

21.23.14 Hāwea Moraine: Schedule of Landscape Values

General Description of the Area

The Hāwea Moraine area corresponds to the Lake Hāwea penultimate terminal moraine ridge which extends approximately west-east from the Hāwea River to the Grandview Range. The terminal moraine separates the flat outwash terraces of 21.23.15 Hāwea Flat (to the north) from the older 21.23.13 Kane Road and Luggate – Tarras Highway outwash terraces to the south. The western edge of the area adjoins the Mata-au (Clutha River (ONF)) and the eastern end abuts Hāwea South North Grandview PA (ONL).

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

Landforms and land types

1. The surficial geology of the area includes moraine from the glaciers that formed the Upper Clutha Basin and Lake Wānaka. Identified in the Geopreservation Inventory as being of regional geological significance, the landform comprises the Lake Hāwea penultimate terminal moraine ridge. This is an excellent example of a terminal moraine ridge that dammed a glacier lake after the Albert Town Glacial Advance retreated. This resulted in several hundred metres of lake sediment being deposited under Hāwea Flats.
2. The sequence of landforms includes:
 - a. The low hummocky terrain characteristic of the penultimate terminal moraine. The moraine forms part of the extensive composite loop of moraine deposited in a semi-circle across Hāwea Valley, from an isolated flat-topped hill (Cameron Hill) around to south of Hāwea Flat and west of Camp Hill, to butt against schist in the south spur of Mt Maude. The Hāwea River, and later outwash plains have now disrupted the moraine loop.
 - b. Distinctive escarpment of approximately 40m to 80m high, leading up from Hāwea Flat.
 - c. Scattered schist boulders throughout the moraine slopes.
3. The relatively free-draining brown and pallic soils with reasonable fertility, reflected in pastoral farming. The undulating terrain is a deterrent to more intensive farming in parts of the area.

Hydrological features

4. Irrigation reservoirs/ponds within the rolling moraine field with varying levels of permanent water.
5. Farm drains.

Ecological features and vegetation types

6. Particularly noteworthy indigenous vegetation features include:
 - a. Limited amounts of grey shrubland - sweet briar and kānuka on parts of the moraine landform.
 - b. Small pockets of native restoration plantings on steeper land, typically associated with recent rural living subdivisions.

7. Other distinctive vegetation types include:
 - a. Conifer, eucalypt, and Lombardy poplar shelter belts throughout the area.
 - b. Areas of managed and unmanaged conifer woodlots alongside Newcastle Road and parts of the escarpment and farmland to the south of Hāwea Flat. Many of the shelter and woodlot trees have wilding potential.
 - c. Native and exotic amenity plantings associated with rural dwellings, farm buildings, and rural living dwellings, including roadside hedges, amenity plantings, driveway plantings, and shelter trees around dwellings.
8. Extensive areas of improved pasture used for dairying that are favourable seasonal feeding grounds for paradise shelduck, South Island oystercatcher, black-billed gull and spur-winged plover.
9. Rank exotic grassland along road margins and across the moraine landform may be utilised by skinks.

Land use patterns and features

10. Low-intensity pastoral farming and conifer woodlot land use, reflecting the rock-strewn and undulating terrain. Some intensive dairy farming towards the southern edges of the area with irrigation.
11. A relatively spacious patterning of rural living development through parts of the higher ground to the south and southeast of Hāwea Flat and in the vicinity of Loess Lane. Dwellings tend to be sited to optimise the screening effect of landform and mature vegetation features. Lots typically a minimum of 3 to 8ha in size, with two consented but unbuilt platforms south of Hāwea Flat.
12. Neighbouring land uses which have an influence on the landscape character of the area due to their scale, character, and/or proximity include:
 - a. Mata-au (Clutha River) PA (ONF) immediately adjoining the area to the west, which includes the Upper Clutha River Track on the true right side of the river, the Newcastle Track on the true left side of the river, and part of the Hāwea River Track near the north-western boundary of the area. The steep scarps of the river corridors form a strong natural landscape edge to the area.
 - b. Hāwea South North Grandview PA and the ONL along the western boundary of the area, which includes the Grandview Mountain Track network. The proximity and large scale of the mountains form a dramatic backdrop to the area.
 - c. The settlement edge of Hāwea Flat (Rural Residential Zone, typically 4,000m² lot sizes) and further to the north, the Rural Lifestyle Zone (typically lot sizes of 1ha) along the central northern boundary, generally coinciding with the toe of steeper slopes associated with the moraine landform of the area. The settlement pattern forms an abrupt, rectilinear 'cut out' into the moraine landform pattern with no discernible defensible edge, making the area vulnerable to development creep.

