

Proposed new rules and regulations Catlins FMU

Recent content updates:

26 September 2023:

- Added proposed environmental flows, level and take limits for lakes and rivers and added information regarding whether further allocation of water is available

25 September 2023:

- Added Catlins FMU boundary map

24 September 2023:

- Added timeframe for achieving the environmental outcomes for target attribute states

A map of the Catlins FMU is shown below.



Environmental outcomes

In its new Land and Water Regional Plan ORC must set environmental outcomes for the freshwater values identified in the Catlins FMU.

An environmental outcome statement describes the desired future state that communities in the Catlins FMU and tangata whenua would like to see for a specific value.

The environmental outcome statements are very similar across all FMUs and rohe in Otago, which reflects the fact that the aspirations that tangata whenua and the different communities have for the environment are largely consistent across the region. Table 1 sets out the draft environmental outcomes for the Catlins FMU.

Value	Environmental Outcomes for Catlins FMU	Attributes to measure and monitor
NPS-FM compulsory values (apply to every FMU/rohe)		
Ecosystem health	Freshwater bodies support healthy freshwater ecosystems with thriving habitats for a range of indigenous species, and the life stages of those species, that would be expected to occur naturally.	<p>Rivers:</p> <ul style="list-style-type: none"> Ammonia Nitrate Suspended fine sediment E. Coli Dissolved reactive phosphorus Periphyton Macroinvertebrates (MCI/ASPM) Fish IBI E. Coli primary contact sites Macroinvertebrates (QMCI) score*¹ Deposited fine sediment* Dissolved oxygen* Ecosystem metabolism* <p>Lakes:</p> <ul style="list-style-type: none"> Phytoplankton (Chlorophyll-a) Total nitrogen Total phosphorus Ammonia Cyanobacteria* Submerged plants (natives)* Submerged plants (invasive)* Lake-bottom dissolved oxygen* Mid-hypolimnetic dissolved oxygen*

Draft Land and Water Regional Plan: Catlins FMU

Value	Environmental Outcomes for Catlins FMU	Attributes to measure and monitor
Human contact	Water bodies are clean and safe for human contact activities and support the health of people and their connections with water bodies.	<p>Rivers:</p> <p>E. Coli</p> <p>Suspended fine sediment</p> <p>Periphyton</p> <p>E. Coli primary contact sites</p> <p>Lakes:</p> <p>Phytoplankton (Chlorophyll-a)</p> <p>Cyanobacteria (Biovolume cubic millimetres per litres)*</p>
Threatened species	The freshwater habitats of threatened species are protected and support the persistence and recovery of threatened species over time.	<p>All the attributes listed for Ecosystem Health above.</p> <p>Recency of presence</p> <p>National conservation category and status</p> <p>Regional conservation category and status</p> <p>Number of sub-populations</p>
Mahika kai (food and resource gathering)	<p>Mahika kai resources are restored to a condition in which populations of valued mahika kai species are self-sustaining and plentiful enough to support cultural take.</p> <p>Mana whenua are able to safely access, harvest and use these resources now and in the future.</p>	All the attributes listed for Ecosystem Health above.

Other values (apply to every FMU/rohe)		
<p>Natural form and character</p>	<p>Freshwater bodies and their riparian margins, and any connected receiving environment including any estuaries and hāpua (lagoon) are able to behave in a way that reflects their natural form and character to the greatest extent practicable, and the natural form and function of unmodified water bodies is protected.</p>	<p>Rivers:</p> <p>Suspended fine sediment</p> <p>Periphyton</p> <p>Macroinvertebrates (QMCI) score*</p> <p>Deposited fine sediment</p> <p>Lakes:</p> <p>Phytoplankton (Chlorophyll-a)</p> <p>Cyanobacteria*</p> <p>Submerged plants (natives)*</p> <p>Submerged plants (invasive)*</p> <p>Lake-bottom dissolved oxygen*</p> <p>Mid-hypolimnetic dissolved oxygen*</p>
<p>Drinking water supply</p>	<p>Provided the health and wellbeing needs of water bodies and freshwater ecosystems are met, source water from water bodies (after treatment) is safe and reliable for the drinking water supply needs of the community.</p> <p>Activities do not introduce or increase the concentration of contaminants in water, so that, after existing treatment, it no longer meets drinking water standards</p>	
<p>Wāhi tūpuna (sites of significance to iwi)</p>	<p>Cultural associations with wāhi tūpuna are maintained, visible, and whānau are able to access, use and relate to wāhi tūpuna now and in the future.</p>	<p>Coming soon.</p>

