	 The beach from Cape Wanbrow to Kakanui is called Whakoata. The entire coastal strip has significance for its use as a trail / places of temporary or permanent settlement. There is an important archaeological site at Awamoa dating from the Archaic (Moa hunter) phase of Maori culture. 	Medium - high
Historic heritage values	None particularly noted	Low

Rating	Comments / Reasons	Outstanding
Medium	Apart from some important geological sites this unit has no values of particular significance but is a pleasantly domesticated, productive coastal landscape with medium values overall.	No

Natural features assessed

None

WL5. Kakanui



Character Description

This unit encompasses the Kakanui River tidal estuary, Kakanui Beach and the two volcanic and sedimentary promontories to either side. The southern promontory is occupied by the township of Taranui whilst the northern one is adjacent to the township of Kakanui. The coastline around the promontories is characterised by semi-vegetated cliffs with sand and gravel beaches and intertidal and subtidal reefs. The beach area is a Late-Pleistocene coastal deposit with some limited dune formation and the river is tidal to approximately 2.5km from its mouth, single stem, with gravel beaches in places.

Away from the immediate coastal edge, the land is mainly under rural land use with pasture, exotic trees, roads and scattered buildings, except that there is low density urban development within the coastal environment at Taranui. The coastal environment has been mapped to include seaward facing and visually prominent slopes on the

promontories, and the low lying, coastal hazard prone land adjacent to the river to the extent of the significant saline influence.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Kakanui north mineral breccia is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as a shallow marine volcaniclastic deposit that includes coarse debris flows notable for their abundance of mantle xenoliths (along with Kakanui South head, New Zealand's only occurrence). Kakanui River mouth Eocene / Oligocene boundary is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as Eocene / Oligocene boundary located in the upper marl facies of the Totara Limestone (southern side of Kakanui River mouth). Kakanui south mineral breccia is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as a shallow marine volcaniclastic deposit that includes coarse debris flows notable for their abundance of mantle xenoliths (along with Kakanui North head, New Zealand's only occurrence). Kakanui Beach and river mouth is a breeding area for yellow-eyed penguin and has seasonal visits by royal spoonbill and white heron. It is an important habitat for a variety of waders. Natural landforms have generally high legibility but land cover / vegetation patterns are highly modified. Expressiveness values are moderate. 	Medium - high
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness is significantly impacted by agriculture and urban development Kakanui is a pleasant domesticated coastal landscape. Wild and scenic, and memorability values are medium. 	Medium
Transient values	 Common presence of wildlife Various moods associated with weather and sea conditions 	High
Shared and recognised values	 Kakanui Beach is listed as a marine mammal and bird site in the Otago Regional Plan: Coast Kakanui River mouth is recognized in the Waitaki District Plan as a site of significant nature conservation value. 	Medium - high

	Kakanui is valued locally as an attractive coastal landscape. Medium – high shared values.	
Tangata whenua values	 There was a Tauranga waka at the mouth of the Kakanui River which was an important part of the coastal trails, with a trail running inland from here as well. The Kakanui River was a noted indigenous fishery with mahika kai values. It was also important for other resources such as harakeke. The river mouth was a place of temporary occupation. Kakanui river is subject to a Statutory acknowledgement 	High
Historic heritage values	 Kakanui was once the site of a port, built in the 1870's and used until damaged by the sea in 1886. Its decline was also due to the construction of the railway through Maheno. Minimal legibility of historic features presently. 	Medium - high

Rating	Comments / Reasons	Outstanding
Medium	Kakanui has high transient and tangata whenua values and medium high natural science, shared and recognized, and historic heritage values. Aesthetic values are assessed as medium. It is a pleasant domesticated coastal landscape with medium values overall.	No

Natural features assessed

None

WL6. Wajanakarua



The Waianakarua unit extends from the northern end of All Day Bay in the north, to Lookout Bluff in the south. This is a coastline of sweeping sandy beaches backed by low scarps and rolling topography, and interspersed by low rocky headlands and reefs. The geology is generally sedimentary (with some volcanic) rock and Late Pleistocene coastal terraces with loess cover. There are some low, marram covered foredunes but in many places the coastline is clearly eroding and sections have been reinforced with rock for protection. There are three small lagoons / estuaries along this section associated with the mouths of Orere Creek, Bow Alley Creek and the Waianakarua River.

