

A3.1.1 Aramoana Salt Marsh Outstanding Natural Feature

A3.1.1.1 Description of feature

Encompasses a portion of The Spit, tidal flats, salt marsh and relict transgressive dunes near the north-western head of the Otago Harbour to the south of the Aramoana settlement. Whilst its natural character is modified to some extent on its western landward edge by agricultural land use and Aramoana Road, its eastern portion is essentially unmodified. Aramoana is mapped as a Coastal Protection Area in the Otago Regional Plan: Coast - for Kāi Tahu cultural and spiritual values and estuarine values. The site is recognised as a regionally significant wetland in the Otago Regional Plan: Water.

The site is identified as a wāhi tūpuna - see Appendix A4.22. It is also identified as having high natural coastal character values - see Appendix A5.2.1.

A3.1.1.2 Values to be protected

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

- a. *Natural science values:*
 - i. The Aramoana salt marsh and adjacent terrestrial environment is of recognised international/national importance for its largely intact vegetation sequence from tidal to dry land including dune slacks. The Aramoana salt marsh is extensive and largely intact.
 - ii. The Aramoana tidal flats are a very significant wader bird habitat and the area is important nationally as a fish breeding and nursery area, with significant ecological values.
- b. *Cultural/historic values:*
 - i. The salt marsh and spit at Aramoana have mahika kai, kāika, wāhi taoka and archaeological values. This site is a wāhi tūpuna. See Appendix A4.22 for details.
- c. *Aesthetic and amenity values:*
 - i. High naturalness values based on natural landforms and vegetation sequences. The area is a memorable wetland landscape. Due to its tidal rhythms and various moods associated with different weather conditions. These values are considered to be outstanding due to the minimal influence of buildings, structures and earthworks.

A3.1.2 Blackhead Organ Pipes Outstanding Natural Feature

A3.1.2.1 Description of feature

This natural feature is located on a distinctive headland on the southern coast between Brighton and St Clair. The Organ Pipes formations (also known as the "Roman Baths" and the "Dock") are on the southern extremity of the headland. Blackhead Organ Pipes are listed in the Geo-preservation index, and provide a good example of columnar jointing in basalt lava flows. The columns were formed when molten lava cooled creating geometric interlocking polygonal shapes. The rest of the headland, which is not mapped within this Outstanding Natural Feature, has been drastically modified by quarrying. The Blackhead Organ Pipes are dramatic and memorable formations with high geological and aesthetic values and are assessed as having overall high and outstanding landscape values. Public awareness of this feature is modest and access is difficult.

A3.1.2.2 Values to be protected

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

- a. *Natural science values:*
 - i. Blackhead Organ Pipes are listed in the Otago inventory of important geological sites and landforms for their highly legible formations expressive of their geological origins and erosive marine processes.
 - ii. Habitat for seals and marine birds.
- b. *Cultural/historic values:*
 - i. Blackhead is known as Makereatu, and **{NatEnv 1071.120}** was an important stone gathering site.
- c. *Aesthetic and amenity values:*
 - i. Natural, memorable, wild and scenic values are high especially when viewed against the adjacent quarry which has resulted in a highly modified and less natural landform.
 - ii. The extent of this ONF is free of built structures and quarry activities.

A3.1.3 Goat Island/Rakiriri Outstanding Natural Feature

A3.1.3.1 Description of feature

Goat Island/Rakiriri is the smaller of the two mid Otago Harbour islands. Goat Island is covered in indigenous bush. There are two flattened areas retained by rock walling dating back to its use for quarantine purposes. An electricity pylon is located on the summit. 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.

A3.1.3.2 Values to be protected

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

- a. *Natural science values:*
 - i. Goat Island has ecological values for remnant/regenerating native bush. Good example of Ngaio/Kohuhu forest. Pest free, with plant life in better condition than mainland sites.
 - ii. One of few areas in the harbour with a natural rocky shoreline.
 - iii. The island is a breeding site for shags.
 - iv. Common presence of marine birds and occasional presence of marine mammals.
- b. *Cultural/historic values:*
 - i. Rakiriri (Goat Island) is a very significant site. It is an important landmark and according to tradition, the abode of Takaroa, guardian of the sea. It is a wāhi tūpuna with wāhi tapu values. See Appendix A4.25.
- c. *Aesthetic and amenity values:*
 - i. High naturalness values given its natural shoreline and indigenous bush cover - reduced to some extent by the presence of the pylon on its summit.
 - ii. High - moderate memorability. An important natural element in the harbour landscape.

A3.1.4 Green Island Outstanding Natural Feature

A3.1.4.1 Description of feature

An island approximately two kilometres south of Kaikorai Stream/Lagoon, with distinctive natural values and an important landmark. It is surrounded by reefs. The vegetation is dominated by *Coprosma repens* (taupata). Green Island has very high values generally, and particularly as a wildlife haven. It has a nature reserve status. Overall, landscape values are assessed as high and outstanding.

The island has been identified as a wāhi tūpuna - see Appendix A4.53. It has also been identified as having outstanding natural coastal character values - see Appendix A5.1.2.

A3.1.4.2 Values to be protected

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

- a. *Natural science values:*
 - i. A highly significant bird habitat for a wide range of species. Also habitat for rare *Lepidium oleraceum*, Cook's scurvy grass and gecko. Fur seal haul-out on this island.
 - ii. A highly legible feature - expressive of its geological formation, created by marine erosion processes.
- b. *Cultural/historic values:*
 - i. The island is known to Māori as Okaihae, and is identified as a wāhi tūpuna. It has wāhi taoka and mahika kai values. See Appendix A4.53.
- c. *Aesthetic and amenity values:*
 - i. High naturalness, memorability and wild and scenic values.
 - ii. An abundance of birdlife.

A3.1.5 Harbour Cone Outstanding Natural Feature

A3.1.5.1 Description of feature

A notably distinctive volcanic cone located in the middle of Otago Peninsula. The ONF area includes the summit and the more visually prominent higher slopes. Overall, landscape values are assessed as high and outstanding.

A3.1.5.2 Values to be protected

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

- a. *Natural science values*
 - i. A very distinctive and well recognised volcanic feature.
- b. *Cultural/historic values*
 - i. Harbour cone (Pukemaka) is a significant site for Manawhenua. It is a wāhi tūpuna with mauka, wāhi taoka and archaeological remains identified as values. See Appendix A4.39.
- c. *Aesthetic and amenity values*
 - i. Very high aesthetic/memorability values – an ‘icon’ of the Otago Peninsula.

A3.1.6 Heyward Point - Aramoana Cliffs Outstanding Natural Feature

A3.1.6.1 Description of feature

This is a volcanic headland at the end of the major ridgeline on the northern side of the Otago Harbour. The headland is characterised by impressive cliffs up to 180 metres in height. At the southern end the cliffs are bordered by a sandy beach. There are stacks and reefs off Heyward Point itself. Behind the cliffs the land is predominantly pasture, but there is a significant area of indigenous forest within the Heyward Point Scenic Reserve. 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.

There is a small lighthouse on Heyward Point but otherwise, no structures of significant scale. Heyward Point Scenic Reserve is recognised as an Area of Significant Conservation Biodiversity Value **{NatEnv 958.60}** in the Dunedin City District Plan. Heyward Point and Aramoana Beach (adjacent to the cliffs) are recognised coastal recreational destinations - largely on account of their landscape and natural character attributes. This feature is significant primarily for its geological and aesthetic values. Overall, landscape values are assessed as high and outstanding.

A3.1.6.2 Values to be protected

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

- a. *Natural science values*
 - i. Heyward Point Scenic Reserve is significant for its coastal native forest remnants and habitat values. A significant area of indigenous forest remains at Heyward Point. It has several species now rare in the Dunedin area, e.g. matai.
 - ii. Heyward Point is a seal breeding site.
 - iii. Naturalness values are high, based on the highly coherent natural landform, minimal impact of structures and the presence of native forest and scrub.
- b. *Cultural/historic values*
 - i. The wider coastline was an area of pre-European settlement generally.
 - ii. There was a traditional foot track along the top of the cliffs.
- c. *Aesthetic and amenity values*
 - i. Memorability/wild and scenic values are high due to the dramatic cliffs, presence of wildlife and expansive coastal views.

A3.1.7 Karitane Peninsula Outstanding Natural Feature

A3.1.7.1 Description of feature

The Karitane Peninsula (Huriawa) is an eroded tombolo headland of sedimentary rock connected to the mainland by beach deposits. The landforms are highly expressive of coastal erosive processes. It was the location of a pā, and later, a whaling station. It is now largely grass covered although residential development has encroached onto its landward end.

The peninsula is listed in the Geo-preservation inventory as an easily appreciated, well defined feature. It has high geological, geomorphological and habitat values, and high takata whenua and historic heritage values. It also has high aesthetic and memorability values.

Despite encroachment by residential development it has been assessed as a natural feature with high and outstanding landscape values. Karitane Peninsula is recognised as an Outstanding Natural Feature Landscape in the Otago Regional Plan: Coast.

A3.1.7.2 Values to be protected

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

- a. *Natural Science values:*
 - i. An important source of fossils and bird habitat (off-shore stacks).
- b. *Cultural/historic Values:*
 - i. This is a significant site in terms of pre-European history. It is identified as a wāhi tūpuna. See Appendix A4.6.
 - ii. Archaeological, including pre-European, remains.
- c. *Aesthetic and amenity values:*
 - i. The naturalness of the headland, including its striking and highly memorable landform.
 - ii. The occasional presence of wildlife is significant in this area.
 - iii. Karitane is a surf break of national significance. **{NatEnv 908.14}**

A3.1.8 Lower Taieri River Gorge Outstanding Natural Feature

The A3.1.8.1 Description of feature

Although largely in Clutha District, this feature extends into Dunedin City District at its northern edge along the seaward section of the Taieri River Gorge. The wider ONF encompasses the lower section of the Taieri River gorge from the Taieri Mouth bridge to the end of the schist section. Within the Dunedin city area, it encompasses a small section of the gorge, approximately 4 km upstream from the river mouth.

The Taieri River is tidal, with significant marine influence right through the gorge. The lower gorge is classed as a Scenic Reserve, and has high natural values, including areas of significant podocarp forest, impressive rock bluffs and saltmarsh wetland margins. Overall, landscape values are assessed as high and outstanding. The Taieri River Scenic Reserve is listed as an area of significant ~~conservation~~ biodiversity value **{NatEnv 958.60}** in the Dunedin City District Plan.

The Taieri River Mouth gorge is recognised in the Otago inventory of important geological sites and landforms as an unmodified and well defined coastal gorge.

The wider area was significant in pre-European history. It is the site of two wāhi tūpuna - the Taieri River, which was an important trail, means of transport and mahika kai, and the Taieri Māori Reserve, much of which is still in Māori ownership. There remains a strong connection with this land.

This area has been identified as having high natural coastal character values - see Appendix A5.2.3.

A3.1.8.2 Values to be protected

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

- a. *Natural science values:*
 - i. Natural vegetation sequences.
 - ii. The gorge landform.
- b. *Cultural/historic values:*
 - i. Ongoing values of significance to Manawhenua. See Appendices A4.60 and A4.62.
- c. *Aesthetic values and amenity values:*
 - i. High naturalness, although this has been modified by the influence of forestry on skylines and higher slopes in places, and the presence of weedy species such as gorse.
 - ii. A highly memorable gorge landform with wild and scenic qualities

A3.1.9 Matanaka Sea Caves Outstanding Natural Feature

A3.1.9.1 Description of feature

Matanaka (Cornish Head) north of Waikouaiti Bay is the southern extent of what has been called “the two most significant kilometres of coastline in the world for sea caves”¹. The cliffs of Caversham sandstone are around 20 to 40 metres high and include some of the longest sea caves in the world, some of them extend hundreds of metres inland, linked via intersecting passages. The caves are accessible from the coast in suitable conditions.

The feature includes a rock slump on the southern face of the sea cave complex (the Cornish Head rock slump). This is listed in the inventory of important geological sites and landforms in the Otago region. The headland is comprised of sedimentary rock with volcanic material coinciding with the summit of the hill. The area 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.

The south face of Matanaka (known as Matainaka) was the site of an ancient fortified Waitaha settlement and urupā. It is identified as a wāhi tāpuna, with urupā, kāika and archaeological values. See Appendix A4.1.

¹“Caves of Otago” Nicolas Barth. *New Zealand Speleological Bulletin no 206*.

A3.1.9.2 Values to be protected

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

- a. *Natural science values:*
 - i. The significant and impressive sea caves.
 - ii. The highly legible landform, expressive of coastal erosive processes.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendix A4.1.
 - ii. The relationship with the Matanaka farm historic site.
- c. *Aesthetic and amenity values:*
 - i. The lack of any built structures, which results in high natural and coastal character values.
 - ii. The slump forms of the headland.
 - iii. The sea caves and access for recreational caving activities.