Other values (apply to every FMU/rohe)		
<p>Fishing</p>	<p>Fish are safe to eat; and</p> <p>Insofar as it is consistent with the protection of indigenous and threatened species, the spawning and juvenile rearing waters for trout and salmon are provided for.</p>	<p>Rivers:</p> <p>E. Coli</p> <p>Suspended fine sediment</p> <p>Periphyton</p> <p>Nitrate</p> <p>Suspended fine sediment</p> <p>Macroinvertebrates (MCI/ASPM)</p> <p>Fish IBI</p> <p>Macroinvertebrates (QMCI) score*</p> <p>Lakes:</p> <p>Phytoplankton (Chlorophyll-a)</p> <p>Cyanobacteria (Biovolume cubic millimetres per litre)*</p>
<p>Irrigation, cultivation and production of food and beverages</p>	<p>Provided the health and wellbeing of water bodies and freshwater ecosystems and human health needs are met, the cultivation and production of food, beverages and fibre is enabled.</p>	<p>Rivers:</p> <p>Suspended fine sediment</p> <p>Periphyton</p> <p>Water quantity</p>
<p>Wetlands</p>	<p>Wetlands are protected, and their ecosystem health, indigenous biodiversity, and hydrological functioning is restored where degraded.</p>	<p>Coming soon.</p>
<p>Taoka species (treasured species)</p>	<p>Thriving, connected habitats for indigenous species are restored and sustained for ever and their mauri is intact.</p>	<p>Coming soon.</p>

Target attribute states

Attributes are indicators that we can measure and monitor. Attributes tell us about the state of a river or lake. A target attribute state (TAS) is the state that an attribute must achieve to make sure that an environmental outcome is met. The timeframe for achieving the TAS for each FMU is set by the environmental outcomes for the FMU. For the Catlins FMU, the environmental outcomes are to be achieved by 2030. By monitoring attributes and comparing their baseline state with their TAS we learn how well how well we are on track towards achieving the environmental outcomes for this FMU.

While the environmental outcome statements are largely consistent across Otago, baseline states and TAS are usually specific to each FMU and rohe. Attributes for each value and baseline states for those attributes have been identified along with trends derived from the Otago Regional Council's State of the Environment (SoE) monitoring data.

The baseline state and TAS for the Catlins FMU are in the map below.

This map shows the proposed monitoring sites and the attribute states in Otago.

Zoom into an area and view the various locations of proposed monitoring sites in an area(s).

Select the yellow dot representing a proposed monitoring site to see the Target Attribute States.

You can further select the Target Attribute States table to view a larger version of the table.

(Note: If you are on a mobile device, tap on the arrow next to the 'X' icon for the table to show.)

A map of these water bodies is available online for you to view:
www.orc.govt.nz/landwatermaps

FMU provisions

National direction requires Council to set limits as rules or action plans (as appropriate) to achieve the environmental outcomes. This can be done at a region-wide level or at FMU/rohe level. The draft region-wide rules are set out in different chapter summaries, including Primary Production, Wastewater Management, Stormwater Management, Earthworks and Drilling, Environmental Flows and Limits (Water Quantity) and various others. However, for the Catlins FMU a number of specific rules are proposed that are needed to make sure the environmental outcomes for this FMU are achieved overtime. These additional rules, which will be included in the Catlins FMU chapter of the new Land and Water Regional Plan, are shown in the table below.

Scientific name	Draft LWRP
<p>Rivers</p> <ul style="list-style-type: none"> • E. Coli • Total nitrogen • Total phosphorus <p>Groundwater:</p> <ul style="list-style-type: none"> • Nitrate <p>Estuaries:</p> <ul style="list-style-type: none"> • Macrofauna communities • Mud content 	<ul style="list-style-type: none"> • Increase setbacks for high-risk activities, such as intensive winter grazing and stock access near waterways. • all livestock (including sheep) on low slope land of 10 metres from the beds of wide rivers (over 1 metre) and 3 metres from smaller continually flowing rivers. • with a transition time of 10 years for existing fences. • More stringent management of harvesting of plantation forestry, for example by requiring wider setbacks from water bodies, or requiring consent where activities are currently permitted under the NESPF.

Environmental flows and levels and limits on take, diversion and damming of water

The Catlins FMU chapter will also include take limits and environmental flows and levels for rivers and lakes in this FMU.