Mana whenua features and their locations

13. The entire area is ancestral land to many whānau within the iwi of Kāi Tahu whānui and, as such, all landscape is significant, given that whakapapa, whenua, and wai are all intertwined in te ao Māori.

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

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

Historic attributes and values

15. The agricultural history and development of the area is typical of the Wānaka and Upper Clutha area, with low-intensity pastoralism giving way to denser agricultural settlement during the late 19th to early 20th centuries. This latter farming was primarily focused on grazing, but some cropping was also carried out where viable.

Shared and recognised attributes and values

16. Locally valued as part of the proximate rural backdrop to Hāwea Flat settlement and as the 'divider' between the northern and southern terraces of the Hāwea hinterland on the eastern side of Mata-au (Clutha River) and the Hāwea River.

Recreation attributes and values

17. Devon Link Track between Butterfield Road and the Hāwea River Track.

Perceptual (Sensory) Attributes and Values

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

Legibility and expressiveness attributes and values

18. The rolling moraine landform, escarpment and rock boulders are strongly expressive of the glacial processes that have shaped the Upper Clutha Basin.

Particularly important views to and from the area

19. The sequence of attractive and varied 'rural' views from Kane Road across the eastern portion of the area. The rolling terrain and frequency of shelterbelt and shade plantings confers a complexity that contrasts with the more open and expansive terrace landscapes to the south and north (the areas addressed by 21.23.13 and 21.23.15 respectively). The boulders and often patchy patterning of conifers across the steeper terrain contribute to the impression of a spacious and relatively undeveloped rural landscape in places, that forms both a marked contrast with the established settlement patterning at Hāwea Flat as well as functioning as a distinctly rural backdrop to the settlement. Elsewhere, the more open pastoral character and limited visibility of built development reinforces the rural impression and the connection of the area to the proximate pastoral mountain context (Grandview Range PA and ONL).
20. The intermittent mid to long-range views from Camp Hill Road, Newcastle Road, the Devon Link Track and Hāwea Flat settlement in which the continuous sequence of moraine is visible and forms a strong contrast with the open and planar outwash/lakebed terrace of 21.23.15 Hāwea Terrace in the foreground of view. The rising land of the area obscures views to the upper terrace (i.e. the area addressed by 21.23.13), thus reading as a southern 'bookend' to the northern outwash terrace. The very limited visibility

of built development throughout the moraine and mix of pastoral land use interspersed with predominantly conifer plantings confers a distinctly rural impression that blends with the overtly working rural landscape foreground.

21. Long range views from the Grandview Track network (ONL) to the east, in which the area reads as a fragmented area largely due to the patterning of rural living, shelterbelts and exotic forestry, that contrasts with the expansive rural outwash terraces on either side stretching between Hāwea and Luggate.

Naturalness attributes and values

22. Perceptions of naturalness and of a working rural character are largely maintained for people visiting the landscape, although this is undermined to some extent by the presence of driveways, gateways and signage.
23. Human intervention as managed farmland and rural living is evident. The boulder-strewn areas, and close proximity of the mountain context, contribute a moderating influence with respect to the perception of naturalness.

Memorability attributes and values

24. Memorable to residents and locals as a rural backdrop to Hāwea Flats, and as a natural divider of the expansive lower and upper outwash terraces stretching between Hāwea and Luggate.

Transient attributes and values

25. Autumn leaf colour and seasonal loss of leaves associated with the exotic trees.
26. Seasonal pasture colours.
27. The changing shadow patterns from shelter belts and the changing light patterns across the undulating moraine.
28. The presence of stock and wildlife such as hawks.

Remoteness/wildness attributes and values

29. Rural tranquillity and quietness are currently experienced in much of the area away from Hāwea Flat and where the levels of activity are consistent with 'working farmland', hobby farming and low-density rural living.

Aesthetic attributes and values

30. The experience of all of the values identified above from public and private viewpoints.
31. More specifically, this includes:
 - a. Expansive rural views of the continuous moraine landform from the north.
 - b. Strong rural character, with areas of open space – either pastoral or cropping – retained adjacent to road corridors, and rural living development set well back from roads and generally integrated by topography and/or vegetation.
 - c. Aesthetic appeal of the undulating moraine landforms and northern escarpment, with boulders and pockets of regenerating kānuka and grey shrubland.
 - d. The juxtaposition between the tamed rural land and the rougher character associated with the steeper moraine slopes where boulders, regenerating grey shrubland / kānuka and patches of conifers prevail.