A3.1.10 Mapoutahi Outstanding Natural Feature

A3.1.10.1 Description of values

Mapoutahi is a rugged promontory of volcanic origin defining the western end of Purakaunui Beach. There are no structures other than some wooden steps. The vegetation cover is rough grassland, regenerating native scrub and some scattered pine and macrocarpa trees. Vegetation patterns reflect human modification but naturalness is still high. It is a distinctive coastal feature with moderately high natural character values.

Mapoutahi is an ancient pā site and sacred area. It was the site of a massacre in pre-European times. It is identified as a wāhi tūpuna, with wāhi tapu values. See Appendix A4.17. It is highly significant culturally and historically, and is assessed as outstanding primarily on this basis.

A3.1.10.2 Values to be protected

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

- a. *Natural science values:*
 - i. A volcanic headland feature expressive of coastal erosive processes.
- b. *Cultural/historic Values:*
 - i. Values of significance to Manawhenua. See Appendix A4.17.
- c. *Aesthetic and amenity values:*
 - i. High naturalness
 - ii. A dramatic and memorable coastal headland, with high scenic values.
 - iii. A popular coastal recreational area appreciated for its landscape values.

A3.1.11 Mt Holmes Organ Pipes Outstanding Natural Feature

A3.1.11.1 Description of feature

This is a volcanic feature located within the Flagstaff/Mt Cargill Significant Natural Landscape, north-east of Flagstaff and Butters Peak at around 530 metres elevation. It consists of jointed basalt columns, originally formed when molten lava cooled creating geometric interlocking polygonal shapes. It is similar to those at the Roman Baths, Blackhead, south-west of Dunedin. A distinctive feature with recognised geological values and an important amenity destination.

The site is located within a wāhi tūpuna area, the peaks from Mihiwaka and Mount Kettle to Mt Cargill, which are a cultural identity marker. See Appendix A4.28.

A3.1.11.2 Values to be protected

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

- a. *Natural science values:*
 - i. A recognised geological feature and a good example of a columnar jointed basalt formation.
- b. *Aesthetic and amenity values:*
 - i. Well recognised locally as a distinctive and relatively unusual feature close to Dunedin City.

A3.1.12 Mt Watkin/Hikaroroa Outstanding Natural Feature

A3.1.12.1 Description of feature

A strikingly dominant isolated volcanic feature north west of Waikouaiti, close to the northern boundary of Dunedin city. It has an aesthetically interesting conical form, with landmark significance, however its naturalness has been modified to some extent by quarrying. The Mt Watkin/Hikaroroa basalt boulder stream is a talus of columnar jointed basalt which is included in the Geopreservation inventory. It is New Zealand's best example of a boulder stream in association with a block field.

Mt Watkin/Hikaroroa has a highly regarded example of dry coastal forest in Otago.

Hikaroroa was one of the paramount tīpuna ariki (ancestors) from the waka Arai te Uru. The view of Hikaroroa from Puketeraki marae is significant to Kāti Huirapa Rūnaka ki Puketeraki. It is the dominant landscape feature and is referred to in mihi.

The site is outstanding on the basis of its natural science and cultural values.

A3.1.12.2 Values to be protected

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

- a. *Natural science values*
 - i. Dominant volcanic feature, valued as a landmark
 - ii. The columnar jointed basalt boulder stream and block field.
 - iii. Dry coastal forest.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendix A4.10.

A3.1.13 Quarantine Island/Kamau Taurua Outstanding Natural Feature

A3.1.13.1 Description of features

Quarantine Island / Kamau Taurua is the larger of the two mid-Otago Harbour islands, and is considered an important harbour landmark. 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. The island is free of many pest species, resulting in good quality regeneration. There are a few buildings, including a restored barracks building dating from its use as a quarantine station, along with other relics from the early 20th century. There is a jetty and some historic hulks in the bay nearest the buildings. Two pylons are present on its western end.

The island served as the quarantine station for Otago from 1863 until 1924. When ships arrived in Otago Harbour with infectious diseases, the passengers were sent to Quarantine Island until they were well or died. There is a small cemetery on the island. Quarantine Island/Kamau Taurua was awarded the status of an Historic Area by the Heritage New Zealand in 2001. Evidence of this former use includes hospital and residential buildings, flattened areas and rock walling.

The island was the site of a Māori settlement, and is identified as a wāhi tūpuna, with mahika kai and archaeological values.

The island has significant historic and cultural values and high or high - moderate natural and aesthetic values. It has a strong sense of place and the overall landscape values are assessed as high and outstanding, largely on account of its cultural/historic significance.

A3.1.13.2 Values to be protected

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

- a. *Natural science values:*
 - i. Ecological values associated with regenerating native bush.
 - ii. Natural rocky shoreline.
 - iii. Breeding site for shag, and other marine birds are regularly present.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendix A4.26.
- c. *Aesthetic and amenity values:*
 - i. High - medium naturalness values, based on the natural shoreline, presence of bush and coherent landform.

A3.1.14 Saddle Hill Outstanding Natural Feature

A3.1.14.1 Description of feature

A distinctive and memorable volcanic double domed landform located south-west of Dunedin between the Taieri Plain and the southern coast. It has notable natural science values, significant cultural and historic values, and is highly regarded as a locally important feature.

Saddle Hill is a wāhi tūpuna, with the peaks known as Pukemakamaka and Turimakamaka. These represent two humps of the taniwha Matamata. See Appendix A4.54.

A3.1.14.2 Values to be protected

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

- a. *Natural science values:*
 - i. Saddle Hill and Jaffray Hill are significant volcanic plugs. Along with Scroggs Hill, they are much higher than the majority of the range, with Saddle Hill being 473 metres and Jaffray Hill 430 metres.
 - ii. There is extensive indigenous vegetation on Saddle Hill and some remnant forest trees on Jaffray Hill.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendix A4.54.
 - ii. Historical significance - Named by James Cook.
- c. *Aesthetic/amenity values:*
 - i. Saddle Hill and its iconic cone shape is experienced from a very large visual catchment extending over the more eastern and northern parts of the city, including elevated portions of the peninsula; the Brighton coast; the Taieri Plain; and from State Highway 87 when travelling from Middlemarch towards Outram.
 - ii. The shape and height of this landscape is important and requires protection. The main existing modification to the natural landform is the Jaffray Hill quarry.
 - iii. Roading and other earthworks are relatively inconspicuous. and the natural landforms remain dominant.

A3.1.15 Sandfly Bay Outstanding Natural Feature

A3.1.15.1 Description of feature

Located on the remote coast south of Peggy's Hill and Harbour Cone, adjacent to the Peninsula Coast Outstanding Natural Landscape. The feature is a transgressive dune system which extends from Sandfly Beach over the ridge to Hoopers Inlet. The feature includes an earthflow which extends inland for some distance. The dunes are vegetated to varying extents from none to indigenous forest cover on the Hoopers Inlet side. Listed in the Geo-preservation inventory as an excellent example of multi-coloured coastal sand dune system with lag gravel surfaces and actively forming ventifacts. The Sandfly Bay dunes are dynamic and constantly changing and therefore have very high natural science, aesthetic, transient and shared and recognised values. Overall, landscape values are assessed as high and outstanding. The area is popular for eco-tourism with highly memorable features including a nesting area for yellow-eyed penguin and habitat for Hooker's sea lion. This feature is included within the Otago Peninsula Outstanding Natural Feature Landscape in the Otago Regional Plan: Coast. Values specifically mention "regionally significant earthflow at Sandfly Bay".

The feature is identified as a wāhi tūpuna - see Appendix A4.40. It is also identified as having high natural coastal character values - see Appendix A5.24.

A3.1.15.2 Values to be protected

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

- a. *Natural science values:*
 - i. Sandfly Bay lag surface, ventifacts and earthflow are listed in the Otago inventory of important geological sites and landforms - together providing an excellent example of a multi-coloured coastal sand dune system.
 - ii. Largely unmodified indigenous broadleaf/hardwood forest at the Hoopers Inlet end, and around the active dunes of Sandfly Bay.
 - iii. Sandfly Bay is an important habitat (including breeding areas) for wildlife - yellow eyed penguin, seals and sea lions and sooty shearwater.
- b. *Aesthetic/amenity values:*
 - i. A highly legible landform feature - expressive of processes of coastal erosion and deposition.
 - ii. High naturalness values.
 - iii. High wild and scenic values.
- c. *Cultural/historic values*
 - i. Values of significance to Manawhenua. See Appendix A4.40.

A3.1.16 Sutton Salt Lake Outstanding Natural Feature

A3.1.16.1 Description of feature

This is an unusual inland saline lake located south of Middlemarch. It is the only salt lake in New Zealand and an easily accessible example of lowland tors, as listed in the Geo-preservation inventory. It is outstanding on the basis of its natural science and aesthetic values, and is also listed as an Outstanding Natural Feature in the Otago Regional Plan: Water; and as a significant wetland in the Otago Regional Plan: Water. Overall the lake is regarded as outstanding, mainly due to significant natural science uniqueness.

A3.1.16.2 Values to be protected

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

- a. *Natural science values:*
 - i. Important sequences of halophytic vegetation around lake margins.
 - ii. Free from grazing animals.
- b. *Aesthetic/amenity values:*
 - i. Well regarded as an attractive and interesting destination.
 - ii. Well known tourist and recreational destination.
 - iii. Memorable for landscape.

A3.1.17 Taiaroa Head Outstanding Natural Feature

A3.1.17.1 Description of feature

A distinctive and memorable volcanic coastal landform located at the outermost point of the Otago Peninsula, close to the entrance of Otago Harbour. 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 Royal Albatross Visitor Centre. As well, there are tracks, roads, parking areas and historic structure remnants.

The vegetation cover is mainly grassland. It has outstanding natural science values and very significant cultural values, and adjoins the Peninsula Coast Outstanding Natural Landscape. It also forms part of the Coastal Protection area in the Regional Plan: Coast. Taiaroa Head (Pukekura) has widely recognised natural habitat and wild and scenic aesthetic values. It is also of great cultural and historic significance. Pukekura was an important *pā* site in the context of southern South Island history. It is identified as a *wāhi tūpuna*. See Appendices A4.29 and A4.34.

Overall, landscape values are assessed as high and outstanding.

A3.1.17.2 Values to be protected

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

- a. *Natural science values:*
 - i. Taiaroa Head is the only mainland breeding site for Royal Albatross in the southern hemisphere.
 - ii. Other bird species feed and nest on the headland including shags, sooty shearwaters, gulls, variable oyster catchers and royal spoonbills.
 - iii. Pilots Beach is an important habitat for Little Blue Penguins, seals and sea lions, with leopard seals and elephant seals being rare visitors.
 - iv. Highly significant values associated with the presence of wildlife.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See appendices A4.29 and A4.34.
 - ii. Site of the Armstrong Disappearing Gun. There are also gun emplacements and other military relics in the wider area.
 - iii. There is significant history associated with its use for navigational purposes. Relevant features include the lighthouse and fog station as well as an early sea wall.
 - iv. Pilot's Beach was the site of whaling activity and takes its name from the days when pilot boats were launched from there.
- c. *Aesthetic/amenity values:*
 - i. Whilst the headland has a significant overlay of structures, these are dominated by the strength of the natural elements and patterns.
 - ii. Wild, scenic, and memorability values associated with the rugged landforms, exposed position and expansive sea views are very high.

A3.1.18 The Chasm/Lovers Leap Outstanding Natural Feature

A3.1.18.1 Description of feature

Two spectacular coastal features south east of Sandymount – a well exposed volcanic cliff section and a significant sea arch, as listed in the Geo-preservation inventory. Encompassing a section of the cliffs with highly dramatic erosional columnar jointed basalt. These features are located adjacent to the Peninsula Coast Outstanding Natural Landscape. 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. This feature is included within the Otago Peninsula Outstanding Natural Feature Landscape in the Otago Regional Plan: Coast. Values specifically mention, "visually impressive landforms including Lovers Leap and the Chasm".

This feature is part of the wider Sandymount area which has been identified as having outstanding natural coastal character - see Appendix A5.1.3.

A3.1.18.2 Values to be protected

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

- a. *Natural science values:*
 - i. 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.
 - ii. A highly legible natural landform feature - expressive of processes of volcanic and coastal erosion.
- b. *Aesthetic/amenity values:*
 - i. Spectacular and highly memorable landform features with high natural science values and notable wild and scenic qualities.