The coastal scarps are scrub covered (native and exotic) in places and the land behind is agricultural and characterised by pasture or arable land use with exotic shelter trees and scattered rural buildings. Roads are located close to the coast for much of the unit. There is some scattered indigenous forest on the northern side of Lookout Point.

The coastal environment has been identified to include the sea facing slopes of the gentle terrace forms behind the coastal scarp as well as the immediate environs of the creeks to the limit of tidal or saline influence.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Bridge Point Eocene fossils and volcanics are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'one of few rich late Eocene (Runangan) fossil faunas in New Zealand. Excellent exposures of marine volcanics and volcaniclastic sediments.' All Day Bay Lagoon provides significant habitat for waterfowl. Lookout Bluff is a breeding area for yellow-eyed penguin and a haul out site for New Zealand fur seal The natural landforms are highly legible. Natural land cover / vegetation patterns are highly modified. Expressiveness values are medium – high overall. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 This is a low relief / domesticated / agricultural coastal landscape of moderate naturalness Wildness values are modest but it has high scenic amenity 	Medium - high
Transient values	 Some areas have common presence of wildlife Various moods associated with different weather and sea states 	Medium - high
Shared and recognised values	 All Day Bay Lagoon and Waianakarua River Estuary Swamp are recognised as Regionally Significant Wetlands (ORC). All Day Bay Lagoon is listed as an area of significant nature conservation value in the Waitaki District Plan. Bridge Point is recognised as an ONFL in the Otago Regional Plan: Coast for its geological and ecological values. Lookout Bluff is listed as a marine mammal and bird site in the Otago Regional Plan: Coast. Moderate shared values as an attractive coastal landscape 	Medium - high

Tangata whenua values	 Waianakarua River Estuary is significant to Kai Tahu. There is an archaic midden archaeological site near the northern end of Te Hakapureirei Beach. This coast has significance for seasonal trails and mahika kai values 	Medium - high
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
Medium -	This is an attractive but unspectacular coastline which includes some	No
high	sites of natural science and tangata whenua significance. Overall, assessed as having medium – high landscape values	

Natural features assessed

• Bridge Point

WL6/F1. Bridge Point



Bridge Point is assessed on the basis that it is currently recognized as an ONFL in the Otago Regional Plan: Coast. It is located at the northern end of Te Hakapureirei Beach and is a low basaltic tuff headland with an associated off-shore reef. It is characterised by low sea cliffs and a flat, grassland covered top reflecting its marine platform origins. Bridge Point Eocene fossils and volcanics are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'one of few rich late Eocene (Runangan) fossil faunas in New Zealand. Excellent exposures of marine volcanics and volcaniclastic sediments'.

Criteria	Comments	Rating
Natural science factors /	 Bridge Point Eocene fossils and volcanics are listed 	High

legibility / expressiveness	 in the inventory of important geological sites and landforms in the Otago Region. These are described as 'one of few rich late Eocene (Runangan) fossil faunas in New Zealand. Excellent exposures of marine volcanics and volcaniclastic sediments.' There is a small colony of Cooks scurvy grass. The natural landforms are highly legible but the vegetation cover is modified. Expressiveness values are high overall. 	
Aesthetic values (naturalness / memorability) Wild and scenic	 This is a rugged promontory but a relatively small scale feature with little to differentiate it from surrounding areas. Naturalness is high – moderate Wild and scenic values are high – moderate Memorability values are moderate 	Medium - high
Transient values	Various moods associated with different weather and sea states	Medium - high
Shared and recognised values	Bridge Point is recognized as and ONFL in the Otago Regional Plan: Coast for its geological and ecological values. But has little other general recognition	Medium
Tangata whenua values	None noted	Low
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
Medium -	This feature has significant geological values but does stand out	No
high	particularly from its surroundings and does not have sufficient landscape values more generally, to be considered outstanding	

WL7. Hampden



The Hampden unit extends from Lookout Bluff in the north to (but excluding) the township of Moeraki in the south. This unit is essentially comprised of a long (approximately 9.5km) sandy beach backed by low sandstone / mudstone cliffs with gently rolling farmland behind. A number of small creeks reach the coast, forming minor ravines as they cut through the coastal cliff. The scarp is also characterised by caves and slump features in various places along its length. Lookout Bluff defines the northern end of the beach and is a broad sandstone headland (with some basalt sections), with cliff landforms bordered by gravel and sand beaches, platforms and reefs. The Moeraki boulders are features of interest near the southern end of the beach.

