

Submission on a Publicly Notified Application for Resource Consent

To: Environment Southland
Private Bag 90116
Invercargill 9840

Attention: **Stephen West – Principal Consents Officer**

Name of submitter: Fish & Game New Zealand – Southland Region (Fish & Game)
PO Box 159
Invercargill 9825

Name of applicant: Environment Southland – Catchment Management Division (the applicant)

Application: APP-20211135

Description of activity: Consent of 15 years duration to:

- Occupy part of the coastal marine area with a tide gate structure;
- Occupy part of the coastal marine area with a weir structure; and
- Dam and divert water.

Activity location: Titiroa River, approximately 185m upstream of Tokanui – Gorge Road Highway bridge and approximately 5km upstream from Toetoes (Fortrose) Estuary.

The position of the tide gates is within the coastal marine area (CMA) boundary. Freshwater is diverted from the bed of the Titiroa River via a diversion channel commencing upstream of the CMA boundary. Damming of water occurs both within and outside the CMA boundary.

Our submission relates to: The whole application.

Our submission is: Fish & Game oppose the application.

Our reasons for comments are:

Fish and Game is responsible for the management of sports fish and game birds within the Southland region. The location of the proposed activities is the Titiroa River bed located approximately 185m upstream of Tokanui – Gorge Road Highway bridge.

The Titiroa Stream has the following recognized sports fish and game values, including recreational hunting and fishing opportunities:

1. It is a significant habitat of indigenous and introduced birds, including game species that are actively hunted during the annual game bird hunting season.

2. The Titiroa River supports a lowland brown trout fishery, which is open for fishing between 1 October – 30 April annually. Anglers are permitted to catch 2 brown trout per day and to fish with fly, spin, and bait. The Titiroa River provides fishing opportunities for inexperienced and experienced anglers alike.
3. The Titiroa River is a very popular river to fish for whitebait. Numerous whitebaiting huts and stands line the banks of the Titiroa River downstream of the tide gates.

The New Zealand whitebait fishery is comprised predominantly of five diadromous galaxiid species, Inanga (*Galaxias maculatus*), Kōaro (*G. brevipinnis*), Banded kōkopu (*G. brevipinnis*), Giant kōkopu (*G. argenteus*) and Shortjaw kōkopu (*G. postvectis*). In recent years, four out of the five whitebait species have been listed as ‘declining’ or ‘threatened’ in large part due to increased stressors such as habitat degradation.

4. The Toetoes (Fortrose) Estuary is a medium-sized, “shallow short residence tidal river estuary” situated at the mouth of the Maitua and Titiroa Rivers. Toetoes estuary is a sensitive receiving environment, which is a highly valued and significant habitat. Toetoes Estuary is popular for fishing, shellfish collection, duck hunting, boating / kayaking, bathing, and bird study. Great diversity of wildlife is associated with the Toetoes Estuary, including waterfowl, and other bird species such as heron, gulls, oyster-catcher, and dotterels.

Position on the Application:

Fish & Game oppose the application for the following reasons:

1. The environment

The application seeks a coastal permit for continuation of the existing occupation and use of the tide gates and diversion channel. No upgrades, maintenance or changes are proposed to the existing tide-gates or diversion channel.

The application provides that: *“There has been some form of tide gates in this location since 1917 when they were constructed by the Public Works Department. The tide-gates ‘lock structure’ in place today was constructed in 1988.”*

The application does not address how the effects of the tide gates and diversion channel should be assessed. To be clear, Fish & Game considers that applicants damming and diversion activities associated with the tide gates and diversion channel do not form part of the existing environment, irrespective of their use since 1988, for the following reasons:

- a. Damming and diversion consents under the Resource Management Act 1991 (‘the RMA’) are not permanent and do not carry existing use right protections. In a re-consenting process, new consents are granted rather than renewals. It should not be assumed that the applicant’s expired consent, which was subject to a finite 5-year term, i.e., time limited, that expired on 29 October 2020 will be renewed or renewed on the same conditions.¹

¹ *Ngāti Rangī Trust v Manawatu-Whanganui Regional Council* [2016] NZHC 2948; and *Environmental and Resource Management Law* (LexisNexis) – Chapter 8 - Water at [8.33].