A3.1.19 The Pyramids Outstanding Natural Feature

A3.1.19.1 Description of feature

The Pyramids are impressive stranded marine stacks situated adjacent to the Peninsula Coast Outstanding Natural Landscape on marine flats north of Papanui Inlet, listed in the Geo-preservation inventory. They are outcrops of columnar basalt that have been eroded by the sea but which are now stranded far inland by beach aggradation, covered in indigenous scrub and bush. The Pyramids have significant natural science, aesthetic, shared and recognised and cultural values. Overall, their landscape values are assessed as high and outstanding.

A3.1.19.2 Values to be protected

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

- a. *Natural science values:*
 - i. The Pyramids (abandoned marine stacks) are listed in the Otago inventory of important geological sites and landforms.
 - ii. Highly legible volcanic coastal landscape.
 - iii. Vegetation is floristically rich.
- b. *Aesthetic/amenity values:*
 - i. Visually memorable with high natural character values.

A3.1.20 Tunnel Beach Outstanding Natural Feature

A3.1.20.1 Description of feature

Tunnel Beach, including its immediate locality, is an Outstanding Natural Feature on the basis of its particular aesthetic/memorability values. Tunnel Beach is located on the south coast between Blackhead and St Clair. The feature includes the sea arch, tunnel and beach and the immediate hinterland. The tunnel was formed by John Cargill for access for his family to the beach in the 1870's. It is included as an Outstanding Natural Landscape Feature in the Otago Regional Plan: Coast. Overall, landscape values are assessed as high and outstanding.

The Tunnel Beach Outstanding Natural Feature includes an area above St Clair known as Te Uraka a Te Raki, which is identified as a wāhi tūpuna. See Appendix A4.46. Tunnel Beach has also been identified as having high natural coastal character values - see Appendix A5.2.5.

A3.1.20.2 Values to be protected

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

- a. *Natural science values:*
 - i. Tunnel Beach sandstone cliffs are listed in the Inventory of important geological sites and landforms in the Otago Region. This is a fine example of sandstone cliffs. This is a highly legible landscape expressive of its geological formation and erosive marine processes.
 - ii. Rare salt tolerant herb vegetation at Tunnel Beach.
- b. *Cultural/historic values:*
 - i. The tunnel at Tunnel Beach was cut by John Cargill (son of Captain William Cargill) for access to the beach for his family.
 - ii. Values of significance to Manawhenua. See Appendix A4.46.
- c. *Aesthetic/amenity values:*
 - i. Naturalness is high - modified to an extent by exotic shrub species on the slopes above the cliffs.
 - ii. Minimal influence of buildings, structures or earthworks which create high wild and scenic values. These are enhanced by the dramatic coastal landforms.

A3.1.21 Wharekakahu Outstanding Natural Feature

A3.1.21.1 Description of feature

Wharekakahu is a small island to the eastern side of Allans Beach, 250 metres from the shore off Alfred and Cicily Beaches. It is a sparsely vegetated rock stack with steep cliff sides, noted as being part of an Outstanding Natural Feature Landscape (ONFL) in the Otago Regional Plan. Wharekakahu has very high natural character and aesthetic values. Overall, its landscape values are assessed as high and outstanding.

Wharekakahu is part of the wider Cape Saunders area which has been identified as having high natural coastal character values - see Appendix A5.2.2. Wharekakahu is also identified as a wāhi tūpuna. See Appendix A4.53.

A3.1.21.2 Values to be protected

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

- a. *Natural science values:*
 - i. High habitat values for sooty shearwater, fairy prion and shag.
 - ii. Absence of introduced mammals - refuge for indigenous and endemic plants and animals that would otherwise have been eliminated.
 - iii. Haul out site for seals.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendix A4.53.
- c. *Aesthetic/amenity values:*
 - i. High naturalness values.
 - ii. High memorability and wild and scenic values - rugged coastal island and focal point.

A3.2.1 High Country Outstanding Natural Landscape

A3.2.1.1 Description of area

The High Country Outstanding Natural Landscape Area extends along the north west boundary of Dunedin City District, incorporating the high country Rock and Pillar and Lammermoor Range ridgelines rising above the Strath Taieri Plain. These have a north-east/south-west orientation typical of Central Otago ridgelines further to the west, and they define the Strath Taieri basin. The area extends towards Deep Stream south of Sutton township and east of the Strath Taieri Plain towards elevated parts of the Taieri Ridge. The eastern boundary runs along the skyline of the eastern ranges and extends north just beyond and to the east of the Hyde-Macraes Road. The area also includes the northern (and most scenic) part of the Taieri Gorge.

This highly significant and visible high country landscape area contains the distinctive and rugged landform features of the Rock and Pillar Range and Taieri Ridge, and is centred around the Strath Taieri Plain. It is characterised by strongly defined landform and minimal influence of human elements. The scale is large and expansive. Although much of the area is grazed and managed under an extensive pastoral regime, the vegetative cover, in the main, retains its natural patterns and character.

The landscape is highly coherent with rock outcrops creating particular interest. The skyline in many places is dramatic on account of these.

The majority of people experience this landscape from State Highway 87 or from the Otago Excursion Train line. The landscape forms part of the skyline visible from the Middlemarch area and the Strath Taieri Plain. Views of the area are generally expansive, particularly from the Strath Taieri Plain area around Middlemarch. The Old Dunstan Road provides a significant internal viewing corridor. Although this is a seldom used route, its heritage and historic significance gives it, and the areas visible from it, added importance.

This is arguably a landscape of national scenic significance. It is definitely of regional significance, particularly because of its actual and potential value for the regional tourist industry.

The vegetation is predominantly grassland, and human elements have minimal apparent influence. This adds to a sense of vast scale and openness and a remote isolated character. The homogeneity of the vegetative cover means that the area is very visually sensitive to change. Most of the area is managed under an extensive pastoral land use regime or the conservation estate. This has resulted in many areas with the substantial modification of the original tussock grasslands. Despite this, the vegetation cover generally retains the tawny colours and characteristic textures of indigenous tussock grasslands.

It is the coherence of the expansive views in combination with the complexity of the detail that makes this an area of unusually high quality. The rugged character of the landform and the large scale of this landscape combine to create an effect which is distinctively Central Otago.

The area includes three areas identified as wāhi tūpuna: Patea (Mt Stoker), Patearoa (the Rock and Pillar Range) and the Taieri River. See Appendices A4.66, A4.67 and A4.62.

A3.2.1.2 Values to be protected

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

a. *Natural science values:*

- i. Historic iconic landmark ridgelines including: Rock and Pillar Range; the Lammerlaw Range; the Lammermoor Range; and elevated sections of the Taieri Ridge.
- ii. The lowland tor landscape (listed as a significant landform (NZ Geological Society Geopreservation Inventory for the Otago Region).
- iii. Rock outcrops which give rise to a dramatic skyline and a highly memorable landscape.
- iv. Significant landform features, i.e. Rock and Pillar solifluction features (NZ Geological Society Geopreservation Inventory for the Otago Region).
- v. Highly coherent natural landform under an apparently largely unmodified grassland vegetative cover. This is landmark high country area distinctive in Dunedin, particularly within the Rock and Pillar Range.
- vi. Fragile ecosystems, e.g. cushion bogs.
- vii. Intact scrub and snow tussock vegetation sequences progressing to sub-alpine herbfields. The retention of enough tussock grassland to give the impression of a semi-natural vegetative character.
- viii. Skink habitat beneath rocky outcrops.
- ix. Mt Ross, Gladsmuir Crater, Conical Hill and Mt Stoker, all assessed as being significant.
- x. Distinctive features within the Outstanding Natural Landscape Area including: Bald Hill; Yellow Hill; and Scratchback Hill.

b. *Cultural and historic values:*

- i. Values of significance to Manawhenua. See Appendices A4.66, A4.67 and A4.62.
- ii. Central Otago Rail Trail between Hyde and Tiroiti, which includes heritage engineering features.
- iii. Historic traditional farming stations with associated routes and tracks.
- iv. Human made elements which emphasise local character and contribute to visual quality, e.g. stone buildings, rock fence posts.

c. *Aesthetic and amenity values:*

- i. The large scale, open, expansive, remote wilderness character.
- ii. A skyline which is almost entirely free of human structures when viewed from the Middlemarch valley or from the Upper Taieri Gorge Railway line.
- iii. Limited visual impact of human imposed elements such as tracks, buildings and exotic tree plantings. The relative visual dominance of the natural landscape elements over these is a fundamental characteristic.
- iv. Snow tussock grassland. The extent and quality of the visual contribution made by these highly significant intact areas.
- v. Recreational values. Sub-alpine tramping and links with Central Otago tracks. Mountain biking and four wheel driving along Dunstan Road, and other access ways; i.e., Department of Conservation tracks within the Rock and Pillar Range.
- vi. A night sky with outstanding capacity to view astronomical features free from light pollution.

A3.2.1.3 Principal threats to values

Threat	Description
Forestry blocks	a. For most of the high country areas, exotic forestry would have an adverse effect on landscape values and should not be located here. b. Where it does occur, inappropriate siting, scale and layout of forestry blocks may diminish the character of the underlying landform and other natural features.
Wilding trees and weeds	Wilding tree and weed spread, if not controlled, can rapidly extend and threaten existing traditional land use patterns and open landscape values.
Roads and tracks	Roads and tracks can have an adverse effect on visual quality if they are poorly sited; for example if they cut across the landform rather than follow it, or if they are of inappropriate scale and design and become visually dominant.
Quarries and mining activity	Quarries and mining activity can become visually dominant focal points, depending on the scale of operations or the degree of inappropriate siting.
Buildings and structures	Buildings and structures can become visually dominant from public viewpoints if they are inappropriately sited, or if the design, scale and finish of structures conflict with established high country values.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts may diminish the visual coherence of the natural landform character.
Reduction of areas of indigenous vegetation	Reduction of areas of indigenous vegetation threatens patterns which reinforce and reflect landform character and fragile ecosystems that contribute significantly to the values identified for the High Country Outstanding Natural Landscape.
Overgrazing or burning	Overgrazing and burning can threaten the more sensitive high country vegetative cover.
Light pollution	Lighting from development associated with residential and other land use activities, particularly external lights and street lights, significantly diminishes the ability to view and enjoy astronomical features.

A.3.2.1.4 Key design elements to be required or encouraged

Threat	Key design elements
Forestry blocks	a. Highly visible areas should be avoided for forestry planting; b. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. c. Visually recessive areas such as gullies may be acceptable for planting forestry blocks. d. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies. Forestry blocks should be established to avoid unnatural lines or rectangular patterns. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. e. Large blocks of single aged monocultures is discouraged. Smaller compartments of different aged trees should be established that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. f. See A3.4.2 See Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Wilding trees and weeds	a. There should be active on-going management to avoid wilding tree and nuisance weed spread. Avoid planting species which are likely to create wilding tree spread problems e.g. Lodgepole Pine (<i>Pinus contorta</i>), Scotts Pine (<i>Pinus sylvestris</i>), Austrian Pine (<i>Pinus nigra</i>), Douglas Fir (<i>Pseudotsuga menziesii</i>) and Larch (<i>Larix decidua</i>).
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. Roads and tracks should wherever possible follow contours rather than cut across them. c. Construction of roads and tracks should be designed to minimise the amount of cut and fill slopes in visually sensitive areas.
Quarries and mining activity	a. Any quarries and mining activity undertaken in the High Country Outstanding Natural Landscape should be designed with an awareness of the visual quality of the setting. b. Wherever possible activities should be sited away from prominent viewing points; c. Visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an on-going basis with appropriate planting and restorative earthworks.

Threat	Key design elements
Buildings and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing existing values. b. Buildings and structures should be located as far as reasonably practical away from prominent public viewing points. c. Buildings and structures should utilise materials and colours which are in sympathy with surrounding natural features. d. Good design should relate to the specific character and location of each site, but other general principles include ensuring building elevation and overall size are not too dominant; and rural planting schemes need to be of a scale and character appropriate to the landscape. e. See A3.4.1 See Appendix A11 {NatEnv cl.16} for design guidelines for buildings and structures.
Shelterbelts	a. See A3.4.3 See Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.
Reduction of areas of indigenous vegetation	a. Areas of indigenous vegetation should be retained and enhanced.
Overgrazing or burning	a. To avoid degradation to the more sensitive high country vegetative cover overgrazing or burning should be discouraged.
Light pollution	a. External lighting should be designed to have only negligible effects on the viewing of the night sky and astronomical features, and light sources should be shielded and/or filtered.

A3.2.2 Heyward Coast Outstanding Natural Landscape

A3.2.2.1 Description of area

The Heyward Coast Outstanding Natural Landscape extends from Potato Point in the west to Kaikai Beach in the east. It includes Long Beach and the lower lying area that extends south-west from here; coastal extents of Pilots Point; Whareakeake Beach and the gully extending inland; Purehurehu Point and Kaikai Beach. At the eastern extent it adjoins the Heyward Point/Aramoana Cliffs Outstanding Natural Feature. The area encompasses a sequence of volcanic rock headlands separated by beaches, dunes and flats. There is a distinctive pattern to this landscape with headlands being characterised by cliffs, stacks and reefs, and beaches being backed by dunes and wetlands.