Behind the cliff, the land is generally under pasture cover with exotic shelter trees and there is often indigenous or exotic scrub cover on the slump features. The hinterland becomes more built at the southern end with the township of Hampden and the railway bordering the coastal environment. There are scattered rural buildings within the coastal landscape at the southern end, including the buildings associated with the Moeraki boulders. The coastal environment has been variously defined to include the visually prominent slopes at Lookout Bluff, the land (including the creek ravines and slump areas) below the coastal scarp, and where the coastal scarp is directly behind the beach, a buffer area of approximately 100m (to recognize that coastal influences and qualities extend a small way inland).

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Hampden Beach Eocene fossiliferous sequence is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as 'a well exposed Eocene sedimentary sequence, lectostratotype of Bortonian Stage. Type locality for Hampden Formation. Moeraki Boulders are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'a group of about 20 concretions (1 – 2m in diameter) eroded out of the rocks at the back of the beach. Excellent examples of concretions. Kakaho Creek Swamp has significant ecological values. The landforms are natural and expressive of an eroding soft rock coastline. The vegetation cover is highly modified. Expressive values are high – medium overall. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness is significantly modified by agriculture, and by built development in places. Wild and scenic / memorability values are moderate only, due to the low relief and domesticated character. 	Medium
Transient values	 Occasional presence of wildlife Various moods associated with different weather and sea states. 	Medium
Shared and Recognised values	 Kakaho Creek Swamp is recognised as a regionally significant wetland (ORC). Moeraki Beach is recognised as a coastal protection area in the Otago Regional Plan (Coast) for Kai Tahu cultural and spiritual values. Moeraki Boulders are recognized as an ONF in the Waitaki District Plan and an 'outstanding feature' in 	Medium

	the Waitaki Landscape Study. This unit has no particular recognition generally for its landscape values	
Tangata whenua values	 Te Kaihinaki (Moeraki boulders) are a taonga of immense significance to Kai Tahu and represent a visible link to the voyage of the Araiteuru. Kakaho Creek tidal estuary has cultural significance The coastline generally has significance for its use as a trail / places of temporary or permanent settlement. 	High
Historic heritage values	None noted	Low

Rating	Comments / Reasons	Outstanding
Medium	This unit contains features of high natural science and Tangata Whenua significance but overall landscape values are modest.	No

Natural features assessed

Moeraki boulders

WL7/F1. Moeraki Boulders



This feature is the scattering of spherical concretions on the beach between Hampden and Moeraki, formed by the precipitation of calcite in the mudstone cliffs behind the beach and exposed as the cliffs erode. They are remarkable for their size (up to 2.2m), their concentration at a single site, and the degree to which they form perfect spheres (DOC, 1998). The feature is defined to include the boulders and their immediate beach setting, including the coastal scarp adjacent.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Moeraki Boulders are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'a group of about 20 	High

	 concretions (1 – 2m in diameter) eroded out of the rocks at the back of the beach. Excellent examples of concretions'. The boulders and adjacent cliffs are highly expressive of their formative processes. 	
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are high, modified to some extent by a degree of weediness in the vegetation on the scarp The boulders are highly memorable features. The beach has moderate – high wild and scenic values. 	Medium - high
Transient values	 Various moods associated with weather and sea state conditions Tidal rhythms and varying degrees of inundation by waves. 	High
Shared and Recognized values	 Moeraki Beach is recognised as a coastal protection area in the Otago Regional Plan (Coast) for Kai Tahu cultural and spiritual values. Moeraki Boulders are recognised as an ONF in the Waitaki District Plan and an 'outstanding feature' in the Waitaki Landscape Study. The boulders are a well-known tourist destination 	High
Tangata whenua values	Te Kaihinaki (Moeraki boulders) are a taonga of immense significance to Kai Tahu and represent a visible link to the voyage of the Araiteuru (representing petrified hinaki (eel baskets) carried on the waka Araiteuru which foundered at Shag Point).	High
Historic heritage values	None known	Low