Summary of Landscape Values

Physical • Perceptual (Sensory) • Associative

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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The physical, associative, and perceptual attributes and values described above for the Hāwea Moraine area can be summarised as follows:

32. **Moderate - high physical values** relating to the geological importance of the penultimate terminal moraine, the productive soils (with irrigation) and associated agricultural land uses, the sequence of rolling moraine fields strewn with boulders and regenerating shrubland and kānuka in places, and the strong patterns of rural land use.
33. **Moderate associative values** relating to the mana whenua associations of the area, and the shared and recognised values of the area for residents and locals; as a backdrop to Hāwea Flat and a divider of the expansive outwash terraces between Hāwea and Luggate; and as a pleasant, modest, and spacious rural living location 'off the beaten track'.
34. **Moderate perceptual values** relating to the expressiveness of the terminal moraine landform and escarpment, the rural character, the attractive views across open pasture, the low-key rural tranquillity and quietness (in places), and the moderate level of naturalness, with rural living retaining a spacious feel and remaining subordinate to rural patterns.

Landscape Capacity

The landscape capacity of the Hāwea Moraine area for a range of activities is set out below.

- i. **Commercial recreational activities** – **some** landscape capacity for small-scale and low-key activities that: integrate with and complement/enhance existing recreation features; are located to optimise the screening and/or filtering benefit of natural landscape elements; are designed to be of a small scale and 'low-key' rural character; integrate landscape restoration and enhancement (where appropriate); and enhance public access (where appropriate).
- ii. **Visitor accommodation and tourism related activities** – **some** landscape capacity for activities that are located to optimise the screening and/or filtering benefit of natural landscape elements; designed to be of a small scale and 'low-key' rural character; integrate landscape restoration and enhancement (where appropriate); and enhance public access (where appropriate). **Very limited** landscape capacity for tourism related activities that are: visually recessive; designed to be small scale and have a low key 'rural' character; integrate landscape restoration.
- iii. **Urban expansions** – **extremely limited or no** landscape capacity.
- iv. **Intensive agriculture** – **some** landscape capacity where the quality of views and aesthetic attributes and values are maintained or enhanced.
- v. **Earthworks** – **limited** landscape capacity to absorb earthworks associated with trails, farming and rural living/visitor accommodation/tourism related activities that maintain naturalness and expressiveness values and integrate with existing natural landform patterns.
- vi. **Farm buildings** – **some** landscape capacity for modestly-scaled buildings that reinforce the existing rural character.

- vii. **Mineral extraction – limited** landscape capacity for farm-scale quarries that maintain or enhance the quality of views, naturalness values and aesthetic values.
- viii. **Transport infrastructure – very limited** landscape capacity to absorb additional infrastructure that is of a modest scale and low-key rural character.
- ix. **Utilities and regionally significant infrastructure – limited** landscape capacity for additional district-scale 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. In the case of the National Grid, **limited** landscape capacity in circumstances where there is a functional or operational need for its location and structures are designed and located to limit their visual prominence, including associated earthworks. **Very limited** capacity for other larger-scale regionally significant infrastructure.
- x. **Renewable energy generation – some** landscape capacity for small-scale wind or solar generation located where topography or mature vegetation ensures it is not highly visible from public places. **Very limited** landscape capacity for larger-scale commercial renewable energy generation.
- xi. **Forestry – limited** landscape capacity for scattered woodlots of up to 2 hectares in area.
- xii. **Rural living – very limited** landscape capacity to absorb additional rural living without cumulative adverse effects on associative and perceptual values. The rural character of the area is vulnerable to fragmentation and ‘domestication’ through rural living development; and the absence of a discernible defensible edge to Hāwea Flat Rural Residential and Rural Lifestyle zoning makes the neighbouring parts of the area particularly vulnerable to rural settlement creep. Any additional rural living should be set well back from the Hāwea settlement edge, roads, and public tracks; co-located with existing development; integrated by existing landform and/or existing vegetation; designed to be of a small scale and ‘low-key’ and spacious rural character; integrate landscape restoration and enhancement (where appropriate); enhance public access (where appropriate); and should maintain the impression of expansive rural views from public vantage points.

Plant and Animal Pests

- A. Plant pest species include wilding conifers, hawthorn, crack willow, broom, and lupin.
- B. Animal pest species include rabbits, stoats, feral cats, possums, hedgehogs, rats, and mice.