# 21.22.25 Mata-au Clutha River: Schedule of Landscape Values

## **General Description of the Area**

Mata-au Clutha River PA includes the Mata-au Clutha River corridor from the outlet at Lake Wānaka to the boundary with Central Otago District, up to the crest of the enclosing escarpments of the corridor. It also includes the meandering section of the Hāwea River, north of its confluence with the Mata-au, and associated fluvial landforms. Two distinctive escarpments formed by the rivers are also included within the ONF: the western Hāwea terminal moraine scarp; and the scarp east of Wānaka airport.

# **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

- A distinctive deep corridor of escarpments and terraces carved by the Mata-au Clutha River through the
  glacial outwash gravels of the Upper Clutha Basin. The immediate escarpments of the river vary in height
  between about 5 metres east of the Albert Town bridge to over 100 metres at Halliday Bluff. Where there
  are older secondary escarpments enclosing the corridor, these vary between 10 and 50 metres in height.
- 2. The series of alluvial terraces and scarps surrounding the confluence of the Mata-au and Hāwea rivers.
- 3. The distinctive 40-metre-high escarpment east of Wānaka airport, formed by the fluvial action of the Mataau reworking the largely alluvial sediments in this area.
- 4. The 60-metre-high eroded scarp on the western half of the Lake Hāwea penultimate glacial terminal moraine ridge. The entire ridge is identified as a Geopreservation Site of national significance and noted as an excellent example of a terminal moraine. The ridge dammed a glacial lake after the Hāwea glacier retreated resulting in the deposition of several hundred metres of lake sediment under Hawea Flat.

## Hydrological features

- 5. The Mata-au Clutha River, in particular the following features and attributes:
  - a. Highest volume river in New Zealand, and one of the most swiftly flowing rivers in the world.
  - b. Clarity and distinctive turquoise colour of the waters.
  - c. Swift water oxbow features, including the 'S'-shaped meander (The Snake) at Rekos Point and Devils Nook near Luggate. At Devils Nook the entire force of the river flows directly against a rock bluff as the river changes direction, forming powerful whirlpools. This rare hydrological feature is thought to be the most extreme high-volume switchback in the world.
  - d. Habitat for trout, salmon, eel and threatened indigenous fish (galaxids) and supports a significant range of indigenous waterfowl.
- 6. The lower Hāwea River, in particular the complex river meanders between Newcastle Road and the Mataau Clutha confluence, the rapids and gravel shoals, and the delta islands at the confluence.

# **Ecological features and vegetation types**

- 7. Particularly noteworthy indigenous vegetation features include:
  - a. Significant areas of regenerating kānuka woodland present on river terraces at Hikuwai Reserve, on the terraces surrounding the lower Hāwea River, and at the Rekos Point Conservation Area.
  - b. Regenerating kānuka woodland in places along the river banks.
  - Indigenous grey shrubland species and kānuka in many places on the escarpments of the river corridor.
  - d. Some dryland cushionfield communities and short tussock grasslands where the glacial outwash gravels of the river terraces do not have irrigated or improved pasture. These include the threatened pillow native daphne (*Pimelia sericeovillosa* subsp. *pulvinaris*), desert broom (*Carmichaelia petriei*), cushions (*Raoulia spp.*) and heaths (e.g. *Leucopogon muscosus*). Significant Natural Areas on the Poplar Beach intermediate terrace protect cushionfield communities and kānuka woodland in this location
- Other distinctive vegetation types include:
  - Crack willow, poplar, elderberry, hawthorn, lupin and other exotic weeds are predominant along the riverbanks of the Mata-au Clutha and Hāwea.
  - b. Mature and semi-mature radiata pine stands and plantations at The Outlet, the Albert Town Campground and further downstream, with some wilding spread.
  - c. Stands of Lombardy poplar at The Outlet, Albert Town and further downstream.
  - d. Predominantly low intensity grassland and scattered k\u00e4nuka regeneration on intermediate terraces. However between Albert Town and Rekos Point, the northern intermediate terraces have improved pasture under pivot irrigation. A small area of pivot irrigation is also present on the river terrace near The Snake horseshoe bend.
- 9. The kānuka woodland, grey shrubland and expansive areas of exotic grassland and the varied landforms (terraces and escarpments) provide suitable feeding habitat for New Zealand falcon and Australasian harrier and nesting and feeding habitat for New Zealand pipit and the smaller native insectivorous birds, such as grey warbler and fantail.