Take limits reflect the total quantity of water that can be taken, dammed or diverted from a stream, river, lake or aquifer. Once the combined rate of take for all consented water takes, diversion or damming activities from a water body matches this take limit no further water can be allocated in new consents.

Environmental flows (for rivers or streams) or environmental levels (for lakes and aquifers) include minimum flows or levels that when reached all consented (and some permitted) takes, diversions and damming activities must cease. These restrictions on water taking, diversions or damming activities typically occur during dry periods and are needed to make sure after important values, such as threatened fish, drinking water supply or mahika kai (food and resource gathering) values, are looked after.

Lakes

Environmental levels and take limits for the Catlins FMU's lakes are shown in the table below. Given the uniqueness of these lakes, it is proposed that a narrative take limit is set for these lakes that prohibits any new takes, damming or diversions that could impact lake levels (except for takes that are permitted under the Resource Management Act 1991). This will ensure that these lakes will continue to behave naturally.

Name	Environmental level(s)	Take limit	Further allocation available (estimate based on best available information)
Natural lakes (unmodified)			
Catlins Lake/Kuramea Lake Wilkie	Natural minimum water level	Narrative - no new taking, diversions, damming or discharges from the lake or upper catchment.	No

River catchments

Environmental flows and take limits for the Catlins FMU’s rivers are shown in the table below.

Take limits and environmental flows are often set as a percentage of the 7-day Mean Annual Low Flow (7-day MALF). The 7-day MALF is a flow statistic that provides an indication of how low the flow gets in a typical year.

For smaller rivers or streams with a mean flow of 5,000 l/s or less, such as the Purakanui River or Nugget Stream, a total take limit is set as 20% of the 7-day MALF. For larger rivers with a mean flow of more than 5,000 l/s, such as the Catlins River, a larger take limit is set at 30% of the 7-day MALF.

Restrictions on water takes, diversions and damming activities in catchments of smaller rivers or streams are triggered when flows are at 90% of the 7-day MALF, whereas for larger rivers these restrictions do not kick in until flows are at 80% of the 7-day MALF.

Rivers managed by default minimum flows and take limits

Table 4 provides estimates of the actual minimum flows and take limits for different catchments based on the default method using the best available information to determine the 7-day MALF of each catchment. The numeric minimum flows and take limits will not be included in the LWRP. Instead, the LWRP will refer to the relevant % of 7-day MALF.

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	Environmental flow(s) (l/s)	Take limit (l/s)	Further allocation available (estimate based on best available information)
<p>River catchments with a mean flow $\leq 5,000$ l/s and managed by default limits</p> <ul style="list-style-type: none"> Minimum flow set as 90% of 7-day MALF Take limit set as 20% of 7-day MALF 			
Cosgrove Creek	51	11	Yes
Hinahina Stream	15	3	Yes
Isas Creek	33	7	Yes
Karoro Creek	149	33	Yes
Nugget Stream	170	38	Yes
Otara Stream	0	0	No
Pillans Stream	33	7	Yes
Puerua River	475	106	Yes
Purakaunui River	622	138	Yes
Waiheke Stream	243	54	Yes
Waipati River	2113	792	Yes
Waitangi Stream	33	7	Yes
Wilkes Creek	57	13	Yes
<p>River catchments managed by default limits (Mean flow > 5,000 l/s)</p>			
<p>River catchments with a mean flow $\leq 5,000$ l/s and managed by default limits</p> <ul style="list-style-type: none"> Minimum flow set as 90% of 7-day MALF Take limit set as 20% of 7-day MALF 			

Catlins River	809	303	Yes
Tahakopa River	1159	435	Yes
Tautuku River	2090	784	Yes
Waipati River	2113	792	Yes

Outstanding water bodies

Outstanding water bodies are water bodies that have one or more outstanding values. National direction requires the Otago Regional Council to identify outstanding water bodies and protect their important values. The table below lists the outstanding water bodies in this FMU and describes their outstanding values.

A map of these water bodies are available below as well.

You can zoom in and view the various water bodies in an area(s).

Water bodies are shown in a blue colour. Select an area to view the water body name .

(Note: if you are on a mobile device, after selecting a water body, tap on the arrow next to the 'X' icon to view more information.)