Terrestrial vegetation is predominantly pastoral with some patches of native forest and scrub. There are a few cribs at Whareakeake and a house and farm shed on Potato Point but otherwise the mapped landscape area is devoid of significant structures.

The area includes two areas identified as wāhi tūpuna. It is also part of a wider culturally significant landscape. See Appendices A4.19, A4.20 and A4.14.

A3.2.2.2 Values to be protected

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

a. *Natural science values:*

- i. Whareakeake Marsh and Jennings Creek Marsh (Kaikai Beach) are regionally significant wetlands in the Otago Regional Plan: Water.
- ii. This is a highly legible eroded volcanic coastal landscape, expressive of its formative processes.
- iii. Natural character: the area's rural amenity values contribute to the natural character of the wider coastal environment.
- iv. Ecological significance: a defining element is the prevalence of natural coastal-estuarine habitats.

b. *Cultural and historic values:*

- i. This area forms the backdrop to the popular recreational destinations/lifestyle settlements of Pūrākaunui and Long Beach. The area has a number of historic and cultural features which are relics of the past and sensitive to change, e.g. remnant shelter plantings.
- ii. A popular recreational destination based to a significant extent on its landscape values.
- iii. Whareakeake is a surf break of national significance.
- iv. Returning servicemen were resettled in this area, establishing dairy farms along the ridgeline roads.
- v. Long Beach was a popular camping and picnic destination for Dunedin families from around 1900. Later developed as a crib settlement.
- vi. Whareakeake was the site of a fight between Māori and the crew of the brig Sophia.
- vii. Values of significance to Manawhenua. See Appendices A4.19, A4.20 and A4.14

c. *Aesthetic and amenity values:*

- i. 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.
- ii. The cliffs and headlands are dramatic.
- iii. The landscape as a whole is coherent and memorable.
- iv. Common presence of seals at Heyward Point, occasional presence of wildlife generally

- v. Backdrop and coastal views: the landscape is remote from major urban centres or main roads but is the landscape context for the settlements of Pūrākaunui and Long Beach.
- vi. Aesthetic coherence: the area has high rural amenity values based on a coherent and memorable volcanic landform and high naturalness based on the presence of areas of native vegetation and the vegetation pattern that generally reflects the landform. Human interest is present in the form of plantings and structures that reflect a previous more densely settled dairy farming landscape. The area also has a sense of remoteness in places due to the limited impact of buildings and other structures, and the open ocean facing aspect.

A3.2.2.3 Principal threats to values

Threat	
Continuing encroachment into pastoral areas.	Incremental change within this rural environment could result in the proliferation of smaller rural farm blocks and as a consequence, the loss of viable operations. a. Houses and associated roading infrastructure would significantly alter the rural character of the area, downgrading the natural character and amenity values with the fragmented landscape that results. b. A multitude of land uses, each requiring its own system of management and servicing, contrasts strongly with the open pastoral character that is maintained under a traditional farming system. c. Such continuing encroachment into pastoral areas is a threat to this area. The greatest pressure for change is now likely to be on higher elevated land with good views towards the coast.
Reduction of values related to significant habitats, wildlife, landforms and geological features.	a. Important habitat, wildlife and geology values relies on protection from land use threats such as the spread of pest species both animal and plant pests. Lack of maintenance and management of these areas results in reduction of values.
Loss of historic features and heritage farming character.	a. The traditional character and aesthetic of the historic farming landscape is an important component and value of this landscape. b. The demise of traditional features such as stone walls, for example, could potentially undermine the existing aesthetic values of the area.
Conflicts between traditional agricultural practices and recreational and tourist demands.	a. There are tourist demands and expectations which need to be carefully managed alongside maintaining existing landscape values, which includes traditional farming.
Buildings and structures.	a. Buildings and structures can become visually dominant from public viewpoints if they are inappropriately sited, or if the design, scale and finish of structures conflict with established values.
Erosion.	a. Removal of protective vegetation, steep slopes and sometimes harsh weather conditions can promote accelerated erosion in this sensitive area.
Roads and tracks.	a. Roads and tracks can have an adverse effect on visual quality if they are poorly sited; for example if they cut across the landform rather than follow it, or if they are of inappropriate scale and design and become visually dominant.

Threat	
Forestry blocks.	a. In most of the area here establishment of exotic forestry blocks is completely contrary to maintaining important values of openness and retaining existing natural character. If care is not exercised, inappropriate siting and scale and layout of forestry blocks may diminish the character of the underlying landform and other natural features.
Quarries and mining activity	a. Quarries and mining activity can have adverse effects on visual quality if sites are visible from significant public viewing points and if care is not taken to appropriately mitigate adverse effects on existing natural topography and vegetation values.
Reduction of areas of indigenous vegetation	a. Indigenous vegetation patterns which reinforce and reflect landform character and fragile ecosystems contribute significantly to the values identified for the Heyward Coast Outstanding Natural Landscape.
Light pollution	a. Lighting from development associated with residential and other land use activities, particularly external lights and street lights, significantly diminishes the ability to view and enjoy astronomical features.

A3.2.2.4 Key design elements to be required or encouraged

Threat	Key design element
Continuing encroachment into pastoral areas	a. The distinctive natural and open pastoral values of this Outstanding Natural Landscape require their protection from inappropriate development. b. The potential for clustering of buildings, and the subsequent retention of viable farm land should be considered for any new development. c. In many cases, the stewardship of the land is synonymous with maintaining and retaining the values of interest to visitors.
Reduction of values related to significant habitats, wildlife, landforms and geological features	a. Continue to conserve the natural, aesthetic and amenity values of the immediate coast through appropriate management and protection. b. Recognise the importance of the pronounced ridged volcanic landform with conical peaks by protecting key Outstanding Natural Features. c. Encourage protection and restoration of remnant vegetation stands on the coastal slopes, as part of on-going land management practices.
Loss of historic features and heritage farming character	a. Preserve the traditional character and aesthetic of historic farming landscape, including protection of historic shelter belts and dry-stone walls.

Threat	Key design element
Buildings and structures	a. Structures should be designed with the intention of preserving or enhancing existing values. b. They should be located as far as reasonably practical away from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features. c. Good design should relate to the specific character and location of each site, but general principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and any designed rural planting schemes need to be of a scale and character appropriate to the landscape. d. <u>See A3.4.1 See Appendix A11 {NatEnv cl.16}</u> for design guidelines for buildings and structures.
Erosion	a. Discourage removal of erosion protective vegetation and enhance protection and restoration of remnant vegetation.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. They should wherever possible follow contours rather than cut across them. c. Construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Forestry blocks	a. Highly visible areas should be avoided for forestry planting; for other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. Visually recessive areas such as gullies may be acceptable for planting. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. c. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. e. <u>See A3.4.2 See Appendix A11 {NatEnv cl.16}</u> for design guidelines for forestry blocks.
Quarries and mining activity	a. This should not be sited in visually prominent areas if it can be avoided. Where this may not be possible, quarrying should be managed with appropriate mitigation to reduce adverse effects on visual amenity.
Reduction of areas of indigenous vegetation	a. Areas of indigenous vegetation should be retained and enhanced.
Light pollution	a. External lighting should be designed to have only negligible effects on the viewing of the night sky and astronomical features, and light sources should be shielded and/or filtered.

A3.2.3 Peninsula Coast Outstanding Natural Landscape

A3.2.3.1 Description of area

The area extends between Taiaroa Head and Andersons Bay and includes the land with a south facing aspect extending from the most elevated parts of the Peninsula down to the coast. A dramatic coastal profile of prominent headlands and offshore stacks incised by broad tidal inlets, flats and sandy bays is reflected in the pronounced volcanic topography of the Peninsula landform. The sheltered Hooper and Papanui Inlets bring the tidal waters of the Southern Ocean in close proximity to the Otago Harbour south of Portobello. At Sandymount and Cape Saunders, sheer cliffs have been sculpted by natural southerly forces, whilst shifting dunefields occupy the adjacent sandy bays. These extremes of coastal habitats support a range of unique wildlife associations that favour the remoteness of the immediate coastline. The steep seaward slopes of the Otago {NatEnv cl.16} Peninsula coast are traditionally farmed in spite of limited access and inclement weather – windshorn vegetation is indicative of the harsh prevailing climate. Native vegetation persists patchily within the deep gullies and hillside slopes, but the interior landscape has been largely stripped of its natural cover to reveal the conical profiles of volcanic landmarks such as Mt Charles/Poatiri and Harbour Cone. Original farming settlement and farm buildings are sporadically located within the seaward slopes and often surrounded by shelterbelts and amenity plantings. Traditional stone walls, along with macrocarpa shelterbelts are frequent boundary features of this heritage working landscape.

The area contains the following Outstanding Natural Features: Sandfly Bay, The Chasm - Lovers Leap, Harbour Cone, Wharekakahu Island, The Pyramids and Taiaroa Head. (See Appendix A3.1)

Several areas of the Otago {NatEnv cl.16} Peninsula Coast have also been identified as having outstanding or high natural coastal character values, including Highcliff - Pudneys Cliff (see Appendix A5.1.1), Sandymount (see Appendix A5.1.3) and Cape Saunders (see Appendix A5.2.2).

The area is a culturally significant landscape and includes several wāhi tūpuna. See Appendices A4.34, A4.37, A4.70, A4.36, A4.29, A4.69, A4.38, and A4.41.

A3.2.3.2 Values to be protected

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

a. *Natural science values:*

- i. Distinctive landmark features: the Otago {NatEnv cl.16} Peninsula Coast is a striking landscape, its geology and vegetative cover reflecting the extreme climatic conditions of the area. Separated from the more serene harbourside by rounded hills in the region of 300 - 400 metres, tall cliffs, bays and beaches result from the high level of coastal erosion on this ocean side of the Otago Peninsula. Features include sea stacks and extensive sand blown dunes, as well as dramatic cliff features. The extensive Papanui and Hoopers inlet systems and saltmarsh on the south east edge of the peninsula form habitat for numerous native and exotic species.
- ii. Most of the significant geological erosional features within the area are protected Outstanding Natural Features, others that are not included are the Sandymount Sea Arch and Terracettes.
- iii. Hoopers and Papanui Inlets and associated dunefields are significant depositional features.
- iv. Native coastal bush remnants contained within steep gullies and on cliffs at Taiaroa Bush and Okia Reserve. Inter-tidal marine habitats of Hoopers and Papanui Inlets. The extensive dunefields of Sandfly Bay are protected in the Sandfly Bay Outstanding Natural Feature. The salt meadows and shallow inlets provide important habitat.
- v. Coastal wildlife: Internationally renowned for colonies of Royal Albatross and Yellow Eyed Penguin as well as Hooker sea lions and seals.

b. *Cultural/historic values:*

- i. Values of significance to Manawhenua. See Appendices A4.34, A4.37, A4.70, A4.36, A4.29, A4.69,

A4.38, and A4.41.

- ii. Original Native **{MW 248.10}** reserve lands which created long narrow properties from strip farming.
- iii. Legacies of early European settlement including historic farmsteads, dry stone walls, lime kilns and mature shelter and amenity plantings.
- iv. Shipwrecks, including the "Victory" off Victory Beach.
- v. Human-made elements which emphasise local character and contribute to visual quality (e.g. stone buildings and rock fence posts).

c. *Aesthetic and amenity values:*

- i. High aesthetic values provided through the range and drama of the coastline and Otago Peninsula landforms against a backdrop of the southern ocean. Some sections of the Otago Peninsula coast remain unseen from land-based public viewing points but can be viewed comprehensively from the sea.
- ii. Important tourist destination for wildlife observation incorporating local walks and nature reserves. Local tracks tend to follow the ridgelines of the intervening spur landforms down to the coast and these provide more immediate views of the interior landscape.
- iii. Important recreational/amenity values for locals and tourists.
- iv. A night sky with outstanding capacity to view astronomical features.

A3.2.3.3 Principal threats to values

Threat	
Continuing encroachment of development into pastoral areas	a. Incremental change within this rural environment could result in the proliferation of smaller rural farm blocks and as a consequence, the loss of viable farming operations. b. Houses and associated roading infrastructure would significantly alter the rural character of the area, downgrading the natural character and amenity values with the fragmented landscape that results. c. A multitude of land uses, each requiring its own system of management and servicing, contrasts strongly with the open pastoral character that is maintained under a traditional farming system. d. Such continuing encroachment into pastoral areas is a threat to this area. The greatest pressure for change is likely to be surrounding Hoopers and Papanui Inlets, which are both relatively sheltered and accessible from Portobello. The peninsula areas closest to the built up part of Dunedin city are also of greatest threat from increased subdivision development pressures over time.
Reduction of values related to significant habitats, wildlife, landforms and geological features	a. The essence of maintaining important habitat, wildlife and geology values relies on protection from land use threats such as the spread of gorse.
Loss of historic features and heritage farming character	a. The traditional character and aesthetic of the historic farming landscape is an important component and value of this landscape. b. The demise of traditional features such as stone walls, for example, could both potentially undermine the existing aesthetic values of the Peninsula.