Rating	Comments / Reasons	Outstanding
High	The Moeraki boulders have very significant natural science, shared and recognised and tangata whenua values. Transient values are also high. Aesthetic values are reduced to some extent by a degree of modification to their setting but are still high – medium. Outstanding status is justified.	Yes

WL8. Moeraki



This unit encompassing Moeraki Peninsula, extends from the southern end of Moeraki Beach, to the northern end of Katiki Beach. It is an intricate coastline of small sandy beaches and rocky headlands with reefs and stacks. The northerly part is characterised by a coastal cliff, reducing in height and steepness southwards. At the southern end is the long distinctive feature of Katiki Point. The geology is sandstone / mudstone and volcanic.

The settlement of Moeraki is located adjacent to the sheltered northern bays and there is a fishing port in the lee of Moeraki Point with wharf and slipway structures and moored boats. There are a couple of smaller crib style settlements in two small bays on the eastern facing coast as well. Elsewhere, the land within the coastal environment is mainly pasture covered with scattered scrub in places and two small areas of indigenous bush. There is a lighthouse and associated keepers house on Katiki Point.

The coastal environment has been identified to include the immediate seaward facing, and visually prominent slopes.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Moeraki complex landslide is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as a 'very interesting and accessible series of slides, topples, falls and flows, with some retrogressive failures occurring'. Moeraki Peninsula erionite is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as 'good examples of the zeolite erionite, plus phillipsite and barite. Moeraki Point volcanic features are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'good exposures of a number of volcanic features, including a classic example of a differentiated dolerite sill'. Tawhiroko Point subcalcite augite is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as the 'type locality of subcalcic augite. Moeraki Peninsula is a breeding area for yellow-eyed penguin, little blue penguin, Stewart Island shag, little shag, spotted shag, royal spoonbill and NZ fur seal. It is a haul out site for sea lion, elephant seal and leopard seal and is visited by various other species. Maukiekie Island is an important site ecologically and the offshore reefs are also of ecological significance. Legibility has been impacted by agricultural and urban development but the landforms (if not the vegetation) is still generally expressive of natural processes. Generally high moderate legibility / expressiveness values overall. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness is significantly modified by agricultural and urban development. There are significant wildness values along the exposed eastern and southern sides. Scenic and memorability values are generally high – moderately high. Interest is provided by the intricate and varied coastal landforms, the fishing activity at Moeraki. Overall aesthetic values are assessed as moderately high. 	Medium - high
Transient values	 Common presence of wildlife Various moods associated with different weather and sea states. Fishing boat activity at Moeraki. 	High

Shared and recognised values	 Moeraki Peninsula is recognised as a coastal protection area in the Otago Regional Plan: Coast for Kai Tahu cultural and spiritual values and geological values. Moeraki Peninsula is listed as a marine mammal and bird site in the Otago Regional Plan: Coast Moeraki Peninsula is recognised as an ONFL in the Otago Regional Plan: Coast Moeraki Peninsula erionite and Katiki Point are recognised as areas of significant nature conservation value in the Waitaki District Plan. Moeraki Peninsula is recognised generally as an area with at least moderate – high coastal amenity. 	High
Tangata whenua values	 This was an important area for settlement from moa hunter times onward. There are pa and moa hunter sites. Te Raka a Hineatea is a pa site at Katiki. The Kaik is a present day Maori settlement of high cultural significance. Significant kai moana, urupa, tauraka waka, mare, kaika and pa values The bush remnants are significant to Kai Tahu. 	High
Historic heritage values	 Katiki Point is an Historic Reserve. Moeraki was the site of a whaling station developed in 1836. Moeraki was a port for the North Otago area in competition with Oamaru. A branch railway was developed to boost its fortunes in 1877 but closed in 1879. Katiki Point was the site of a battle with Kaikoura Maori. The pa site has important heritage values (terraces and house sites) Katiki Point lighthouse was built in 1878. 	High