A map of these water bodies is available online for you to view:

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Unique identifier	Site identifier	Values and characteristics
Ecology		
ECL46	Tautuku River	<ul style="list-style-type: none"> • Tautuku River lies within the Catlins Conservation Park and the Forest & Bird Fleming River Reserve area and is protected from land use effects and without introduced fish species for much of its catchment. • Native fish species include Black flounder, Common bully, Giant kōkopu, Gollum galaxias, Inanga, Kōaro, Lamprey, Longfin eel, Redfin bully, Shortfin eel. • The Tautuku bird reports include a report of Australasian bittern, a nationally critical threatened species and South Island fernbird, a declining species. • Tautuku River is proposed an outstanding catchment for diversity and representativeness in the Catlins area. • The catchment is nearly fully protected and without introduced fish species for much of its catchment. • It is expected to support all the native fish that characterise this area even though some are yet to have been reported from the catchment.

<p>ECL47</p>	<p>Tahakopa River Bog</p>	<ul style="list-style-type: none"> • Native fish species include Black flounder, Clutha flathead galaxias, Common bully, Common smelt, Gollum galaxias, Inanga, Kōaro, Lamprey, Longfin eel, Redfin bully. • Two declining species of birds, black-billed gull and South Island pied oystercatcher have been reported. • The area is moderate in size (185.9 hectares) and adjacent to the CMA with outstanding site integrity (100% natural with 15% left). • The site scored a weighted conservation rank of 49.5 within the FENZ/WONI analysis (High). • Tahakopa is a rare example of riparian white pine/kahikatea (<i>Dacrycarpus dacrydioides</i>) and silver beech (<i>Nothofagus menziesii</i>) forest. Along with MacLennan River Podocarp Swamp Complex, this is the largest area of pūkio (<i>Carex secta</i>) swamp under reserve status in Otago. • Active peat deposit (1.3 square kilometres) including peat dome. • High regional scientific value. • Provides habitat for nationally or internationally rare or threatened species including the Threatened Australasian Bittern (<i>Botaurus poiciloptilus</i>) and Fernbird (<i>Bowdleria punctata</i>). Good numbers of White-faced Heron (<i>Ardea novaehollandiae novaehollandiae</i>) and other waders and Shags have been noted as well as an average number of Finches (<i>Fringillidae</i>). • High plant species diversity including a composition of manuka, jointed wire rush (<i>Leptocarpus similis</i>) and white pine (<i>Dacrycarpus dacrydioides</i>). • Mudflats have been noted to have high faunal
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<p>ECL48</p>	<p>Waimāeroero / Maclellan River Podocarp Swamp Complex</p>	<ul style="list-style-type: none"> • The site scored a high weighted conservation rank of 32.1 within the FENZ/ WONI analysis (high rank). • High site integrity (97% natural). • This wetland contains the largest stand of white pine (<i>Dacrycarpus dacrydioides</i>) and silver beech (<i>Nothofagus menziesii</i>) forest in South East Otago. Described as a nationally significant forest sequence from swamp to high podocarp forest. • Along with Tahakopa River Bogs, this is the largest area of pūkiō (<i>Carex secta</i>) swamp under reserve status in Otago.
<p>ECL49</p>	<p>Tautuku River Estuary</p>	<ul style="list-style-type: none"> • Tautuku River Estuary represents one of the least impacted estuaries on the southeast coast of Aotearoa due to the unmodified estuary and catchment. Native forest transitioning to wetland to estuarine saltmarsh is an uncommon vegetation sequence in Otago and Aotearoa, hence the wetlands and saltmarsh are classified as regionally significant in the ORC Coastal Plan. • As this estuary has the largest percentage of dense native vegetation cover within the catchment and estuary margin, and highest broadscale ecological health, it is recognised as outstanding. • Tautuku River lies within the Catlins Conservation Park and the Forest & Bird Fleming River Reserve area and is protected from land use effects and without introduced fish species for much of its catchment. • The Tautuku River Estuary is recognised to host a high diversity of threatened and at risk native freshwater fish species and is an important habitat for marine and freshwater fish. • Native fish species include Black flounder, Common bully, Giant kōkopu, Gollum galaxias, Inanga, Kōaro, Lamprey, Longfin eel, Redfin bully, Shortfin eel. • The Tautuku bird reports include a report of Australasian bittern, a nationally critical threatened species and South Island fernbird, a declining species.