Threat	
Conflicts between traditional agriculture practices and recreational and tourist demands	a. There are tourist demands and expectations of the Peninsula landscape as a whole, which need to be carefully managed alongside maintaining existing landscape values, which include traditional farming.
Buildings and structures	a. Buildings and structures can become visually dominant from public viewpoints if they are inappropriately sited, or if the design, scale and finish of structures conflict with established <u>Otago {NatEnv cl.16}</u> Peninsula coast values.
Erosion	a. Removal of protective vegetation, steep slopes and sometimes harsh weather conditions can promote accelerated erosion in this sensitive area.
Roads and tracks	a. Roads and tracks can have an adverse effect on visual quality if they are poorly sited; for example if they cut across the landform rather than follow it, or if they are of inappropriate scale and design and become visually dominant.
Forestry blocks	a. In some areas of the <u>Otago {NatEnv cl.16}</u> Peninsula Coast landscape establishment of exotic forestry blocks is completely contrary to maintaining important values of openness and retaining existing natural character. In others, if care is not exercised, inappropriate siting, scale and layout of forestry blocks may diminish the character of the underlying landform and other natural features.
Quarries and mining activity	a. Quarries and mining activity can have adverse effects on visual quality if sites are visible from significant public viewing points and if care is not taken to appropriately mitigate adverse effects on existing natural topography and vegetation values.
Reduction of areas of indigenous vegetation	a. Indigenous vegetation patterns which reinforce and reflect landform character and fragile ecosystems contribute significantly to the values identified for the Peninsula Coast Outstanding Natural Landscape.
Light pollution	a. Lighting from development associated with residential and other land use activities, particularly external lights and street lights, significantly diminishes the ability to view and enjoy astronomical features.

A3.2.3.4 Key design elements to be required or encouraged

Threat	Key design element
Continuing encroachment of development into pastoral areas	a. The distinctive natural and open pastoral values of this Outstanding Natural Landscape requires their protection from inappropriate development. b. The potential for clustering of buildings, and the subsequent retention of viable farm land should be considered for any new development. c. In many cases, the stewardship of the land is synonymous with maintaining and retaining the values of interest to visitors.
Reduction of values related to significant habitats, wildlife, landforms and geological features	a. Continue to conserve the natural, aesthetic and amenity values of the immediate coast through appropriate management and protection. b. Recognise the importance of the pronounced ridged volcanic landform with conical peaks by protecting key Outstanding Natural Features such as Taiaaroa Head, The Pyramids and Harbour Cone. c. Encourage protection and restoration of remnant vegetation stands on the coastal slopes, as part of on-going land management practices.
Loss of historic features and heritage farming character	a. Preserve the traditional character and aesthetic of historic farming landscape, including protection of historic shelter belts and dry-stone walls.
Conflicts between traditional agriculture practices and recreation and tourist demands	a. These two sometimes conflicting requirements need to be carefully managed so that values for each are not compromised.
Buildings and structures	a. Structures should be designed with the intention of preserving or enhancing existing values. b. They should be located as far as reasonably practical away from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features c. Good design should relate to the specific character and location of each site, but general principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and any designed rural planting schemes need to be of a scale and character appropriate to the landscape. d. See A3.4.1 See Appendix A11 {NatEnv cl.16} for design guidelines for buildings and structures.
Erosion	a. Discourage removal of erosion protective vegetation and enhance protection and restoration of remnant vegetation.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. They should wherever possible follow contours rather than cut across them. c. Construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.

Threat	Key design element
Forestry blocks	a. Highly visible areas should be avoided for forestry planting; for other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. Visually recessive areas such as gullies may be acceptable for planting. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. c. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. e. See A3.4.2 See Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Quarries and mining activity	a. Quarries and mining activities activity {PO cl.16} should not be sited in visually prominent areas if it can be avoided. Where this may not be possible, quarrying should be managed with appropriate mitigation to reduce adverse effects on visual amenity.
Reduction of areas of indigenous vegetation	a. Areas of indigenous vegetation should be retained and enhanced.
Light pollution	a. External lighting should be designed to have only negligible effects on the viewing of the night sky and astronomical features, and light sources should be shielded and/or filtered.

A3.3.1 Durdan Hill Significant Natural Landscape

A3.3.1.1 Description of Area

Pahatea/Durdan Hill is a significant domed hill around 440 metres in elevation located 3-4 kilometres north-west of Waikouaiti, and just south of the Dunedin City District northern boundary. It has visually prominent higher slopes largely devoid of taller vegetation or any structures, and it has a predominantly pastoral land use.

It forms a distinctive backdrop to the main highway and associated coastal settlements.

A3.3.1.2 Values to be Protected

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

- a. *Natural science values:*
 - i. Coherent natural volcanic landform with an aesthetically interesting conical shape.
- b. *Aesthetic and amenity values:*
 - i. Aesthetic Coherence. The area has high rural amenity values based on a coherent and memorable volcanic form. It has an uncluttered appearance and a sense of remoteness in places due to the absence of buildings and other structures.
 - ii. Provides a significant visual backdrop to coastal features. High aesthetic values and memorability.

A3.3.1.3 Principal Threats to Values

Threat	
Structures	Inappropriate siting, design, scale, density and finish of structures such that they become visually dominant from public viewpoints.
Forestry blocks	Inappropriate siting, design, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts such that they diminish the visual coherence of the natural landform character.
Quarries and mining activity	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.

A3.3.1.4 Key design elements to be required or encouraged

Threat	Key design elements
Structures	a. Structures should be designed with the intention of preserving or enhancing existing values. They should be located as far as reasonably practical away from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features.
Forestry blocks	a. Highly visible areas, which includes a considerable proportion of this Significant Natural Landscape, should be avoided for forestry planting. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact of the visual integrity of the landscape. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. b. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. c. See A3.4.2 Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas; they should wherever possible follow contours rather than cut across them; and construction activity should minimise the amount of cut and ensure that this is not disposed of over downslopes in visually sensitive areas.
Shelterbelts	a. If practically feasible, shelterbelt plantings should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See A3.4.3 Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.
Quarries and mining activity	a. Any quarries and mining activity should be designed with an awareness of the visual quality of the setting. Wherever possible activities should be sited away from prominent viewing points; visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.

A3.3.2 Flagstaff - Mt Cargill Significant Natural Landscape

A3.3.2.1 Description of area

This Significant Natural Landscape covers the hills to the north of urban Dunedin including Flagstaff, Swampy Summit, the peaks and higher slopes from Mt Cargill - Mihiwaka and Signal Hill. The geology is largely volcanic and the hills reach elevations of 680 metres (Mt Cargill) and 739 metres (Swampy Summit). The area is the catchment for numerous small rivers and streams, most notably the Waitati River, Water of Leith and Lindsay Creek. The area surrounds the Mt Holmes Organ Pipes which are an excellent and easily accessible example of columnar jointing. These {NatEnv cl.16} are an Outstanding Natural Feature in the plan.

Land cover/land use is a mix of remnant indigenous vegetation (forest and grassland), agriculture, forestry, rural residential development and exotic scrub. The main northern approaches to Dunedin traverse these hills and the hills provide the northern backdrop to the city and the west harbour, as well as the southern backdrop to the Blueskin Bay area. The area is host to a number of utility structures, most notably the television mast on Mt Cargill, as well as quarries.

The peaks are a cultural identity marker for Manawhenua and are identified as a wāhi tūpuna. See Appendices A4.28, A4.32, and A4.49.

A3.3.2.2 Values to be protected

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

a. *Natural science values:*

- i. Distinctive natural landforms: Geopreservation inventory sites in this area are as follows:
 1. Flagstaff Peak Patterned Ground - A good example of patterned ground (which is the distinct, and often symmetrical geometric shapes formed by freezing and thawing of soils); and
 2. Volcanic Peaks. These include Flagstaff, Swampy Summit, Mt Cargill and Mt Kettle.
- ii. Natural character: the area contains significant areas of indigenous vegetation as follows:
 1. Cloud forest (Libocedrus and podocarps) e.g. Leith Saddle – now rare in New Zealand;
 2. Podocarp Broadleaf forest e.g. Grahams Bush;
 3. Broadleaf forest e.g. Orokonui / Burns Park;
 4. Silver Beech forest (Mt Cargill Reserve) - One of only four remaining remnants in the Dunedin Ecological District;
 5. Cassinia/Dracophyllum shrublands at Swampy Summit, Mt Cargill, Mihiwaka;
 6. Snow tussocklands on Flagstaff; and
 7. Orokonui Ecosanctuary.

b. *Cultural/historic values:*

- i. Values of significance to Manawhenua. See Appendices A4.28, A4.32, and A4.49
- ii. Shared and recognised values:
 1. This area is valued by residents and visitors to the city as a natural landscape backdrop and as a recreational resource close to the city.
 2. Provides a distinctive and natural northern approach to the city.
 3. The ring of encircling hills has been referred to as the outer town belt and the hilltops are distinctive city landmarks.
- iii. Historical significance: the name Flagstaff refers to the flagpole that was used in early European times

to alert the wider population that a ship had entered the harbour. An alternative explanation is that the name refers to the poles that were used to mark the original track northwards from Dunedin which ran along the Flagstaff and Swampy summit tops to Hightop.

c. *Aesthetic and amenity values:*

- i. Visual prominence: the area has very high levels of visibility from significant population centres and major roads. It forms much of the backdrop to urban Dunedin, much of the north-western side of Otago Harbour and the Blueskin Bay area.
- ii. Natural landform values. Visual quality in terms of naturalness, memorability and aesthetic coherence is variable. Overall, the landforms are striking and memorable and many are iconic landmark features of Dunedin. In many places there is native vegetation cover and vegetation patterns that reflect the natural topography and natural skylines.
- iii. Transient values. The rare Libocedrus cloud forest of Pahuatea often produces a distinctive cloud cap that forms over Mt Cargill and nearby hills. Other transient values include seasonal snow cover and a wide range of birdlife in the areas of indigenous vegetation.
- iv. Recreational values. The ridges and peaks are connected by a network of popular walks and mountain bike tracks incorporating scenic recreation and nature reserves. Expansive and panoramic views over Dunedin city and beyond are afforded from the accessible summits.

A3.3.2.3 Principal threats to values

Threat	
Buildings and structures	Inappropriate siting, design, scale density and finish of buildings and structures such that they become visually dominant from public viewpoints. This is a more significant issue at higher elevations.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Loss of existing native vegetation and habitat	The protection of native vegetation and restoring the extent and connections between existing forest and bush stands should be an important priority within this landscape.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts such that they are not sympathetic with underlying topography or natural landform character.
Quarries and mining activity	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.
Forestry blocks	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Loss of historic and cultural features	Retention of heritage landscape features such as traditional drystone walls and shelterbelts

A3.3.2.4 Key design elements to be required or encouraged

Threat	Design element
Buildings and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing landscape values. b. Buildings and structures should be located with an awareness of being viewed from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features. c. Encourage clustering of buildings and structures or farm/forest park development layouts. This will ensure more sensitive and visible landscapes in other areas that remain free of buildings and structures. Applying visual controls and limiting development to low densities are some of the ways adverse impacts of buildings and structures can be reduced. d. See A3.4.1 Appendix A11 {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. Roads and tracks should wherever possible follow contours rather than cut across them and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Loss of existing native vegetation and habitat	a. Wherever practicable existing native vegetation areas should be retained and enhanced. b. Encourage protection and restoration of remnant vegetation and planting of new appropriate vegetation as part of on-going land management practices.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See A3.4.3 Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.
Quarries and mining activity	a. Any quarries and mining activity should be designed with an awareness of the visual quality of the setting. Wherever possible activities should be sited away from prominent viewing points; visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.



Threat	Design element
Forestry blocks	a. Highly visible areas, which includes a considerable proportion of this Significant Natural Landscape, should be avoided for forestry planting. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact of the visual integrity of the landscape. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. b. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. c. See <u>A3-4-2 Appendix A11</u> {NatEnv cl.16} for design guidelines for forestry blocks.
Loss of historic and cultural features	a. Retention of heritage landscape features such as traditional drystone walls and shelterbelts

A3.3.3 Heyward Coast Significant Natural Landscape

A3.3.3.1 Description of area

This area includes the land between the outer Otago Harbour and the Heyward Coast Outstanding Natural Landscape which runs along the open coast to the north-east, from Aramoana to Potato Point. Mihiwaka and Mopanui define its inland extent. This is an area of volcanic geology essentially comprised of a main ridge defining the northern side of Otago Harbour landscape, with secondary ridges leading off this to the north (reflecting the pattern of old lava flows from the central harbour volcanic crater). These ridges define small valleys and embayments. Pūrākaunui Inlet is located at the end of the largest of these valleys. The hills are generally no more than 350 metres in height but are steep and rugged in places.