Rating	Comments / Reasons	Outstanding
High	This unit has high natural science, transient, shared and recognised, tangata whenua and historic heritage values. Aesthetic values are reduced by moderate naturalness. Overall, whilst the Moeraki unit has been assessed as having high landscape values, they are not considered outstanding.	No

Natural features assessed

Katiki Point

WL8/F1. Katiki Point



Katiki Point is a low, lineal basalt headland that forms the southern tip of the Moeraki Peninsula and which defines the northern side of the Katiki Beach landscape. It has a segmented form with steep cliffy sides. There are sandy pocket beaches along with rocky benches and reefs on its eastern side. Vegetation cover is largely grassland but there is also a small patch of native bush. A lighthouse and associated keepers house stands on its summit within a context of shelter plantings, and there are other light house related buildings on lower, east facing slopes to the north of the lighthouse. A walking track provides public access from a car park at the end of Lighthouse Road, to the end of the point. The feature has been mapped to include the lighthouse buildings.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Katiki Point is the site of a colony of NZ fur seals, the most significant in North Otago. Breeding area for sea birds including yellow-eyed penguin, little blue penguin, sooty shearwater, diving petrel, red billed gull, spotted shag, white fronted tern and variable oystercatcher. Has a highly legible natural landform. The bush remnant is expressive of natural vegetation cover. Generally, highly expressive of its formative geological and erosional processes. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are modified by agricultural use and by the buildings but still moderately high. Wild and scenic and memorability values are high 	High
Transient values	 Common presence of wildlife Various moods associated with different weather and sea conditions. 	High
Shared and recognised values	 Katiki Point is within a coastal protection area in the Otago Regional Plan: Coast (for Kai Tahu cultural and spiritual values and geological values). Katiki Point is within a marine mammal and bird site in the Otago Regional Plan: Coast Moeraki Peninsula, including Katiki Point, is recognised as an ONFL in the Otago Regional Plan: Coast Katiki Point are recognised as an area of significant nature conservation value in the Waitaki District Plan. Katiki Point is a recognised tourist and recreational destination for its natural character and landscape values. 	High
Tangata whenua values	 This was an important area for settlement from Moa Hunter times onward. There are pa and moa hunter sites. Te Raka a Hineatea is a pa site at Katiki. Significant kai moana, urupa, tauraka waka, mare, kaika and pa values The bush remnants are significant to Kai Tahu. 	High
Historic heritage values	 Katiki Point is a Historic Reserve and was the site of a battle with Kaikoura Maori. The pa site has important heritage values (terraces and house sites) Katiki Point lighthouse was built in 1878. 	High

Rating	Comments / Reasons	Outstanding
High	Katiki Point is a memorable landscape feature which has high values across all the assessment factors. Outstanding status is justified.	Yes

WL9. Katiki Beach



Character Description

The Katiki Beach unit encompasses the approximately 8km sweep of sandy beach between Katiki Point in the north, and Shag Point in the south. There is some dune development at the northern end of the beach but for most of its length, the beach is backed by a low, partly vegetated sandstone / mudstone cliff. At the southern end there are rocky platforms extending from the base of the cliff in a few places which interrupt the sweep of sand. There are also concretions similar to those at Moeraki Beach in places. A few creeks reach the sea along this stretch of beach and form shallow estuaries. At the southern end of the beach there are a succession of reefs and kelp beds.

Behind the beach the landscape is characterised by pastoral farmland with scattered exotic trees and a few rural houses and sheds. A major feature is the main trunk railway and State Highway 1, which run adjacent to the beach for virtually the whole length of

