

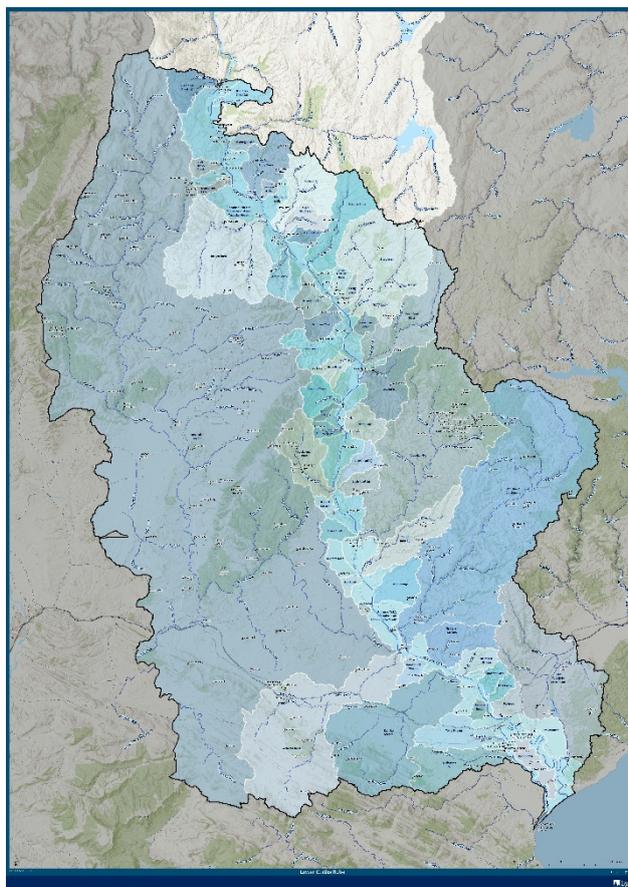
The Lower Clutha Rohe Snapshot (Clutha/Mata-Au FMU)

This snapshot summarises what ORC knows about the Lower Clutha Rohe, to help create a vision for its freshwater.

The Rohe is part of the Clutha/Mata-Au FMU. In creating a vision for the Rohe, we also need to think about a vision for the whole Clutha/Mata-Au which encompasses Ki Uta Ki Tai – from the mountains to the sea – and how they fit together.

In this Rohe the Clutha / Mata-au runs unobstructed from Roxburgh dam to the sea. It includes the Pomahaka catchment, as well as a number of other river catchments that feed the Clutha/Mata-au including Tuapeka, Waitahuna, Waiwera, the Bengier Burn, Beaumont River, Tuapeka and Waitahuna catchments, and a number of smaller tributaries.

The Rohe also include Lake Tuakitoto, a small shallow lake with an adjoining wetland of a type now rare in Otago.



Brief history

The Mata-au River takes its name from the earliest of peoples, the Waitaha and features in early traditions and accounts of the taniwha such as Kopuwai whose domain of influence included the Mata-au. The river was part of the mahika kai¹ network that drew tupuna inland, and was also very important as a means of transporting people and resources such as pounamu from the interior to the coast. Rights to inland resources and mahika kai were obtained through traditional means such as discovery, original naming, through battle, or strategic marriages, that underpin whakapapa connections and tribal identity. Numerous placenames, nohanga, tauraka waka,² mahika kai resources and traditions associated with the river are located along the river and contribute to the importance of the wāhi tūpuna³ values associated with the river and surrounding lands.

The river and its tributaries supported seasonal settlements and plentiful mahika kai. In particular, the Pomahaka River was an important mahika kai for kāika (settlements) in the Catlins and Tautuku areas, and the coastal area at the mouth of the Mata-au/Clutha River offered a bounty of mahika kai, including eeling and harvest of other freshwater fish in lagoons and up the river. Reliance on coastal resources increased after the land sales of the 1840s and 1850s and the associated loss of access to much of the traditional land based mahika kai.

¹ The customary gathering of food and natural materials, the places where those resources are gathered, and the transfer of knowledge, custom, and practice that goes along with it.

² Canoe landing places

³ Cultural landscape, encompassing places where the tūpuna travelled, stayed, gathered and used resources, and the associated stories and traditions that transcend the generations.

Mahika kai and sites associated with travel, settlement and use of the river system and surrounding lands contribute to significant wāhi tūpuna⁴ values.

The wetland complex formerly known as Te Roto-nui-a-Whatu now represented by the remnant wetland Tuakitoto was an important food basket for whanau and hapu living at and near the mouth of the Mata-au. Drainage has significantly reduced the size and function of this former mahika kai resource, compounded by pollution and sedimentation from the source catchment. Roto-nui-a-Whatu was named by the great discoverer Rakaihautu.