# Land use patterns and features

- 10. Much of the river corridor is Council-owned or Crown-owned land used for informal recreation, camping or historic/scientific reserve. Apart from the bridges, there is little human modification on the immediate banks of the river. The bank and river escarpment on the true right immediately upstream of the Albert Town bridge have been modified to reduce hazards associated with river erosion and there are shelters, toilets and a rodeo arena within the Albert Town campground across the river.
- 11. Low density rural living and small farming on lots of 20-40ha is present on the intermediate terrace at Poplar Beach on the southern side of the Mata-au Clutha River below Wānaka airport. Across the river to the north, dairy farming under pivot irrigation is present on the intermediate terrace, as far west as the Hāwea confluence. Farming infrastructure, including haysheds, milking sheds, silos, farm tracks and effluent ponds are also evident.

# Archaeological and heritage features and their locations

12. Rekos Point Conservation Area, spanning a large area of 'The Snake' meander of the Clutha Mata-au north of Luggate. The point is named after Reko, a rangatira who, together with Kaikōura, guided Nathaniel Chalmers from the Upper Clutha down the river by mōkohi (reed raft) in 1851.

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- 13. Various inter-related complexes of 19th and early 20th century alluvial gold mining and dredging scattered along the Mata-au Clutha River, including at Rekos Point and downstream of the Red Bridge. These include water races, sluice box channels, herringbone tailings, hut sites, water wheels and stamper batteries.
- 14. Various sites of punts and ferries crossing the Mata-au Clutha, including the site of the Luggate Punt Ferry, access track and ferryman's house immediately downstream of the Red Bridge.
- 15. Grandview Bridge (Red Bridge) at Church Road near Luggate, a steel truss road bridge opened on October 28, 1915 (QLDC Ref 515).
- 16. James Horn plaque at the Albert Town Bridge, commemorating opening of the first bridge in 1930 (QLDC Ref. 509).
- 17. Pioneer graveyard at Graveyard Bend opposite Albert Town (QLDC Ref. 508).

#### Mana whenua features and their locations

- 18. The Mata-au was an important trail for Māori accessing the Upper Clutha and Lakes Wānaka, Hāwea, and Whakatipu Waimāori from coastal Otago, and was used by people trading pounamu (greenstone) from the West Coast. A kāika mahika kai (food gathering settlement) and permanent fortified pā, known as Te Rua Tūpāpaku, was located alongside the river near Luggate.
- 19. A contemporary nohoaka (camping site to support traditional mahika kai activities) at the Albert Town campground on the true right of the Hāwea, provided as redress under the Ngāi Tahu Claims Settlements Act 1998.

#### **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

20. Mata-au, Hāwea River and Te Rua Tūpāpaku (Clutha River near Luggate) have been identified as Wāhi Tūpuna by Ngāi Tahu.

# Historic attributes and values

- 21. Strong historic associations with access into the Upper Clutha for early European and Chinese settlers and gold miners and early transport infrastructure (including evidence of historic ferries and punts around Albert Town and the Red Bridge.
- 22. Strong historic associations with gold mining in and alongside the Mata-au Clutha River, and associated physical remnants, including evidence of sluicing and dredging.
- 23. Strong historic associations with early European development and pastoralism in the area, including the pioneer graveyard at Albert Town.

## Shared and recognised values

- 24. Nationally recognised values of the Mata-au Clutha River as the highest volume and flow river in New Zealand.
- 25. Locally shared and recognised values for the contribution of the PA to the Upper Clutha Basin sense of place and distinctiveness and its recreational attributes.