The predominant land use is pastoral farming and the vegetation cover is dominated by pasture grassland with areas of native scrub and forest in the steeper slopes and gullies. Evidence of a previous more densely settled farming landscape can be discerned from the presence of shelter trees, rock walls and building ruins. Rural houses are dotted about, generally located near the roads which are on the spurs. The settlements of Pūrākaunui and Osborne are located adjacent to this Significant Natural Landscape.

The area includes wāhi tūpuna. See Appendices A4.21 and A4.32.

A3.3.3.2 Values to be protected

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

- a. *Natural science values:*
 - i. Natural landforms:
 1. Pūrākaunui Inlet, immediately adjacent, is a Geopreservation Inventory site listed as an "easily accessible, almost pristine example of a small drowned valley forming an intertidal estuary with a sand dune barrier across the entrance".
 - ii. Natural character: the area's rural amenity values contribute to the natural character of the wider coastal environment.
 - iii. Ecological significance: a defining element is the prevalence of natural coastal-estuarine habitats.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendices A4.21 and A4.32.
 - ii. Shared and recognised values. This area forms the setting of the popular recreational destinations/lifestyle settlements of Pūrākaunui and Osborne. The area has a number of historic and cultural features which are relics of the past and sensitive to change, e.g. remnant shelter plantings.
 - iii. Historical Significance: returning servicemen were resettled in this area, establishing dairy farms along the ridgeline roads.
- c. *Aesthetic and amenity values:*
 - i. Backdrop and coastal views: the landscape is remote from major urban centres or main roads but is the landscape context for the settlements of Pūrākaunui and Osborne. It also forms the northern backdrop to the Outer Otago Harbour.
 - ii. Aesthetic coherence: the area has high rural amenity values based on a coherent and memorable volcanic landform and high naturalness based on the presence of areas of native vegetation and the vegetation pattern that generally reflects the landform. Human interest is present in the form of plantings and structures that reflect a previous more densely settled dairy farming landscape. The area also has a sense of remoteness in places due to the limited impact of buildings and other structures, and the open ocean facing aspect.

A3.3.3.3 Principal threats to values

Threat	
Buildings and structures.	Inappropriate siting, design, scale, density and finish of buildings and structures such that they become visually dominant from public viewpoints.
Roads and tracks.	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Loss of native vegetation remnants.	As traditional agricultural practices have removed much of the indigenous native vegetation cover from the seaward slopes of the North Heyward Coast, it is important to retain the remaining remnants of coastal forest and scrub.
Shelterbelts.	Inappropriate siting, scale and design of shelterbelts such that they are not sympathetic with underlying topography or natural landform character.
Quarries and mining activity.	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.
Forestry blocks.	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Loss of historic and cultural features.	Retention of heritage landscape features such as traditional drystone walls and shelterbelts.

A3.3.3.4 Key design elements to be required or encouraged

Threat	Key design elements
Buildings and structures.	a. Buildings and structures should be designed with the intention of preserving or enhancing existing values. They should be located as far as reasonably practicable away from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features. Good design should relate to the specific character and location of each site, but general principles include ensuring building elevation and overall size are not too dominant and rural planting schemes need to be of a scale and character appropriate to the landscape. Future residences would need to be very carefully sited in relation to the exposed steep spur and gully terrain descending from Heyward Point Road. There is limited capacity for new residential development within the immediate seaward slopes towards Heyward Point. Alternative locations include potentially siting individual dwellings along Heyward Point ridgeline, in sympathy with the existing pattern of farmstead locations, or more dense development capacity within existing coastal settlements. Both of these locations would be consistent with traditional settlement patterns. b. See A3.4.1 <u>Appendix A11</u> {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and tracks.	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas; they should wherever possible follow contours rather than cut across them; and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.

Threat	Key design elements
Loss of native vegetation remnants.	a. Restoration planting of native coastal forest would potentially extend the natural values of the coast within this discreet landscape, consistent with the bush cover of bordering ridgelines. Native planting would also contribute to the stabilisation of the steep slopes and the control of pest weeds. The limited public access to parts of this coastline (in particular the cliff edges) is also consistent with protecting wildlife values. Encourage protection and restoration of remnant vegetation stands on the coastal slopes, as part of on-going land-management practices.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See A3.4.3 Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.
Quarries and mining activity	a. Any quarries and mining activity should be designed with an awareness of the visual quality of the setting. Wherever possible activities should be sited away from prominent viewing points; visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.
Forestry blocks.	a. Some highly visible areas should be avoided for forestry planting; for other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. b. See A3.4.2 Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Loss of historic and cultural features	a. Retention of heritage landscape features such as traditional drystone walls and shelterbelts

A3.3.4 Maungatua Significant Natural Landscape

A3.3.4.1 Description of area

This area includes the higher slopes on both sides of the Maungatua Range and parts of the Mill Creek and Waipori Gorge areas. The Maungatua Range is a schist block mountain typical of the Central Otago region with a broad rounded summit reaching 895 metres in height and its eastern face is a scarp associated with the Maungatua fault. Lower parts of the Maungatua Significant Natural Landscape (MSNL) are covered in a mixture of pasture, scrub and native forests. The upland parts are mainly under snowgrass cover with areas of shrubland and farmland. The land use is a mixture of pastoral agriculture and Department of Conservation reserve and there is little modification to the landscape in the form of built structures.

Maungatua is significant to Kāi Tahu and is identified as a wāhi tūpuna. See Appendix A4.64.

A3.3.4.2 Values to be protected

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

- a. *Natural science values:*
 - i. Prominent natural landform: the interior Maungatua **{NatEnv 1071.118}** Range is elevated above the main nearby ridgelines, and features distinctive character, unique geology, aspect and associated vegetation types. The Maungatua Range is well recognised as a local landmark.
 - ii. Natural character: there is an unbroken sequence of native vegetation communities from valley floor mixed forest beech forest, through to montane shrubland, low alpine snowgrass and cushion bog (Waipori Gorge - Maungatua tops). These communities provide habitat for a range of insects and moths. There are also rare plant species.
 - iii. Maungatua summit wetland: this area has a significant wetland of a scarce type. Although modified by fires, grazing and trampling, the Maungatua wetlands are the only remaining examples of high altitude wetlands on the eastern side of the Waipori Ecological District.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See appendix A4.64.
 - ii. The Maungatua Range is a notable landmark of the wider Dunedin area. Its natural character values are recognised in the Otago Conservancy Management Strategy and the Otago Regional Council Regional Plan Water.
- c. *Aesthetic and amenity values:*
 - i. Visual prominence. The Maungatua Range is the dominant topographical feature of the Taieri Plain and a significant landmark. It is highly visible from surrounding areas. It has high memorability values based on its scale and distinctive block mountain form.
 - ii. Natural landform values. Naturalness values are high based on the natural skyline, lack of structures and presence of rock outcrops, native grassland and indigenous forest cover. At lower altitudes the landscape is more modified, but here too naturalness values are generally high due to the mainly harmonious relationship of vegetation/land use patterns with natural landforms. Natural altitudinal vegetation sequences are highly legible in this landscape. Seasonal snow cover and light effects which highlight the natural landforms can also contribute to landscape values.
 - iii. Recreation. The Maugatua Range has very distinctive amenity values which relate closely to its landscape character and features. It is recognised for recreation pursuits, predominantly walking and hunting.

A3.3.4.3 Principal threats to values

Threat	
Forestry blocks	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished. This is mainly an issue for the more elevated parts of the Maungatua Range and areas on the western slope overlooking the Strath Taieri.
Wilding trees and other weeds	The establishment and spread of wilding trees and other weeds such as hieracium, gorse and broom can have an adverse effect on landscape values, particularly in the subalpine grassland areas.
Reduction of areas of indigenous vegetation	Removal or diminution of areas of indigenous vegetation, particularly native grasslands at higher altitudes.
Buildings and structures	Inappropriate siting, design, scale density and finish of buildings and structures such that they become visually dominant from public viewpoints.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it, and consequently become visually dominant features.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts such that they diminish the visual coherence of the natural landform character. This is mainly an issue for the more elevated parts of the Maungatua Range and the western slope overlooking the Strath Taieri, where the landform character is determined by the predominant grassland cover.

A3.3.4.4 Key design elements to be required or encouraged

Threat	Key design elements
Forestry blocks	a. Highly visible areas should be avoided for forestry planting. On the Maungatua Range all exotic forestry should be avoided at higher altitudes. b. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. c. At lower altitudes forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. e. See A3.4.2 <u>Appendix A11</u> {NatEnv cl.16} for design guidelines for forestry blocks.
Wilding trees and other weeds	a. Active ongoing management to avoid wilding tree and nuisance weed spread should be promoted.
Reduction of areas of indigenous vegetation	a. Removal or reduction of significant areas of indigenous vegetation should be avoided. b. Opportunities to reinforce and enhance these areas with additional appropriate planting should be encouraged. c. It is important to retain and enhance the unbroken indigenous vegetation pattern, characterised by sequences extending from valley floor mixed forest communities to subalpine grassland communities.

Threat	Key design elements
Buildings and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing the landscape values. b. Buildings and structures should be located with an awareness of being viewed from prominent public viewing points on the Taieri Plain or from the Lee Stream and wider Strath Taieri locations to the north. c. Good design should relate to the specific character and location of each site. General principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and rural planting schemes need to be of a scale and character appropriate to the landscape. d. See <u>A3.4.1 Appendix A11</u> {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. Roads and tracks should wherever possible follow contours rather than cut across them and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, particularly upper altitudes. b. If established, shelterbelts should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. c. See <u>A3.4.3 Appendix A11</u> {NatEnv cl.16} for design guidelines for shelterbelts.

A3.3.5 North-West Peninsula Significant Natural Landscape

A3.3.5.1 Description of area

This area covers the higher land on the Otago Harbour side of the Otago Peninsula. The lower boundary is defined to exclude the harbour-side settlements and more developed lower slopes. It excludes Taiaroa Head, which is wholly included in the Peninsula Coast Outstanding Natural Landscape.

The geology is volcanic, the harbour being an eroded volcanic crater. The hills reach up to 395 metres in elevation. This is the sheltered, sunny side of the Otago Peninsula, which is reflected in the presence of a number of settlements dotted along the harbour shoreline. Apart from the residential areas the land is largely managed as pastoral farms but there are also some small areas of plantation forestry and areas of remnant or regenerating native bush.

The iconic Harbour Cone sits centrally in the Otago Peninsula, providing a significant backdrop to the harbourside settlements of Broad Bay and Portobello. The rural landscape here is a very special one, highly expressive of its formative processes, both natural and cultural. The uniform pasture covering the majority of the landscape clearly shows the natural landforms, with the scattering of remnant bush coinciding with the steep, wet areas that have been unsuitable for grazing.

It provides a significant portion of the setting, visual containment and skyline for the urban areas of Dunedin and the harbour communities. It therefore has a substantial impact on the visual quality of the wider area.

The area is within a culturally significant landscape and includes wāhi tūpuna. See Appendices A4.41 and A4.34.

A3.3.5.2 Values to be protected

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

- a. *Natural science values:*
 - i. Distinctive natural landforms: defining elements include steep spur and gully hillsides descending from prominent volcanic ridgelines. The iconic Harbour Cone (an ONF) and its surrounding area provide a significant backdrop to the harbourside settlements of Broad Bay and Portobello. Distinctive natural landforms include:
 1. Harbour Cone
 2. Peggys Hill
 3. Harwood Earth Flow. A good example of a recently active flow, now seasonally creeping.
 4. Harwood Stranded Sea Cliffs. Well preserved and easily accessible example of ancient cliff-line stranded by build-up of the Holocene terrace in front.
 - ii. Natural character. The extent, integrity, coherence and natural character of the major natural elements such as landform, streams and areas of indigenous vegetation. A key feature here is the extent and quality of areas of regenerating indigenous bush.
 - iii. Ecological significance: a defining element is the prevalence of natural coastal-estuarine habitats.
 - iv. Forest remnants or areas of regenerating bush some of which are significant habitat for fauna.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendices A4.34 and A4.41.
 - ii. Shared and recognised values: Otago Peninsula has high tourism and recreational values and is viewed as a special area of Dunedin.
 - iii. Historical significance: historic cultural features throughout the area include drystone walls and remnant Macrocarpa shelter trees and building sites. The Harbour Cone property (largely within the SNL)

represents a pristine archaeological landscape, and other significant historic landmarks include Larnach Castle and the Mathieson homestead which has significance as the site of New Zealand's first cheese factory.

c. *Aesthetic and amenity values:*

- i. Visual prominence: The extent and quality of the outstanding panoramic views which are available both of the area and from the area. The skyline generally defined by natural elements. The area is very visible from the Dunedin CBD and from the western side of the harbour.
- ii. Qualities of the elevated rural land: This has natural characteristics which contrast with the developed harbour edge settlements, and which provide a fundamental characteristic of the harbour landscape. Generally the land above the 40 metre contour has a strong rural character.