the unit. There is native and exotic scrub on the coastal escarpment and other steeper slopes, and exotic forestry at the southern end of the unit. The coastal environment has been mapped to include the immediate seaward facing slopes behind the beach.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Kemp Road Lagoon is a regionally significant wetland. Habitat for waterfowl and waders. A section of the beach is a breeding area for yelloweyed penguin. The rare plant Euphorbia glauca is present. The area provides habitat for a variety of sea birds. Legibility / expressiveness values are reduced by earthworks associated with the railway and highway and by significantly modified vegetation cover. 	Medium - high
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness is significantly modified by earthworks associated with the railway and highway and farming and forestry land use The long sweeping beach has high – moderate wild and scenic and memorability values 	Medium - high
Transient values	 Common presence of wildlife Various moods associated with different weather and sea states. 	High
Shared and recognised values	 Kemp Road Lagoon is listed as a regionally significant wetland (ORC) Part of the beach is recognised as a marine mammal and bird site in the Otago Regional Plan: Coast. Katiki Beach is recognised as an ONFL in the Otago Regional Plan: Coast Katiki Beach and Kemps Road Lagoon are listed as areas of significant nature conservation value. This beach has a high public profile given the presence of State Highway 1, and is generally valued for its coastal scenery. 	High - medium
Tangata whenua values	 This area was an integral part of seasonal trails. Trotters Creek and Waimataitai lagoon are noted as significant tidal estuaries with mahika kai values. 	High
Historic heritage values	There is an archaic moa hunter archaeological site at Waimataitai Lagoon. No other values noted.	Medium

Rating	Comments / Reasons	Outstanding
High - medium	Whilst the Katiki Beach unit is very modified, it has a high public profile and has high – medium landscape values overall based on some significant ecological, tangata whenua, transient, wild and scenic and shared and recognised values.	No

Natural features assessed

None

WL10. Shag Point



This unit encompasses the promontory of Shag Point and extends from the southern end of Katiki Beach to the Shag (Waihemo) River mouth. The sheltered northern shore is characterised by a low scrub covered cliff with a broad rocky bench, reefs and kelp beds below, and ribbon housing development set amongst coastal scrub and other plantings above. Plantation forestry covers the higher slopes.

The eastern facing shore is more broken with rock outcrops, coves and sandy beaches, and with extensive reefs offshore. There is no built development other than one house higher up the hill, the road, parking areas, and a slipway. The vegetation cover is rough grass and scrubland with forestry beyond, some distance back from the shore. There are some bluffs associated with fault lines in this area.

The coastal environment in this unit has been defined to include the visually prominent immediate coastal slopes.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 Shag Point coal pit is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as 'first discovery of bituminous (hard) coal in NZ' Shag Point Cretaceous macroflora is listed in the inventory of important geological sites and landforms in the Otago Region. This is described as 'well preserved upper Cretaceous plant fossils'. Shag Point plesiosaur fossils are listed in the inventory of important geological sites and landforms in the Otago Region. These are described as 'source of complete plesiosaur fossils'. Extensive subtidal reef system with luxuriant bladder kelp – some of the best examples of macrocystus in NZ. Spherical boulders (Katiki concretions) Habitat for sooty shearwater, spotted shag, Stewart Island shag, yellow-eyed penguin and reef heron. Haul out site for sea lion and NZ fur seal. Snow tussock and other alpine species grow at low altitude and in coastal settings Legibility and expressiveness have been impacted by forestry and urban development. The shoreline is still very expressive of its formative processes. 	High
Aesthetic values (naturalness / memorability) Wild and scenic	 Overall naturalness is significantly reduced by forestry and urban development Despite modifications the area retains high – medium memorability and wild and scenic values 	Medium - high
Transient values	 Common presence of wildlife Various moods associated with different weather and sea states. 	High
Shared and recognised values	 Shag Point is recognised as a Coastal Protection Area in the Otago Regional Plan: Coast Shag Point is listed as a marine mammal and bird site in the Otago Regional Plan: Coast Recognised as an ONFL in the Otago Regional Plan: Coast. The natural and cultural / historic values of Shag Point are well documented. The area is generally valued for its coastal scenery. 	High

Tangata whenua values	 Matakaea (Shag Point) is highly significant and is subject to a Statutory Acknowledgement and is a Topuni. Matakaea recalls the tradition of the Arai Te Uru canoe. The area has been occupied for centuries and is the site of numerous urupa and wahi tapu. Matakaea was the name of a pa on Shag Point. The small harbour was a traditional tauraka waka 	High
Historic heritage values	 This area was used by early moa hunters Whalers discovered coal in the 1830's. Coal was mined from 1862 – 1972 when flooding closed shafts that extended under the sea. Early miners shipped coal from the small harbour in sailing and steam colliers. 	High

Rating	Comments / Reasons	Outstanding
High	Shag Point has high values across all the assessment factors except aesthetic, which have been adversely impacted by forestry and urban development. Overall, landscape values are assessed as high but not outstanding.	No