The Rohe encompasses the urban centres Roxburgh, Lawrence and Balclutha. The Otago goldrush began in Gabriel's Gully near Lawrence, and the Rohe still contains reminders of its mining past. This, and the history of agriculture, as well as coal mining in Kaitangata, gives the Rohe a storied history, with many heritage sites.

The main economic activity in the Rohe is agriculture – from sheep, beef and dairy in the lower part of the Rohe, to orchards around Ettrick, Roxburgh and Millers Flat, and coal mining at Kaitangata. Dairy in the mid to lower part of the Rohe increased dramatically between 1999 and 2008.

Recreational activities include hunting, nature tourism and renowned fishing on the Pomahaka.

Geography and hydrology

Instream values in the Lower Clutha are profoundly influenced by the hydro dams. The flow variability affects river margins, reducing habitat, affecting spawning, and feeding sites available for native species, including inaka and tuna, with flow-on effects for human values like mahika kai and whitebaiting.

The Lower Clutha is dominated by alluvial plains, rolling hill country and lowlands. The Pomahaka is the biggest sub-catchment, with steep tussock-dominated uplands. Rainfall increases down the catchment, creating numerous flushing flows.

Soils vary by elevation. In the upper Umbrella and Blue Mountains, soils are semi-arid, while low lying areas have poorly draining soils. Farming has relied on artificial drainage, particularly tile drains, which provide a direct pathway for contaminants to enter water. Predominant land cover throughout the Rohe is high producing grassland. The majority of intensive agriculture occurs in the middle to lower catchment.

Lake Tuakitoto is a large lowland lake and adjoining swamp, north of the mouth of the Clutha River/Mata-Au and is one of the best remaining examples of a previously widespread wetland type in Otago. Adjacent to the Matau (northern) branch is the Clutha-Matau wetlands, which are classified as regionally significant.

Lower parts of the catchment, such as Inch Clutha, are at increased risk of flooding. The wetlands have significant hydrological function including maintaining water quality and low flows and reducing flood flows. Sediment passing out of the Clutha Mouth can have an adverse effect on coastal kelp forests.

Water Quality⁵

The Clutha/Mata-Au through this FMU has good water quality, as do the tributaries in their upper reaches. However, some of the tributaries, particularly in the Pomahaka catchment have poor water quality in their lower reaches, and these are generally non-compliant with the limits as set out in the Otago Water Plan.

⁴ Cultural landscape, encompassing places where the tūpuna travelled, stayed, gathered and used resources, and the associated stories and traditions that transcend the generations.

⁵ SOE Monitoring Report 2006 to 2017

There are local catchment groups established in this Rohe, notably around the Pomahaka River. They have been working for some time to provide practical solutions to address water quality issues.

Freshwater values and challenges

| | What's special about the Lower Clutha Rohe: | What isn't working so well: |
|-------------------------|--|--|
| Kā i Tahu values | <ul style="list-style-type: none"> • The significance of the Mata-au/ Clutha River in Kāi Tahu traditions and history • The ongoing relationship of mana whenua with wāhi tupuna • Significant mahika kai values, including sites and wetlands | <ul style="list-style-type: none"> • Loss of connections to wāhi tupuna from modification of water bodies and land • Disruption of sediment transport depleting estuarine and coastal habitats • Effects of water body modification and environmental degradation on mauri and on mahika kai • Loss of access to mahika kai and other significant areas • Loss and diminishment of wetlands |
| Environment | <ul style="list-style-type: none"> • Threatened Species in various upper catchments: Clutha flatheads, Dusky Galaxiids, Lamprey, Pomahaka Galaxiids Giant Kokopu (Lake Tuakitoto) • Natural form and Character e.g. Rongahere gorge, lower Beaumont • Native forest in upper catchments • Wetlands are home to threatened species (bittern, dotterel, crakes, swamp nettle) • Inaka (Whitebait) | <ul style="list-style-type: none"> • Lack of detailed information in several catchments • Contamination pressure on aquifers from septic tanks and poor bore security • Potential abstraction issues • Considerable and variable water quality issues throughout the catchments |
| Economy | <ul style="list-style-type: none"> • Sheep, Beef, Dairy • Commercial forestry • Coal Mining • Nature tourism | <ul style="list-style-type: none"> • Intensive land use affecting waterways. • Climate Change resilience |
| Social | <ul style="list-style-type: none"> • Community drinking water • Hunting (mountains and wetlands) • Fishery (e.g. Pomahaka) • Lake Tuakitoto is an integral part of the Lower Clutha Flood Control and Drainage Scheme • Heritage e.g. gold mining, Miller's Flat bridges | <ul style="list-style-type: none"> • Community supply at risk from contamination • Risk to water-based pursuits due to contamination of waterways |