A3.3.5.3 Principal threats to values

Threat	
Buildings and structures	Inappropriate siting, design, scale, density and finish of buildings and structures such that they become visually dominant from public viewpoints.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Loss of rural production/rural character.	Incremental change within this rural environment has resulted in the proliferation of small rural farm blocks and as a consequence, the loss of viable farming operations. Houses and associated roading infrastructure significantly alter the rural character of the area, downgrading the amenity values with the fragmented landscape that results. A multitude of land uses, each requiring its own system of management and servicing, contrasts strongly with the open pastoral character that is maintained under a traditional farming system. Such continuing encroachment into pastoral areas is a threat to this area. Rolling landforms above the Macandrew Bay and Company Bay settlements are potentially attractive for rural lifestyle development. The better soils and sheltered sites of this area, considered alongside their highly visible position, requires their protection from inappropriate development.
Shelterbelts:	Inappropriate siting, scale and design of shelterbelts such that they diminish the visual coherence of the natural landform character.
Quarries and mining activity	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.

A3.3.5.4 Key design elements to be required or encouraged

Threat	Key design elements
Buildings and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing existing values. b. They should be located with an awareness of being viewed from prominent public viewing points. c. Good design should relate to the specific character and location of each site, but general principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and rural planting schemes need to be of a scale and character appropriate to the landscape. d. See A3.4.1 Appendix A11 {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas; b. They should wherever possible follow contours rather than cut across them; and c. Construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Loss of rural production / rural character.	a. The potential for clustering of housing, and the subsequent retention of viable farm land should be considered. Ecological restoration that creates corridors throughout the landscape needs to form a fundamental component of any development activity.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See A3.4.3 Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.
Quarries and mining activity	a. Any quarrying and mining activity undertaken should be designed with an awareness of the visual quality of the setting. b. Wherever possible activities should be sited away from prominent viewing points; c. Visible quarries and mining surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.

A3.3.6 Saddle Hill Significant Natural Landscape

A3.3.6.1 Description of area

Excluding the more elevated parts of Saddle Hill and Jaffray Hill, generally above 300 metres, this Significant Natural Landscape includes the higher slopes, generally above the 80 metre contour. It encompasses Saddle Hill, Jaffray Hill, Scroggs Hill and the ridge to the south of Scroggs Hill to a spur just to the north of McClarens Gully. The geology of these hills is complex, including schist, sandstone, siltstone and mudstone, as well as the volcanic rocks that form the dominant hill forms. There are areas where past large scale landslides can be discerned in the landforms. Land use is a mix of pastoral farming and forestry, with some areas also under exotic scrub cover and indigenous vegetation.

The uppermost slopes of Saddle Hill and Jaffray Hill are considered an Outstanding Natural Feature (ONF). The hills define the south-eastern side of the northern Taieri Plain and separate this area from the coast.

Saddle and Jaffray Hill (Pukemakaka and Turimakamaka) are identified as a wāhi tūpuna. See Appendices A4.54 and A4.55.

A3.3.6.2 Values to be protected

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

- a. *Natural science values:*
 - i. Distinctive natural landforms. An important and visually dominant part of the volcanic landscape of Dunedin. The conical landforms of Saddle Hill and Scroggs Hill are expressive of their volcanic origins.
 - ii. Natural character. Along with the significant landforms indigenous forest remnants allude to what was a naturally forested area.
 - iii. Scroggs Hill. This volcanic hill form provides a distinctive and memorable landmark.
 - iv. Coastal Broadleaf Podocarp Forest Areas, some of which are protected under QE2 Covenants.
- b. *Cultural/historic values:*
 - i. Values of significance to Manawhenua. See Appendices A4.54 and A4.55.
 - ii. The area is very visible from many vantage points, has high naturalness values and has featured prominently in many aspects of Dunedin's earlier development. It has cultural significance to both Māori and Pakeha.
 - iii. While the peaks are the predominant focus, the surrounding slopes have a high level of picturesque appeal and a high level of visual amenity.
- c. *Aesthetic and amenity values:*
 - i. Visual prominence. The landscape offers extensive impressive views from many public routes and viewpoints, and the skyline is generally defined by natural elements. The area is visually prominent and forms an important part of the hill backdrop to the Brighton coast, Kaikorai Estuary and the northern end of the Taieri Plain, including Mosgiel.
 - ii. Landmarks. The landscape visual quality has a substantial impact on wider areas. Scroggs Hill is valued as local landmarks.

A3.3.6.3 Principal threats to values

Threat	Description
Buildings and structures	Inappropriate siting, design, scale density and finish of buildings and structures such that they become visually dominant from public viewpoints. Generally development at higher elevations should be avoided.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Reduction of areas of indigenous vegetation	Removal or diminution of areas of indigenous vegetation.
Quarries and mining activity	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.
Forestry blocks	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts such that they are not sympathetic with underlying topography or natural landform character.

A3.3.6.4 Key design elements to be required or encouraged

Threat	Key design elements
Buildings and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing the landscape values. Higher elevated areas in this landscape are the most sensitive part of this landscape in this regard. b. Buildings and structures should be located with an awareness of being viewed from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features. c. Good design should relate to the specific character and location of each site. General principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and rural planting schemes need to be of a scale and character appropriate to the landscape. d. See A3.4.1 <u>Appendix A11</u> {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. Roads and tracks should wherever possible follow contours rather than cut across them and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Reduction of areas of indigenous vegetation	a. Removal or reduction of significant areas of indigenous vegetation should be avoided. b. Opportunities to reinforce and enhance these areas with additional appropriate planting should be encouraged.



Threat	Key design elements
Quarries and mining activity	a. Any quarries and mining activity undertaken should be designed with an awareness of the visual quality of the setting. b. Wherever possible activities should be sited away from prominent viewing points. c. Visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.
Forestry blocks	a. Some highly visible areas should be avoided for forestry planting. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. c. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the environmental effects occurring at this stage of the forest growing cycle. e. See A3.4.2 Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See A3.4.3 Appendix A11 {NatEnv cl.16} for design guidelines for shelterbelts.

A3.3.7 Seacliff Significant Natural Landscape

A3.3.7.1 Description of area

This area includes the seaward facing slopes between Warrington and Puketeraki. It extends to the summits of Porteous and Hammond Hills, reaching 410m and 438m respectively. The geology of this area is a mixture of sandstone, siltstone and volcanic rocks and the topography is essentially comprised of gently rising slopes, often with hummocky forms indicative of past land movement. The land use is predominantly pastoral farming with patches of bush and farm dwellings dotted about.

This is a broadly defined coastal landscape incorporating a range of both inland and coastal landforms and features. In addition to the high natural values of the immediate coast and important estuarine habitats, the area holds significance for both Māori and European histories. Many of these historical associations are still evident in the working rural landscape of today. It is also valued as a scenic corridor which forms an alternative northern gateway to Dunedin city.

A3.3.7.2 Values to be protected

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

- a. *Natural science values:*
 - i. Natural landforms: the general visual dominance of natural landform and other natural elements over cultural or human-made landscape elements. A notable feature is the coastal erosion of Seacliff. Geological instability is highly legible in the landforms.
 - ii. Natural character: the area's rural amenity values contribute to the natural character of the wider coastal environment. Indigenous vegetation cover is low on developed farmland but substantial patches of indigenous scrub can be found in steep gullies and coastal cliffs.
 - iii. Ecological significance: a defining element is the prevalence of significant natural coastal-estuarine habitats within bays and inlets. The presence of native bush is expressive of the natural vegetation character of the area. There are a number of covenants protecting areas of indigenous vegetation. Coastal cliffs are likely to provide roosting and nesting habitat for seabirds.
- b. *Cultural/historic values:*
 - i. This larger landscape includes several wāhi tūpuna of significance to Manawhenua. See Appendices A4.13, A4.14, and A4.12.
 - ii. The Coast Road and railway are recognised as valuable scenic routes in this area. The Waikouaiti coast and hills represent a strategic transport gateway into Dunedin City from the north.
 - iii. Historical significance: The ruins of Seacliff Hospital (once New Zealand's largest building) is located in this area and has associations with both Sir Truby King (founder of the Plunket Society) and writer Janet Frame.
- c. *Aesthetic and amenity values:*
 - i. Backdrop and coastal views: this area is usually viewed either as distant coastal hill country from viewpoints south of Blueskin Bay, or as the immediate landscape context of Coast Road and the Main South Railway. Its visual prominence is therefore moderate in terms of profile from major population centres and roads. Coast Road is recognised as a scenic route for its magnificent coastal views.
 - ii. Aesthetic coherence: this is a modified rural landscape but naturalness and aesthetic coherence values are high due to the generally coherent natural landform and the presence of areas of native bush and scattered native and exotic trees. It forms an attractive rural foreground to highly memorable coastal viewpoints such as Coast Road.

A3.2.7.3 Principal threats to values

Threat	Description
Buildings and structures	Inappropriate siting, design, scale, density and finish of buildings and structures such that they become visually dominant from public viewpoints.
Roads and tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Loss of natural coastal landscapes	a. This is generally a visually sensitive landscape. The aesthetic appearance of the land is therefore important, as is maintenance of key views and vistas from public viewing locations across it. b. Inappropriate development could significantly impact upon the perceived quality of this landscape, particularly if important views of the coast are obscured. c. Ultimately, the natural values of the coastal environment, as the key focus of this landscape, require the highest protection. It is also important that the coastal and estuarine environments can be directly experienced and enjoyed by locals and visitors.
Shelterbelts	Inappropriate siting, scale and design of shelterbelts such that they diminish the visual coherence of the natural landform character
Quarries and mining activity	a. Removal of significant landform features by quarrying and mining activity. b. Inappropriate siting and scale of quarries and other mining activity such that they become visually dominant focal points.
Forestry blocks	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Loss of historic and cultural features	Retention of heritage landscape features such as traditional drystone walls and shelterbelts

A3.3.7.4 Key design elements to be required or encouraged

Threat	Key design elements
Buildings and structures	a. Structures should be designed with the intention of preserving or enhancing the landscape values. Higher elevated areas in this landscape are the most sensitive part of this landscape in this regard. b. They should be located with an awareness of being viewed from prominent public viewing points and utilise materials and colours which are in sympathy with surrounding natural features. c. Good design should relate to the specific character and location of each site. General principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and rural planting schemes need to be of a scale and character appropriate to the landscape. d. See A3.4.1 <u>Appendix A11</u> {NatEnv cl.16} for design guidelines for buildings and structures.

Threat	Key design elements
Roads and tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas. b. They should wherever possible follow contours rather than cut across them and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Loss of natural coastal landscapes	a. Ultimately, the natural values of the coastal environment, as the key focus of this landscape, require the highest protection. It is also important that the coastal and estuarine environments can be directly experienced and enjoyed by locals and visitors.
Shelterbelts	a. If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. See <u>A3.4.3 Appendix A11</u> {NatEnv cl.16} for design guidelines for shelterbelts.
Quarries and mining activity	a. Any quarries and mining activity should be designed with an awareness of the visual quality of the setting. Wherever possible activities should be sited away from prominent viewing points; visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks.
Forestry blocks	a. Some highly visible areas should be avoided for forestry planting; for other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. c. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the adverse environmental effects occurring at this stage of the forest growing cycle. e. Encourage the provision of appropriate edge planting. f. See <u>A3.4.2 Appendix A11</u> {NatEnv cl.16} for design guidelines for forestry blocks.
Loss of historic and cultural features	a. Retention of heritage landscape features such as traditional drystone walls and shelterbelts

A3.3.8 Silver Peaks Significant Natural Landscape

A3.3.8.1 Description of area

The Silverpeaks significant natural landscape comprises a distinctive ridgeline north of Swampy Summit following the watershed boundary between the Taieri River catchment to the west and south (including the Silverstream), and the Waikouaiti River catchment to the east. The geology is schist and the topography is a sharply peaked ridgeline (at around 750m elevation) with the valleys a deeply dissected part of the Otago peneplain.