Natural features assessed

None

WL11. Shag River Estuary



This unit covers the Shag (Waihemo) River Estuary to the extent of saline influence upstream and includes some of the visually significant estuary facing slopes to the north of the river mouth. The estuary is a broad area of sand flats and shallow water, with various channels running through, and areas of saltmarsh. Agricultural development has reclaimed some areas of historic marshland. The slopes near the river mouth to the north of the estuary are characterised by exotic and native scrub with forestry extending to the estuary edge in the more westerly parts. There are some distinctive rock outcrops in this area. A sand spit extends from the southern shore at the mouth of the estuary and has marram covered dunes which grade back to scrub on the inland side.

The coastal environment in this unit has been defined to include the visually prominent coastal slopes on the headland and the saline wetland areas (existing or historic) associated with the estuary.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 The estuary is an ecologically significant saline wetland and feeding area for birds. Important white bait spawning area and habitat for lamprey. It is the most northerly of the chain of Otago's salt marshes. The spit is an occasional haul out area for sea lions The natural landforms have high legibility but vegetation patterns are substantially modified by agriculture (and forestry on the hill adjacent). Expressiveness values are medium – high. 	Medium - high
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness is variable, modified by modification to the vegetation patterns, but overall medium – high. The estuary is not 'wild' in comparison with the open coast but memorability and scenic values associated with its natural character are medium high. 	Medium - high
Transient values	 Common presence of wildlife Tidal rhythms 	High
Shared and recognised values	 Shag River Estuary Swamp is recognised as a regionally significant wetland (ORC). Shag River Estuary is included within a coastal protection area in the Otago Regional Plan: Coast Estuaries are accorded value generally for their natural landscape values. Shag River Estuary has no particular public recognition in terms of its landscape qualities. 	High - medium
Tangata whenua values	 This area is highly valued by Kai Tahu (mahika kai and other wahi taoka). Onewhenua at the mouth of the Waihemo River was an early settlement site. 	High
Historic heritage values	There is an archaeological site (occupation) on the spit – regarded as being of national archaeological importance. One of the first recorded moa hunter sites.	Medium - high

Rating	Comments / Reasons	Outstanding
High - medium	Shag River Estuary has important but modified ecological values. It has high transient and tangata whenua values and due to the Onewhenua site, some historic heritage significance. Aesthetic values are moderately high, impacted by the modified vegetation patterns. Overall, landscape values area assessed as medium – high.	No

Natural features assessed

None

WL12. Goodwood



The Goodwood unit encompasses a mainly cliffed coastline between the estuaries of Shag and Pleasant Rivers. The main features on this stretch of coast are Bobbys Head and Stony Creek Estuary. North of Stony Creek the coastal sandstone cliffs are fringed by a sandy beach. South of this, whilst there are smaller sandy beaches, the shoreline is also characterised by rocky benches, coves and reefs in places. Bobbys Head is a basalt headland with coastal cliffs, intertidal and subtidal reefs and Stony Creek forms a shallow tidal estuary with a sand spit and marram covered dunes at its mouth. To the south of Bobbys Head at Tavora there is another area of dunes and another small creek.

Throughout the whole unit, the land behind the coastal cliffs is gently undulating pasture covered with exotic shelter belts and some exotic woodlots. Farm buildings and roads are generally well back from the coastal edge. There are some small areas of native