- b. The environment (for the purpose of assessing effects) should be considered as if the damming and diversion activities under the applicants expired consent have been discontinued and that the application is for a new damming and diversion activities. Assessing the application as if the previously authorised damming and diversion activities is not part of the environment allows a more thorough assessment of effects.

In relation to whether it is not feasible to assess the existing environment as excluding the applicant's damming and diversion activities, Fish & Game submits that this is a matter for the Applicant to establish. Fish & Game anticipates that the applicant may argue that:

- a. The environment, including the Titiroa River upstream and downstream of the tide gates, is modified and has been for some years;
- b. The damming and diversion are established activities; and
- c. Applicable planning documents promote the protection of coastal infrastructure.

If so, Fish & Game submits that:

- a. To analyse the existing environment as excluding the applicants damming and diversion activities is feasible;
- b. The factors set out above were not considered by the High Court to be particularly compelling in *Ngāti Rangī Trust v Manawatu-Whanganui Regional Council* [2016] NZHC 2948 in circumstances where the hydro-generation activity had been occurring for approximately 100 years. Further, historical aerial photographs set out in **Appendix 1** of this submission do not substantiate that there has been some form of tide gates at the location continually since 1917; and
- c. The tide gates and diversion channel are currently operating without consent in circumstances where s 124 of the RMA does not apply to the damming and diversion activities.

Fish & Game submits that the RMA requires the following steps to be undertaken when assessing the application:

- a. Identification of the environment;
- b. Identification of the actual and potential effects, including cumulative effects, on the environment;
- c. Assessment of those effects; and
- d. Identification of whether measures are available or necessary to avoid, remedy or mitigate those effects.

The decision whether to grant consent follows. The matter should not be approached on the basis that mitigations from the current level of effects, including on fish passage, associated with the applicants damming and diversion activities are simply considered. The RMA

requires an assessment of the application as if the applicants damming and diversion activities are not currently occurring.

2. Effects on fish fauna

The Freshwater Fisheries database² and Wilderlab environmental DNA (eDNA) database³ provides that the following indigenous fish species have been identified in the Titiroa River / catchment.

Table 1 – Indigenous fish species in the Titiroa River / catchment

Common name	Scientific name	Threat classification (2017) ⁴
Diadromous species		
Shortfin eel	<i>Anguilla australis</i>	Not threatened
Inanga	<i>Galaxias maculatus</i>	At Risk - Declining
Common bully	<i>Gobiomorphus cotidianus</i>	Not threatened
Redfin bully	<i>Cobiomorphus cotidianus</i>	Not threatened
Common smelt	<i>Retropinna</i>	Not threatened
Kōaro	<i>Galaxia brevipinnis</i>	Not threatened
Longfin eel	<i>Anguilla dieffenbachia</i>	At risk - Declining
Non-diadromous species		
Unidentified flounder	-	-
Gollum galaxias	<i>Galaxias gollumoides</i>	Threatened – Nationally vulnerable

All the above indigenous fish species identified in the Titiroa River are Taonga Species recognised in Appendix M of the pSWLP.

In addition, the Freshwater Fisheries database provides that brown trout have been identified in the Titiroa River.⁵

Table 2 – Introduced and naturalised species in the Titiroa River

Common name	Scientific name	Threat classification (2017)
Non-diadromous species		
Brown trout ⁶	<i>Salmo trutta</i>	Introduced and naturalised

² <https://nzffdms.niwa.co.nz/search>.

³ <https://www.wilderlab.co.nz/explore>. Sample 529540 and 529535.

⁴ *New Zealand Threat Classification Series 7 - Conservation status of New Zealand freshwater fish*, New Zealand Department of Conservation – New Zealand Threat Series Classification 24 (2017).