Two major sections of plantation forest lie in the south-west and the north-east. They are located on grey brown silt loams which are of low fertility and free draining soils, making them prone to drying out on the steeper slopes. To the south and east there are large swathes of beech and podocarp forest with snow tussock on the ridgelines. To the west, the land is mainly covered in tussock grasslands or exotic forestry.

The area is remote, largely unoccupied and undeveloped (except for forestry in places) and a popular tramping destination. It has limited vehicle access. Much of the area is managed as Department of Conservation reserve.

A3.3.8.2 Values to be protected

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

- a. *Natural Science values:*
 - i. Distinctive natural landform. A dramatic rugged peaked ridgeline landform sequence which forms the backdrop to the north-west of Dunedin city and coast. It is a significant drainage watershed, with networks of deeply incised streams and gullies.
 - ii. Pulpit Rock. A distinctive elevated feature on the Silver Peaks track which allows extensive views of the coast and inland ranges.
 - iii. Natural Character. The area is a large swathe of rugged hill country predominantly under indigenous vegetation cover and as such has significant natural character and scenic values.
 - iv. Ecological significance. Values include snow tussock grasslands, broadleaf forest, kanuka forest, Cassinia/Inaka shrubland, habitat for native falcon, fernbirds, other birds and a large number of invertebrates. Silver Stream Valley has the only population of South Island Robin in East Otago.
 - v. Remnant vegetation sequences. This includes beech and podocarp forest, kanuka scrub and snow tussockland within the Silverpeaks Reserve, Silver Stream Reserve and the Chalkies / Silver Beech Forest. Significant in that the trees here are at the eastern extremity of their range and are important markers in Otago's vegetation history.
- b. *Cultural/ historic values:*
 - i. The area is identified as a wāhi tūpuna and has values of significance to Manawhenua. See Appendix A4.50.
 - ii. Historic walking route between Dunedin and Waitati for travelling Māori, evidenced by rock caves.
 - iii. Historic water supply: the Silver Stream valley has significance for the historic Dunedin water supply water race, completed in 1881 and abandoned in the 1960's.
- c. *Aesthetic and amenity values:*
 - i. Significance as a landmark. The distinctive ridgeline north of Swampy Summit is generally seen as a distant backdrop from population centres and major roads and its visual prominence is generally low. As a distant skyline however it does have some landmark significance. It also has qualities of remoteness and isolation.
 - ii. Recreational Qualities. Remoteness, lack of motorised access, a rugged and attractive landscape and

ready access to Dunedin have made the area highly favoured for recreational activities, especially tramping and hunting. The area has a long tradition of being walked, and formed an early access route for Māori travelling between Dunedin and Waitati.

A3.3.8.3 Principal threats to values

Threat	Description
Forestry blocks	Inappropriate siting, scale and layout of forestry blocks such that the character of the underlying landform or other natural features is diminished.
Reduction of areas of indigenous vegetation	Removal or diminution of significant areas of indigenous vegetation.
Erosion related to exotic forestry activity	The two plantations areas here are placed directly alongside tributaries of major waterways (the Taieri River in the south and Waikouaiti in the north). Given their underlying soils the potential for erosion on these steep slopes needs to be considered when harvesting occurs. Increased erosion on the newly exposed slopes has a very real adverse effect on waterways. Increased sedimentation pollutes the water, affecting its quality and impacting the numerous species inhabiting it.
Buildings and structures	Inappropriate siting, design, scale, density and finish of structures such that they become visually dominant from public viewpoints.
Roads and Tracks	Inappropriate siting, scale and design of roads and tracks such that they cut across the landform rather than follow it and become visually dominant features.
Quarries and mining activity	Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points.

A3.3.8.4 Key design elements to be required or encouraged

Threat	Key design elements
Forestry blocks	a. Some highly visible areas should be avoided for forestry planting. For other areas there should be careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. b. Forestry blocks should be carefully located so that when trees have matured they visually sympathise with and emphasise underlying ridges and gullies rather than create new unnatural lines or rectangular patterns. c. Rather than forestry establishment following the straight edges of property boundaries, landowners should be encouraged to pay attention to the landforms and vegetation patterns that exist. d. Large blocks of single aged monocultures should be discouraged, replaced by smaller compartments that can be harvested over a staggered timeframe, thereby reducing the adverse environmental effects occurring at this stage of the forest growing cycle. e. See A3.4.2 Appendix A11 {NatEnv cl.16} for design guidelines for forestry blocks.
Reduction of areas of indigenous vegetation	a. Removal or reduction of areas of indigenous vegetation should be avoided.

Threat	Key design elements
Erosion related to exotic forestry activity	a. There is the possibility of establishing buffer zones to reduce the adverse impacts of exotic forestry felling on waterways. Such a buffer zone should be established by allowing native regeneration to take place along riversides and gullies containing significant tributaries, which will slow the rate of sediments entering the waterways.
Building and structures	a. Buildings and structures should be designed with the intention of preserving or enhancing these existing values. b. Buildings and structures should be located as far as reasonably practical away from prominent public viewing points. c. Good design should relate to the specific character and location of each site, but general principles include ensuring building elevation and overall size are not too dominant; materials and their colours should be sympathetic to the surrounding landscape; and rural planting schemes need to be of a scale and character appropriate to the landscape. d. See A3.4.1 Appendix A11 {NatEnv cl.16} for design guidelines for buildings and structures.
Roads and Tracks	a. If roads or tracks are required they should be carefully designed to be located in the least visually prominent areas; they should wherever possible follow contours rather than cut across them; and construction activity should minimise the amount of cut and ensure this is not disposed of over downslopes in visually sensitive areas.
Quarries and mining activity	a. Removal of significant landform features by quarrying and mining activity. Inappropriate siting and scale of quarries and other excavations such that they become visually dominant focal points. Any quarries and mining activity should be designed with an awareness of the visual quality of the setting. {NatEnv 360.6} b. Wherever possible activities should be sited away from prominent viewing points {NatEnv 360.6} c. Visible quarry surface activity should be reduced as much as possible and the visual prominence of sites should be mitigated on an ongoing basis with appropriate planting and restorative earthworks. {NatEnv 360.6}

A3.4 Design Guidelines {Confirmed to be replaced by A11- NatEnv cl.16¹}

¹ **NatEnv cl.16:** The contents of Appendix A3.4 has been transferred to new Appendix A11, because the design guidelines are relevant to the management of effects of development on both landscape values and natural character values.

A3.4.1 Building and structures {NatEnv cl.16}

Guidelines can only be of a general nature. Because every site is different, it is not possible to offer specific advice. It is important that each individual site is assessed to determine an appropriate design solution based on site character and the specific development requirements. However, the following principles apply: **{NatEnv cl.16}**

- a. Where possible, site a new building or structure in association with a stronger natural feature e.g. a group of trees. Ensure that it has a backdrop of land or vegetation rather than sky as seen from main viewpoints. Seek to avoid prominent ridgelines, spurs and hilltops. **{NatEnv cl.16}**
- b. In siting, take care to minimise the need for any earthworks and align the buildings with the direction of the landform. Blend any cut and fill required with the surrounding natural contours. **{NatEnv cl.16}**
- c. Site at a distance from adjacent roads wherever possible to retain the spaciousness of the rural landscape. Take care not to block or detract from any significant views. **{NatEnv cl.16}**
- d. Where other buildings already exist, site the new buildings or structures to visually relate to the group rather than be seen as an isolated element. **{NatEnv cl.16}**
- e. Aim to relate the building or structure to the land by keeping it as low as possible. The proportions should be wider than higher. Relate floor levels to the ground level and avoid high foundations. **{NatEnv cl.16}**
- f. Traditional, simple, non-fussy designs are likely to integrate most readily into the rural setting. Where practicable, relate roof shapes to the lie of the land and break up large wall and roof planes. Provide for eaves and the shadow line they create which helps to tie the building or structure visually with the land. **{NatEnv cl.16}**
- g. Use materials which occur naturally in the area e.g. local stone or timber, or materials that have traditionally been used in rural buildings e.g. appropriately coloured corrugated iron. Materials with a rough, coarse texture will help to minimise reflectivity of light. Do not use a great variety of different materials. Keep the effect simple. **{NatEnv cl.16}**
- h. Minimise the visual impact of buildings by using colours which blend with, or provide subtle contrast with, the background landscape. Avoid sharp colour contrasts. Generally, roofs should be darker than walls to help visually relate the buildings and structures to the land. **{NatEnv cl.16}**

A3.4.2 Forestry blocks {NatEnv cl.16}

The following general principles should be followed for any areas where forestry is determined not to be inappropriate, as noted above: **{NatEnv cl.16}**

- a. Wherever possible, the edges between forestry and adjacent land uses should be located to reflect the natural landform rather than human-imposed boundaries, e.g. a fence line. Planting which recognises variations in topography will reinforce natural landscape character and is more likely to maximise productivity through being responsive to variations in soil and microclimate. It is usually desirable to avoid planting on prominent skylines as this will minimise the negative impacts on the landscape during the harvesting phase. Highly visible forest edges adjacent to roads require extra care. Provide generous edges and plant a long term species to

provide screening during the harvesting phase. Irregular natural looking edges responsive to any landform features will help to integrate the forest more than straight lines. Avoid planting where the plantation will block or detract from significant views or shade roads and contribute to problems with ice in winter. **{NatEnv cl.16}**

- b. Where areas of native bush and shrubland remain, these should be retained as far as possible. **{NatEnv cl.16}**
- c. When planting adjacent to watercourse or streams (riparian areas) leave an unplanted margin and allow native vegetation to establish. This helps to protect water quality during harvesting, provides a richer habitat for wildlife, and helps to emphasise the stream or gully as a natural feature. The boundary between the gully and the riparian species should be located to reflect the landform. **{NatEnv cl.16}**
- d. Use contour planting rather than rows running up and down the slope for a more natural appearance. If possible, use a mixture of species rather than just one, to reflect changes in landform, soil or microclimate and to create a more diverse landscape, and richer wildlife habitat. This may also help to reduce the severity of landscape change during harvesting. **{NatEnv cl.16}**
- e. Keep access tracks off conspicuous faces, or as low in the landscape as possible. Avoid firebreaks which do not follow the landform. Live firebreaks of native species in damp gullies are much preferable to artificial-looking cleared swathes. **{NatEnv cl.16}**
- f. Avoid using species which are likely to create wilding tree spread problems e.g. Lodgepole Pine (*Pinus contorta*), Scotts Pine (*Pinus sylvestris*), Austrian Pine (*Pinus nigra*), Douglas Fir (*Pseudotsuga menziesii*) and Larch (*Larix decidua*). **{NatEnv cl.16}**

A3.4.3 Shelterbelts {NatEnv cl.16}

If practically feasible, shelterbelt planting should avoid highly visible areas, otherwise they should be located following a careful assessment of the underlying topography and existing natural features to ensure minimum impact on the visual integrity of the landscape. **{NatEnv cl.16}**

Where shelterbelts are determined to be appropriate, the following general principles should be followed: **{NatEnv cl.16}**

- a. Reinforce the natural character of the landscape by siting shelter plantings to relate to natural features such as a change in slope or a water course. Avoid shelter plantings which cut across the natural features and patterns of the landscape, and which will block significant views. **{NatEnv cl.16}**
- b. Traditional lineal shelter belts may not always be the best solution. Group plantings can provide effective shelter and can lessen risks associated with increasing wind turbulence on the downwind side and cold air ponding. Where rows are desirable, their integration with the landscape can be enhanced by linking them with other planting where possible, and by minimising regularity by widening out in places. **{NatEnv cl.16}**
- c. Where appropriate, link shelter planting with existing areas of trees. Small disjointed lines of planting should be avoided in favour of unified entities. **{NatEnv cl.16}**
- d. The dark colours and strong forms of exotic coniferous species such as Pine and Macrocarpa make them very visually dominant. The use of other species with rounded forms and softer colours will make shelter plantings easier to integrate with the landscape. **{NatEnv cl.16}**
- e. The use of local native trees helps to promote distinctive local landscape character and has advantages for indigenous wildlife habitat. Avoid adding ornamental trees or shrubs to enhance amenity as these typically look fussy and inappropriate in the scale of the rural landscape. **{NatEnv cl.16}**
- f. Use species which will reach an appropriate height at maturity so that they will not have to be trimmed or hedged. The use of a range of species can help to reduce the visual impact of shelter plantings. Species

should be mixed naturally and informally. Avoid use of variegated or golden varieties as these attract too much attention and give an unnatural appearance. **{NatEnv cl.16}**

- g. Avoid using species which are likely to create wilding tree spread problems e.g Lodgepole Pine (*Pinus contorta*), Scotts Pine (*Pinus sylvestris*), Austrian Pine (*Pinus nigra*), Douglas Fir (*Pseudotsuga menziesii*) and Larch (*Larix decidua*). **{NatEnv cl.16}**