scrub in places. The coastal environment has been defined to include the immediate coast facing slopes and the estuary environs.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 TheTavora wetland is habitat for rare / threatened plants and birds. Stony Creek Estuary has estuarine values Bobbys Head is a breeding area for yellow-eyed penguin, sooty shearwater, spotted shag and little blue penguin, and a haul out site for NZ fur seal. Although the vegetation cover is highly modified the natural landform is highly legible and the landscape is high – moderately expressive of its formative processes. 	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are modified by agriculture but the natural landforms are highly coherent. Medium – high memorability and wild and scenic values based on strongly legible coastal landforms. 	Medium - high
Transient values	 Common presence of wildlife in key places Various moods associated with different weather and sea states 	Medium - high
Shared and recognised values	 Tavora Wetland is recognized as a regionally significant wetland (ORC) Stony Creek Estuary is recognized as a Coastal Protection Area in the Otago Regional Plan: Coast. Bobbys Head is listed as a marine mammal and bird site in the Otago Regional Plan: Coast. This coast is off the main transport / tourist routes and has generally low public awareness. As a whole, this unit has no particular status in statutory documents. 	Medium
Tangata whenua values	 Stony Creek Estuary has Kai Tahu cultural and spiritual values. Te Umu Koau (Bobbys Head) was noted for harakeke (flax) of exceptional quality The entire coastal strip has significance for its use as a trail / places of temporary or permanent settlement. 	High
Historic heritage values	 There is an account of seamen from the 'Matilda' being hunted down and eaten at or near Bobby's Head by Maori because of a feud started four years earlier. No other historic heritage values known 	Medium - low

Rating	Comments / Reasons	Outstanding
Medium - high	The Goodwood unit is a pleasant rural coastal landscape with medium – high natural science, aesthetic and transient values. Whilst tangata whenua values are assessed as high shared and recognised, and historic heritage values are rated medium or less. Overall landscape values are assessed as medium – high.	No

Natural features assessed

• Bobbys Head

WL12/F1. Bobbys Head



Bobbys Head is a basalt headland forming an anomalous protrusion on an otherwise relatively uniform, sedimentary rock coast. It is surrounded by coastal cliffs with intertidal and subtidal reefs and reaches an elevation of approximately 100m. The land is mainly grazed pasture but there are areas fenced off for regeneration of indigenous vegetation. It is managed as part of the Tavora Reserve by the Yellow-eyed Penguin Trust. The feature assessed coincides with the Tavora Reserve boundaries and includes the wetlands and dunes around the creek to the south of the headland.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 TheTavora wetland is habitat for rare / threatened plants and birds. 	High

	 Bobbys Head is a breeding area for yellow-eyed penguin, sooty shearwater, spotted shag and little blue penguin, and a haul out site for NZ fur seal. The natural landforms are highly legible. Natural vegetation patterns are now much modified but recovering in areas due to regeneration programmes. Overall, this feature is highly expressive of its geological origins and of coastal erosion. 	
Aesthetic values (naturalness / memorability) Wild and scenic	 Naturalness values are modified by agricultural land use but natural landforms are highly legible and there is regenerating native vegetation – overall, medium – high. High wild and scenic values associated with rugged headland landforms. The landform is not particularly dramatic or striking. Memorability is assessed as medium – high. Overall, aesthetic values are assessed as medium high. 	Medium - high
Transient values	 Common presence of wildlife Various moods associated with different weather and sea states 	High
Shared and recognised values	 Tavora Wetland is recognised as a regionally significant wetland (ORC) Bobbys Head is listed as a marine mammal and bird site in the Otago Regional Plan: Coast. This feature does not have a high degree of public awareness 	Medium - high
Tangata whenua values	 Te Umu Koau (Bobbys Head) was noted for harakeke (flax) of exceptional quality The entire coastal strip has significance for its use as a trail / places of temporary or permanent settlement. 	High
Historic heritage values	 There is an account of seamen from the 'Matilda' being hunted down and eaten at or near Bobby's Head by Maori because of a feud started four years earlier. No other historic heritage values known. 	Medium - low

Rating	Comments / Reasons	Outstanding
High	Bobbys Head has high ecological, expressiveness, transient and tangata whenua values. Aesthetic, and shared and recognised values have been assessed as medium – high due to the level of modification to the vegetation and by less than high memorability. Overall landscape values are assessed as high but not outstanding.	No

WL13. 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 characterised 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. The coastal environment has been mapped to include the estuary to the limit of the saline influence and to include the area below an often distinct coastal scarp.

Criteria	Comments	Rating
Natural science factors / legibility / expressiveness	 The estuary is a regionally significant saltmarsh wetland and habitat for waders and waterfowl as well as terrestrial invertebrates. 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. 	High - medium
Aesthetic values (naturalness / memorability) Wild and scenic	 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. 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 	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	 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. Shared values associated with this landscape are assessed as moderate 	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 th – 16 th 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	No
	assessed as High – medium.	

Natural features assessed

(none)