

## Catlins FMU

This snapshot summarises what ORC knows about the Catlins FMU, to support the community in developing a vision for its freshwater.

The Catlins FMU lies between the Clutha River/Mata-Au to the north-east and the Mataura River to the west.

The Rohe includes a number of catchments that drain to the coast, including the Owaka, Catlins, Puerua, and Tahakopa Rivers, many of which still have native cover.

It also includes Kuramea (Lake Catlins) and its adjoining wetland and estuary, which provides for a diverse range of native species and habitats.



The largest urban centre is Owaka, with around 300 people.

### Brief history

Maori settlement dates to approximately 1150 AD as shown by archaeological excavation of Māori kaika (villages), moa-hunting camps and middens. Settlements were concentrated on or near major river estuaries because they offered access to mahika kai (food resources) along the coast and into the densely forested interior.

Historically, significant settlements were located in the coastal estuaries of the Catlins. This was an important area for mahika kai from both land and sea sources, including lagoons, wetlands, estuaries and forests. Catlins Lake (traditionally known as Kuramea) and estuary were significant mahika kai, supporting settlements in the area, and the lake was also an important waka building location. The ability to retain and pass on knowledge of these values is of continuing importance to Kāi Tahu cultural identity.

European settlement from the early 1800s commenced with whalers and sealers. From 1840s clearing of forests began and agriculture was established in the valleys. From 1850s to 1870s sawmilling grew, becoming a major industry supplying Dunedin together with some sea fishing. The saw milling industry was an important economic contributor at various points across time, however by the 1960s resources became depleted and most mills closed. Today, the population is supported principally by agriculture with an increasingly important tourism industry.

### Geography and hydrology

The Catlins has a cool wet temperate climate. Summer temperatures hover around 16-24 degrees with the occasional day of up to 30 degrees Celsius. Winter temperatures range from 8-13 degrees with some frosts and occasional light snowfalls. Rainfall averages about 1300mm pa evenly spread through the year. Winds can reach considerable strengths, especially on the exposed coast. Sudden changes in weather are common.

The Catlins has the largest remaining area of native forest on the South Island's east coast, and is defined by undulating parallel ranges of hills, which are separated by the valleys of the Owaka, Catlins and Tahakopa rivers, which flow in a south-easterly direction.

The coast is dominated by sandy bays and cliffs and rises steadily from the south-east to north-west, reaching its maximum altitude (720 m) at Mt Pye, then it falls again, through rolling country, towards the Mataura River (in Southland) and the Clinton lowlands. Flat land is restricted to the lower reaches of the principal rivers and streams while upper catchments have their vegetation intact.

### Water Quality

Water quality in the Catlins FMU is generally very good. Typically, the higher the percentage of native bush cover in the catchment the better water quality. Both the Tautuku and Maclennan rivers have indigenous forest covering >90% of their catchment area and have excellent water quality reflecting pre-pastoral conditions. The Tahakopa catchment is also dominated by indigenous forest (>50%). In contrast, the Owaka catchment is dominated by high producing exotic grassland (>60%), the areas with more intensive land use which are reflected in poorer water quality in this catchment.

### Freshwater values and challenges

	What's special about Catlins:	What isn't working so well:
Kai Tahu values	<ul style="list-style-type: none"> <li>• The ongoing relationship of mana whenua with wāhi tūpuna<sup>1</sup></li> <li>• Mahika kai values</li> <li>• Traditional settlements on antiquity</li> </ul>	<ul style="list-style-type: none"> <li>• Loss of connections to wāhi tupuna from modification of water bodies and land</li> <li>• Effects on mauri and mahika kai resulting from sedimentation and intensive grazing</li> <li>• Loss of access to mahika kai and other significant areas</li> </ul>
Environment	<ul style="list-style-type: none"> <li>• Natural Character and form (high degree of naturalness), extensive forests (47%) some from top to bottom of catchment with many virgin forest areas. Well-developed estuaries in good condition.</li> <li>• Outstanding coastal landscapes.</li> <li>• Ecological values include high fish and macroinvertebrate diversity, rare fish (Gollum galaxiids – Clutha flathead galaxiids – lamprey), trout spawning and rearing habitat and significant populations of eels, whitebait - lamprey - koura (crayfish) – pipis, marine environment (e.g. kelp forests).</li> <li>• Scenic values, e.g. pristine coastal areas.</li> <li>• Areas with low human impact.</li> <li>• Good quality water in most areas.</li> <li>• Scientific research/reference sites.</li> </ul>	<ul style="list-style-type: none"> <li>• Stock management in riparian areas and restoration of riparian areas.</li> <li>• Pest animal impacts on water quality (e.g. <i>E. coli</i>)</li> <li>• Septic tank practices particularly in relation to tourism and accommodation services.</li> <li>• Baseline information to support decision making related to groundwater and surface water quality.</li> </ul>
Economy	<ul style="list-style-type: none"> <li>• Sheep and beef grazing, and some dairy (Owaka catchment) provide the majority of land use in the catchment, with deer farming and forestry being less common.</li> <li>• Tourism is a developing market.</li> </ul>	<ul style="list-style-type: none"> <li>• Resilience to climate change</li> <li>• Appropriate road infrastructure and use.</li> </ul>

<sup>1</sup> Cultural landscape, encompassing places where the tūpuna travelled, stayed, gathered and used resources, and the associated stories and traditions that transcend the generations.

<b>Social</b>	<ul style="list-style-type: none"><li>• Amenity values, e.g. tourism, recreation including camping, walking, fishing, hunting, swimming, canoeing, boating, nature appreciation and conservation volunteering (nature based social sciences and scenic photography) and visiting natural and cultural sites.</li></ul>	<ul style="list-style-type: none"><li>• Camping and walking infrastructure and access.</li><li>• Balancing tourism visitor numbers and experiences with capacity to avoid overcrowding potentially impacting on freshwater.</li></ul>
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