#### Recreation attributes and values

- 26. Highly valued destination for kayaking, rafting, and fishing (particularly fly fishing) on the Mata-au and Hāwea River. Jetboating is popular on the Mata-au Clutha River.
- 27. Camping at Albert Town campground, and swimming and picnicking at easily accessible spots along the rivers; Freedom camping for self-contained vehicles in accessible spots along the rivers, outside of prohibited zones.
- 28. Very popular destination for walking and mountain biking on the network of trails that run along both sides of the Mata-au Clutha River between The Outlet and Luggate, and on the Hāwea River Track.
- Events associated with kayaking national events, including national freestyle, national secondary schools and open nationals involving Hāwea Standing Wave structure (outside the PA) and reaches of the lower Hāwea.

# 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

- 30. The course of the Mata-au Clutha River and the fluvial escarpments and terraces within the river corridor are highly visible and expressive and provide clear evidence of the eroding action of the river on the surrounding glacial outwash plains.
- 31. The eroded scarp on the western part of the penultimate Hāwea terminal moraine is a striking and expressive landform that is clearly related to the erosive action of the Hāwea River. It is visually prominent from the Hāwea Flats and the Hāwea River Track.

## Coherence

32. Coherent pattern formed by the river course, escarpment and fluvial terrace landforms, with linking vegetation patterns of willows along the river edges and kānuka on escarpments and some terraces.

# Particularly important views to and from the area

- 33. Enclosed highly attractive views from the surface of the rivers are dominated by the waterbody, its vegetated margins and the immediate riverbanks or escarpments.
- 34. High amenity views from the walking and cycling tracks that take in the dynamic river waters and the series of imposing escarpments and terraces that step up from the rivers. The scale, clarity and impact of these landforms is greater in the Mata-au Clutha corridor than in the lower Hāwea River. There is a varied level of enclosure experienced along the tracks, with long-range views to the mountain ranges available from some areas, and restricted mid-range views of the river corridor from others. The river course, escarpment and fluvial terrace landforms, with linking vegetation patterns of willows along the river edges and kānuka on escarpments and some terraces form a coherent pattern as people move through the ONF.

## Naturalness attributes and values

35. The Mata-au Clutha River has unmodified flow characteristics and generally unmodified and dynamic geomorphology, with ongoing processes of fluvial erosion and deposition. The exception is the true right bank upstream of the Albert Town bridge, where erosion hazards are being managed by rock revetments and bank reshaping. Natural processes of vegetation spread are occurring and the scarps and terraces (in places) support significant indigenous vegetation communities.

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- 36. Although rural living, campgrounds, modified landforms and intensive farming are present with the PA, this domestication and modification is dwarfed by the scale of the soaring river terrace escarpments and the areas of indigenous vegetation, and there is a high perception of naturalness overall.
- 37. Flow characteristics on the Hāwea River are managed by control gates at the Lake Hāwea outlet, but the lower stretch of the river is otherwise relatively unmodified. There is a perception of significant naturalness, despite the presence of crack willows and the built interventions at Albert Town campground.

# Memorability attributes and values

38. The dramatic scale of the river corridor, the powerful flow and clear turquoise waters of the Mata-au Clutha River, the contrasts between the scarp and terrace landforms, and the sense of enclosure experienced by people accessing the rivers and adjacent public tracks create a highly memorable landscape.

### Transient attributes and values

39. Transient attributes include fluctuations in the H\u00e4wea River flow, the presence of wildlife, and the seasonal changes in the vegetation lining the river, particularly the gold of willows and poplars in autumn and their intense fresh green in spring.

# Remoteness and wildness attributes and values

40. People on the surface of the Mata-au downstream of Albert Town are enclosed within the river corridor and fringing vegetation and experience a strong sense of remoteness and wildness. This is also true for people using those trails that are separated from urban, rural living or intensive agriculture land uses.

