

21.22.5 Waiwhakaata (Lake Hayes) ONF

General Description of the Area

The Waiwhakaata (Lake Hayes) ONF encompasses the pronounced ridgeline extending north-eastwards from Slope Hill and framing the western side of Waiwhakaata (Lake Hayes), and Waiwhakaata (Lake Hayes) itself.

Physical Attributes and Values

Geology and Geomorphology • Topography and Landforms • Climate and Soils • Hydrology • Vegetation • Ecology • Settlement • Development and Land Use • Archaeology and Heritage • Mana whenua

Important landforms and land types:

1. The pronounced and steep glacier overridden schist ridgeline extending north-eastwards from Slope Hill and framing the eastern side of Waiwhakaata (Lake Hayes).

Important hydrological features:

2. The shallow lowland, glacial lake of Waiwhakaata (Lake Hayes) (325m). The lake is currently eutrophic (with poor water quality) due to elevated nutrient inputs from its catchment. While nutrient loads have stabilised in the past 20 years, the lake remains eutrophic due to its internal phosphorus load. Sediment run-off also threatens the recovery of Lake Hayes.

Important ecological features and vegetation types:

3. Particularly noteworthy indigenous vegetation features include:
 - a. A raupō (*Typha orientalis*) - makura (*Carex secta*) community at the south end of Lake Hayes fronting crack willow woodland.
 - b. Swathes and scattered pockets of grey shrubland along the steep western slopes framing the western side of Waiwhakaata(Lake Hayes). Small pockets of grey shrubland also occur along the shoreline.
4. Other distinctive vegetation types include:
 - a. The almost continuous patterning of willows and Lombardy and black poplars along the shoreline of Waiwhakaata (Lake Hayes).
 - b. Proliferation of exotic weeds around the edges of Waiwhakaata (Lake Hayes). Dense growth of hawthorn, broom, elderberry, sweet briar and blackberry encountered along the northwest side of the lake above the shoreline willows.
 - c. Numerous indigenous plantings have been established along the loop trail, particularly on the southern and western side of the lake.
5. Waiwhakaata (Lake Hayes) is a valued habitat for threatened native fish species: the Koaro (*Galaxias brevipinnis*). Other native fish species present include: the upland bully (*Gobiomorphus breviceps*) and shortfin eel (*Anguilla australis*).
6. Waiwhakaata (Lake Hayes) is a valued habitat for the nationally threatened swamp birds Australasian Bittern (*Botaurus poiciloptilus*) classified as nationally critical and Great Crested Grebe (*Podiceps cristatus australis* - classified as nationally vulnerable.

7. Waiwhakaata (Lake Hayes) is of special value as a breeding area for a variety of waterfowl, including Paradise Shelduck (*Tadorna variegata*), Grey Duck (*Anas superciliosa*), the New Zealand shoveller/Kuruwhengi (*Anas rhynchos variegata*), Black Swan (*Cygnus atratus*), Grey Teal (*Anas gracilis*), Mallard (*Anas platyrhynchos*) and New Zealand Scaup (*Aythya novaeseelandiae*).
8. Other aquatic birds that inhabit Lake Hayes include white-faced Heron (*Ardea novaehollandiae novaehollandiae*), White Heron (*Egretta alba modesta*), Black shag (*Phalacrocorax carbo*), Little shag (*Phalacrocorax melanoleucos*), the Marsh Crake (*Porzana pusilla affinis*), Australian Coot (*Fulica atra australis*) (*Anas platyrhynchos*), Swamp hen/Pukeko (*Porphyrio porphyrio melanotus*), and New Zealand Kingfisher (*Halcyon sancta vagans*).
9. The raupō (*Typha orientalis*) - makura (*Carex secta*) community provides important nesting habitat and shelter for waterfowl and rails while the crack willow trees along the shoreline provide important roosting sites for shags and kingfisher.
10. Waiwhakaata(Lake Hayes) is an important recreational fishery with brown trout (*Salmo trutta*) and European perch (*Perca fluviatilis*).
11. Animal pest species include feral cats, hares, rabbits, ferrets, stoats, weasels, possums, rats and mice.

Important land-use patterns and features:

12. Human modification which is currently concentrated around the northern and eastern margins of Waiwhakaata (Lake Hayes) (adjacent and close to the ONF). Along the southern and western side of Waiwhakaata (Lake Hayes), built development is generally well set back from the lake edge.
13. The Lake Hayes Trail / Wai Whaka Ata (part of the Queenstown Trail) which forms a loop around the lake, creating multiple access points to the lake.
14. State Highway 6 which at the southern end of the lake and the northern and western side of the lake coincides with a block of conservation land that extends westwards (beyond the ONF) to Slope Hill Road.
15. Informal jetties in places. Public boat ramps.

Important archaeological and heritage features and their locations:

16. No historic heritage features, heritage protection orders, heritage overlays or archaeological sites have been identified/recorded to date within the ONF.