<p>ECL50</p>	<p>Pounaweia / Catlins Estuary</p>	<ul style="list-style-type: none"> • The Catlins River Estuary is the largest estuary within the Catlins FMU and largest estuary considered in the outstanding water body assessment. • The Catlins River Estuary provides habitat which supports numerous life stages of the threatened New Zealand sea lion (<i>Phocarcos hookeri</i>, Nationally Vulnerable). The majority of the Catlins population of the New Zealand sea lion are born within the Catlins River Estuary. As this estuary is the most heavily used site within the Catlins and provides critical breeding habitat for New Zealand sea lions it is recognised as outstanding. • The Catlins River Estuary is adjacent to three regionally significant wetlands, the Catlins River Wetland, Ratanui Swamp, and Hungerford Point Saltmarsh, which add to the ecological integrity of the estuary complex. Due to the extremely rare native vegetation sequence which supports a range of high and very high bird and fish ecological values, this estuary is recognised as outstanding.
<p>ECL51</p>	<p>Mokoreta</p>	<ul style="list-style-type: none"> • Mokoreta River is proposed as an outstanding water body for the populations of southern flathead and Gollum galaxias that are rare in Otago and the absence of brown trout from this reach is an additional outstanding feature for this river reach. • There are 217 population fragments of Gollum galaxias recognised in the Department of Conservation (DoC) GIS layer of which 35 are located in the Otago region. The largest population in Otago is the population in the Mokoreta River and this comprises 37% of all the Gollum galaxias habitat in Otago. It is also the third largest population of Gollum galaxias when all populations are compared. • The Mokoreta River has already been recognised as outstanding due to the diversity of non-diadromous galaxiids and absence of introduced fish in this catchment. The size of the Gollum galaxias population in this catchment reinforces the outstanding value assessment. • There are 93 population fragments of southern flathead recognised in the DOC GIS layer of which 2 are in the Otago region. The largest population in Otago is the population in the Mokoreta River and this comprises 82% of all the southern flathead habitat in Otago.

Physical		
PHY28	Pūrākaunui Falls	<ul style="list-style-type: none"> Regionally Significant. Easily accessible example of waterfall over near flat-lying Triassic sandstone beds. Popular tourist attraction; aesthetically beautiful cascades as they fall over successive beds. Hard sandstone beds hold up waterfall. Made of Murihiku Supergroup sedimentary rocks. 500 metre walk from Pūrākaunui Falls Rd, on Pūrākaunui River. 10km SW of Owaka, Catlins.
PHY29	Kuramea / Catlins Lake	<ul style="list-style-type: none"> Regionally Significant Excellent and unusual example of a large tidal lagoon (lake) with shape controlled by Settlement Fault along east side. Elongate intertidal lake linked by a narrow estuary to the sea. 3km south of Owaka township.
PHY30	Tautuku Bay coastal features	<ul style="list-style-type: none"> Nationally Significant <p>A pristine environment containing some of the best examples of typical Catlins coastline landforms. One of the few bays in New Zealand with an almost completely unmodified catchment except for sparse logging operations. Florence Hill lookout gives a spectacular v</p> <p>Tautuku River estuary and salt marsh, Tautuku Bay 4km-long white sandy beach, sandspit and indigenous forested-covered sand dunes, a tombolo opposite the spit at the southern end of the beach linking Tautuku Peninsula to the mainland.</p> <ul style="list-style-type: none"> 4km southwest of Papatowai.

<p>PHY31</p>	<p>Tahakopa River estuary and alluvial swamp</p>	<ul style="list-style-type: none"> • Regionally significant. • One of the most accessible and least modified beach, estuary and dune systems on the Catlins coast. • Four km-long pristine beach. • The hinterland of Tahakopa Bay is made up of a large wedge of an indigenous forest-covered series of foredunes, with the Tahakopa River estuary forming the western border. • Two kms upstream the sand and mud bars of the estuary gradually transform into salt marsh and unmodified brackish forested swamp. • Lower Tahakopa River, 500 metres northeast and 5 km inland from Papatowai, Catlins Coast.
<p>PHY32</p>	<p>Waipāti / Waipati estuary</p>	<ul style="list-style-type: none"> • Regionally significant. • Excellent example of a narrow elongate estuary. • Narrow, elongate tidal estuary at mouth of Waipati River. • North of Chaslands Mistake, Catlins Coast.
<p>Recreation</p>		
<p>None identified.</p>		
<p>Natural character</p>		