## Aesthetic attributes and values

- 41. The experience of all of the values identified above from a wide range of public viewpoints.
- 42. More specifically, this includes:
  - a. The volume, scale and fast-moving flow of the Mata-au Clutha River.
  - b. The distinctive swift water horseshoe bends and meanders in the rivers.
  - The dramatic and expressive sequence of contrasting terrace and scarp fluvial landforms stepping
    up from the river courses.
  - d. The autumn and spring colours of riverside willows and poplars and the contrasting turquoise colour of the Mata-au Clutha.
  - e. The spread of indigenous vegetation, particularly kānuka woodland, along the rivers and escarpments and on some terraces.
  - f. The ability to travel along the rivers on walking and cycling trails or on the water itself and to be immersed in the natural, wild and scenic qualities of the river corridors.

# **Summary of Landscape Values**

Physical • Associative • Perceptual (Sensory)

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

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The various physical, associative and perceptual attributes and values described above for the Mata-au Clutha River PA can be summarised as follows:

- 43. **Very high** physical values relating to the exceptional unmodified volume, flow and clarity of the Mata-au Clutha River waters, the distinctive horseshoe bends and high flow switchback, the clarity and scale of the fluvial landforms, the areas of indigenous vegetation and threatened plant communities, and the habitat values for native and introduced fauna.
- 44. **High** associative values relating to the Kāi Tahu associations with the river, the history of gold mining and early European settlement, the very significant recreational attributes, and the strong shared and recognised values.
- 45. **Very high** perceptual values relating to the scale, legibility and expressiveness of the rivers and their associated fluvial landforms, the high level of naturalness, the coherence and memorability of the corridor, and the strong aesthetic qualities.

# **Landscape Capacity**

The landscape capacity of the Mata-au Clutha River PA for a range of activities is set out below.

- Commercial recreational activities some landscape capacity for activities that integrate with and complement/enhance existing recreation features; are located to optimise the screening and/or camouflaging benefit of existing natural landscape elements; designed to be of a sympathetic scale, appearance, and character; integrate landscape restoration and enhancement; and enhance public access.
- ii. Visitor accommodation and tourism related activities limited landscape capacity to absorb visitor accommodation that is within existing buildings or building platforms. Extremely limited or no landscape capacity for tourism-related activities.
- iii. Urban expansions extremely limited or no landscape capacity.
- iv. Intensive agriculture limited landscape capacity on intermediate terraces only.
- v. Earthworks limited landscape capacity for earthworks and additional trails that protect naturalness and expressiveness attributes and values and are sympathetically designed to integrate with existing natural landform patterns. Some landscape capacity for additional earthworks to manage erosion hazards in the vicinity of Albert Town that are sympathetically designed to integrate with existing natural landform patterns.
- vi. **Farm buildings** in those areas of the PA with pastoral land uses, **limited** landscape capacity for modestly scaled buildings that reinforce existing rural character and are sited to optimise the integrating effects of existing landscape and vegetation features.
- vii. Mineral extraction extremely limited or no landscape capacity.
- viii. Transport infrastructure extremely limited or no landscape capacity.
- ix. **Utilities and regionally significant infrastructure very limited** landscape capacity for infrastructure that is 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 and/or co-located with existing infrastructure.
- x. **Renewable energy generation very limited** landscape capacity for hydro-electric generation that is consistent with the PA's values.
- xi. Forestry very limited capacity for forestry that protects aesthetic and naturalness values.

xii. Rural living – very limited landscape capacity on intermediate terraces where there is existing rural living development and where existing landform and vegetation features mean that new development is reasonably difficult to see from outside the site. Extremely limited or no landscape capacity in other locations.

# **Plant and Animal Pests**

- A. Animal pest species include rabbits, stoats, possums, rats and mice.
- B. Plant pest species include oxygen weed, crack willow, hawthorn, elderberry, broom, lupin, and wilding conifers.