Mana whenua features and their locations:

17. The entire area is ancestral land to Kāi Tahu whānui and, as such, all landscape is significant, given that whakapapa, whenua and wai are all intertwined in te ao Māori.
18. Waiwhakaata is the Kāi Tahu name for Lake Hayes.

Associative Attributes and Values

Mana whenua creation and origin traditions • Mana whenua associations and experience • Mana whenua metaphysical aspects such as mauri and wairua • Historic values • Shared and recognised values • Recreation and scenic values •

Mana whenua associations and experience are:

19. Kāi Tahu whakapapa connections to whenua and wai generate a kaitiaki duty to uphold the mauri of all important landscape areas.

20. Wāi maori (fresh water) is a central element in Kāi Tahu creation traditions. The whakapapa of wāi māori describes bonds, relationships, and connections that bind Kāi Tahu to the land, waters and all life supported by them.

Important historic attributes and values:

21. Waiwhakaata (Lake Hayes) has historical significance for its association with early commercial fishing in the area.

Important shared and recognised attributes and values:

22. The descriptions and photographs of the area in tourism publications.
23. The popularity of the postcard views across Waiwhakaata (Lake Hayes) as an inspiration/subject for art and photography.
24. The very high popularity of the recreational 'feature' listed below.

Important recreation attributes and values:

25. Walking, running and cycling along the Lake Hayes Trail / Wai Whaka Ata (part of the Queenstown Trail).
26. Non-motorised activity permitted on Waiwhakaata(Lake Hayes); rowing, kayaking, swimming (when water quality permits), paddleboarding and fishing at Waiwhakaata(Lake Hayes).
27. Picnicking around the lake shoreline.
28. A large carparking area at the northern end of Waiwhakaata (Lake Hayes) where visitors base themselves from for recreational activities.
29. The Wakatipu Rowing Club located on the eastern edge of Waiwhakaata (Lake Hayes). Also used by local community groups such as Scouts and Cubs.
30. Aotearoa's National Walkway, the Te Araroa Trail passing along the western edge of the lakefront via the Wakatipu Track connecting Frankton/ Queenstown (south) to Arrowtown (north).
31. Regionally significant fishery, spawning habitat (Mill Creek) and game bird habitat.

Perceptual (Sensory) Attributes and Values

Legibility and Expressiveness • Views to the area • Views from the area • Naturalness • Memorability • Transient values • Remoteness / Wildness • Aesthetic qualities and values

Legibility and expressiveness attributes and values:

32. The area's natural landforms, land type and hydrological features (described above), which are highly legible and highly expressive of the landscape's formative glacial processes.

Particularly important views to and from the area:

33. 'Postcard' long-range views from SH6 at the south end of the lake, across the lake that includes the historic homestead and mature trees at Threepwood (outside the ONF), the Lake Hayes Showground Reserve, the lake edge deciduous tree plantings, and the Lake Hayes Trail / Wai Whaka Ata, all viewed against a mountain backdrop. The seasonal leaf colour and mirror-like qualities of the lake during still weather are particularly memorable aspects of this composition.

34. Appealing mid to long-range views westbound on SH6 to the southern end of Waiwhakaata(Lake Hayes), and the ridgeline framing the western side of the lake. The depth of the outlook together with its 'classic' elements that include water in the foreground and a structured layering of mountainous landforms and gateway impression (enabling first glimpses of Queenstown) contribute to the memorability of the vista.
35. Attractive close to mid-range intermittent views from Arrowtown Lake Hayes Road across the lake to Slope Hill and the ridgeline framing the western side of the lake, backdropped by the surrounding mountain context. The filtering and framing effect of vegetation in places along with the alternating availability of such views enhances their interest and appeal.
36. Highly attractive close to long-range views from the Lake Hayes Trail / Wai Whaka Ata, the necklace of reserves around the edge of Lake Hayes and the residential properties around Lake Hayes (outside the ONF), across the lake to the dramatic and generally undeveloped roche moutonnée, the undeveloped ridgeline framing the western side of the lake and/or the more distant surrounding mountain backdrop.
37. Attractive long-range views of Waiwhakaata (Lake Hayes) from the Northern Remarkables, in particular the Remarkables Ski Field Access Road (and lookouts).
38. Attractive long-range views from the Queenstown Trail on Christine's Hill and from Arrowtown Lakes Hayes Road at McIntyre's Hill southwards out over the lake, backdropped by the dramatic ONF and ONL mountain context.
39. In all of the views, the dominance of more 'natural' landscape elements, patterns, and processes evident within the ONF, along with the generally subservient nature of built development within the ONF and the contrast with the surrounding 'developed' landscape character, underpins the high quality of the outlook.