<p>NAT26</p>	<p>Kuramea/Catlins Conservation Park</p>	<p>Active Bed</p> <ul style="list-style-type: none"> • Largely unmodified water bodies in the upper reaches of the Catlins Conservation Park which contains many tributaries of the lower Tahakopa River. • Includes the Tautuku River Mouth wetlands, which contain several habitat types including swamping river flats. • Water quality is very high throughout the area, particularly in the upper reaches of the catchment. • Includes the intact and ecologically significant Tautuku Estuary. • Limited structures and no modified flow regimes due absence of water takes and bores, which are limited to the Tahakopa River valley. <p>Margin</p> <ul style="list-style-type: none"> • The margins of the water bodies are predominantly within indigenous forest in the upper reaches of the catchment and significant wetland saltmarsh near the estuaries and coastal interface. • Wetlands are lined with rush swamps, and swamp podocarp species. • Parts of the lower reaches of the Tahakopa catchment are lined with areas of pasture or exotic forest. • Structures include a recreational jetty in the Waipāti Estuary. <p>Context</p> <ul style="list-style-type: none"> • Largely comprises the Catlins Conservation Park, an area of intact indigenous lowland forest which extends between the upper reaches of the short coastal catchments and their coastal interface. • Lower reaches of the Tahakopa River flow through areas of extensive pasture and exotic forest. • No settlements, and limited structures present within the headwaters, including tramping huts and tracks. • Overall the natural elements, patterns and processes remain intact and significant. • The coastal interface provides unique experience of intact ecosystems/ extensive native forest in Otago.
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Natural features and landscapes		
LAN58	Pounaweia / Catlins Lake	<ul style="list-style-type: none"> • Large, shallow, tidal lake. • Habitat for several coastal fauna including haul out areas for New Zealand Sea Lions, large cockle beds, and coastal birds including waders, shorebirds, and waterfowl. • Margins have largely been modified into farmland, however areas of seagrass still remain. • Highly legible coastal lake which is expressive of its tidal and coastal influences. • Kuramea is the Māori name for Catlins Lake.
LAN59	Pounaweia / Catlins River	<ul style="list-style-type: none"> • Meandering, narrow, rocky riverbed with no active consents and minimal structures. • Margins are largely clad in intact indigenous forest. In the upper extent farmland and gorse and broom are located within the margins. • Heightened sense of remoteness and isolation due to dense indigenous forest.
LAN60	Pūrākaunui River	<ul style="list-style-type: none"> • Intact and very narrow, meandering riverbed, rocky near the Purakaunui Falls. • Distinctive sand bar on the coastal interface. • Immediate margins are largely clad in indigenous forest. Beyond, the river is surrounded by farmland. • The Purakaunui falls and river mouth is a highly memorable local landscape feature. • The mouth of the Purakaunui is recorded as being occupied by tangata whenua with the presence of artefacts and middens.

<p>LAN61</p>	<p>Tahakopa River</p>	<ul style="list-style-type: none"> • Narrow, meandering, and boggy river. • Lower reaches are clad in farmland and exotic forestry. Upper reaches within the Catlins Conservation Park are surrounded by intact indigenous forest. • Several wetlands and bogs adjoining the active bed. • Highly legible and central feature within the Tahakopa valley. • A traditional travel route between Mokoreta and Tahakopa Bay follows the margins of the river.
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Primary contact sites – water recreation

ORC must also identify in its plan sites, lakes or reaches of rivers or streams that are regularly used, (or would be regularly used if the water quality was good) for recreational activities such as swimming, paddling, boating, or watersports. To learn where the primary contact sites are in the Catlins FMU, see the map below.

Zoom in to view the various primary contact sites in a specific area(s).

A **pink** dot represents a proposed primary contact monitoring site.

A **purple** dot represents a primary contact (recreation) site.

(Note: If you are on a mobile device, after selecting a dot, tap on the arrow next to the ‘X’ icon to view more information.)

A map of these water bodies is available online for you to view:
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Economic profile and snapshot

In 2018, the Catlins FMU was home to around 1,600 residents. In the 12 years between 2006 and 2018, there was a 4% decrease of population in the Catlins, which is in contrast to that of the Otago region (+16%). Most Catlins residents live in rural areas of the FMU while nearly 40% of the population live in either one of the three townships – Ōwaka, Kaka Point, or Pounaweia.

Water resources are essential to the Catlins local community and economy. Most Catlins workers are likely to be working in the agriculture or tourism sector, which are closely tied to the area’s natural resources, such as biodiversity, landscapes, freshwater and soil.

An understanding of Māori history and the Māori economy is essential for policy development and policy impact assessment. Not only does pre-European Māori history help shape modern day New Zealand, but the Māori economy is also integral to the New Zealand economic system. ORC is partnering with Aukaha and Te Ao Marama to develop an overview of Kāi Tahu history and economy.

- View the Catlins FMU economic snapshot that provides local economy information
- View more regional economic information
- View the media release for new Otago economic reports