Naturalness attributes and values:

40. The exotic vegetation bordering Waiwhakaata (Lake Hayes) which, along with almost continuous patterning of rural living development along its northern and eastern sides, contribute a reduced perception of naturalness. While the waterbody itself is relatively unencumbered by structures (excepting the odd informal jetty and the public boat ramps) and overt modification, its widely reported water quality issues detract from its perceived naturalness. The generally undeveloped character of land along the southern and western sides, together with the proliferation of wetland, grey shrubland and large-scale exotic vegetation in places around the lake edges, serves to increase the perceived naturalness at a localised level.

Memorability attributes and values:

41. The highly attractive outlook of Waiwhakaata (Lake Hayes). The close proximity of Slope Hill ONF in the outlook, collectively seen within a relatively developed immediate context serves to enhance the memorability of the outlook.

Transient attributes and values:

42. Autumn leaf colour and seasonal loss of leaves associated with the exotic vegetation (lake edge poplars and willows in particular).
43. The mirror-like qualities of Waiwhakaata (Lake Hayes) during calm and settled weather conditions.

Remoteness and wildness attributes and values:

44. The track along the western side of Waiwhakaata (Lake Hayes) and localised sections of the balance of the track where intervening landform and vegetation screens views to nearby development.

Aesthetic qualities and values:

45. The experience of the values identified above from a wide range of public viewpoints.

46. More specifically, this includes:
- a. The highly attractive large-scale composition created by the glacial lake, juxtaposed beside a rural living and urban context.
 - b. At a finer scale, the following aspects contribute to the aesthetic appeal:
 - i. the very limited level of built modification evident within the ONF;
 - ii. the mirror-like qualities of Waiwhakaata (Lake Hayes) during certain weather conditions; and
 - iii. the poplars and willows around the edges of Waiwhakaata (Lake Hayes), which contribute to the scenic appeal despite not being native.

Summary of Landscape Values

Physical • Associative • Perceptual (Sensory)

Rating scale: seven-point scale ranging from **Very Low** to **Very High**.

very low	low	low-mod	moderate	mod-high	high	very high
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These various combined physical, associative, and perceptual attributes and values described above for PA ONF Waiwhakaata(Lake Hayes) can be summarised as follows:

47. **High physical values** due to the high-value landforms, vegetation features, habitats, species, hydrological features and mana whenua features in the area.
48. **High associative values** relating to:
- a. The mana whenua associations of the area.
 - b. The historic features of the area.
 - c. The strong shared and recognised values associated with the area.
 - d. The significant recreational attributes of Waiwhakaata (Lake Hayes).
49. **Very High perceptual values** relating to:
- a. The high legibility and expressiveness values of the area deriving from the visibility and abundance of physical attributes that enable a clear understanding of the landscape's formative processes.
 - b. The very high aesthetic and memorability values of the area as a consequence of its distinctive and appealing composition of natural landscape elements. The visibility of the scenic route of SH6, Arrowtown Lake Hayes Road, The Remarkables Ski Field Access Road and the Queenstown Trail, along with the area's transient values, also play an important role.
 - c. A high perception of naturalness arising from the dominance of more natural landscape elements and patterns along the southern and western sides of Waiwhakaata (Lake Hayes).
 - d. A localised sense of remoteness and wildness associated with the track around Waiwhakaata (Lake Hayes).

Landscape Capacity

The landscape capacity of the PA ONF Waiwhakaata(Lake Hayes) for a range of activities is set out below.

- i. **Commercial recreational activities – limited** landscape capacity for activities that: integrate with, and complement/enhance, existing recreation features; are located to optimise the screening and/or camouflaging benefit of natural landscape elements; designed to be of a sympathetic scale, appearance, and character; integrate appreciable landscape restoration and enhancement; enhance public access; and protect the area's ONF values.
- ii. **Visitor accommodation and tourism related activities – no** landscape capacity.
- iii. **Urban expansions – no** landscape capacity.
- iv. **Intensive agriculture – no** landscape capacity.
- v. **Earthworks – very limited** capacity for earthworks associated with farm or public access tracks, that protect naturalness and expressiveness attributes and values, and are sympathetically designed to integrate with existing natural landform patterns.
- vi. **Farm buildings – no** landscape capacity.
- vii. **Mineral extraction – no** landscape capacity.
- viii. **Transport infrastructure – very limited** landscape capacity for trails that are: located to integrate with existing networks; designed to be of a sympathetic appearance and character; integrate landscape restoration and enhancement; and protect the area's ONF values. **No** landscape capacity for other transport infrastructure.
- ix. **Utilities and regionally significant infrastructure – limited** capacity for infrastructure that is buried or located such that they are screened from external view. In the case of utilities such as overhead lines or cell phone towers which cannot be screened, these should be designed and located so that they are not visually prominent.
- x. **Renewable energy generation – no** landscape capacity.
- xi. **Production forestry – no** landscape capacity.
- xii. **Rural living – no** landscape capacity.
- xiii. **Lake structures – no** landscape capacity.