⁵ <https://nzffdms.niwa.co.nz/search>.

⁶ Brown trout move extensively within fresh water, and some have a marine phase to their life cycle.

In addition, the fish survey undertaken on behalf of the applicant identified Redfin perch (*Perca fluviatilis*) in the Titiroa Stream. Redfin perch is classified as “Introduced and naturalised”.⁷

The diadromous species identified in the Titiroa River migrate between freshwater and the ocean as part of their life cycle. This behaviour makes them vulnerable to harm from habitat degradation or inaccessibility, especially when they migrate up or down the Titiroa River to and from the ocean or move a lot within freshwater. Brown trout also move within freshwater, and some have an estuarine or marine phase to their life cycle.

Research recognises that fish passage associated with tidal gates is affected by three interrelated factors:

- a. The area of the tide gates that is open;
- b. Water velocity through the tide gate openings; and
- c. The amount of time the tide gates are open.

Fish & Game is concerned that the application does not provide an adequate assessment of the fish passage effects of the tide gates for the following reasons:

- a. The survey design is constrained, insofar as capture of fish (via fyke nets and Gee minnow traps) was carried out in the still water environment immediately upstream and downstream of the dam wall in the bed of the Titiroa River. No comparative analysis has been undertaken of fish communities located further up and downstream of the tidal gates, including habitat diversity / quality and fish species that would be expected to be normally present or migrating through it.
- b. No analysis, such as catch per unit effort, has been undertaken of the numbers of fish captured immediately upstream and downstream of the tide gates to statistically quantify the difference. Instead, a fish species presence / absence assessment is used. The statement that *“The differences in overall numbers of fish caught upstream and downstream of the tide gates most likely reflects habitat suitability differences between the two areas surveyed”* is unsubstantiated and does not address the following matters:
 - i. The upstream and downstream survey areas (located immediately upstream and downstream of the dam wall located perpendicular to the diversion channel) appear almost identical, but for the presence of the tide gates and diversion channel. No description is provided of what the habitat differences between the two sites are and suitability thereof for fish species.
 - ii. The upstream and downstream capture sites used are geographically located very close together. Most capture sites are located within 50m of each other, none exceed 100m.
- c. The fish passage assessment documents average (0.3559m/s) and maximum (1.328m/s) water velocity through the tide gates, but does not discuss in detail, the

⁷New Zealand Threat Classification Series 7 - Conservation status of New Zealand freshwater fish.

implications of it, particularly for indigenous fish species (including juveniles and weak swimmers). Research shows that:

- i. A fish must first exceed the water velocity before it can make any headway upstream.
- ii. Fish swimming ability increases with size. Because indigenous New Zealand fish species migrate upstream at a small size (juveniles), they have a lower swimming ability than larger sized species considered weak swimmers.
- iii. Fish use different parts of the water column at different life stages. This calls into the question the statement that: *“Even during the period when water velocity is greatest, native fish may well be able to migrate upstream by swimming near the bottom of the water column.”*

Table D-1 ‘*Summary of fish swimming data for NZ species*’ of the New Zealand Fish Passage Guidelines shows that some indigenous fish (depending on size / age class and swimming mode) have swimming speeds that would be challenged by an average water velocity of 0.3559m/s, including: Inanga, Common bully, Banded kōkopu, Smelt, and Shortfin eel. For context, a literature review by NIWA found that the mean sustained swimming velocity for New Zealand juvenile indigenous fish species was 0.20–0.32m/s⁸, i.e., less than the measure average water velocity.

3. Effects on water quality

The application does not include an assessment of the effects of the tidal gates on water quality in the Titiroa Stream.

4. Necessity

For fish habitat and passage, the science is clear that it is best to not use tide gates, nor is any tide gate entirely fish friendly – they all have some impact on fish passage.⁹ Commentary accompanying the New Zealand Fish Passage Guidelines (2018) provides that: *“It is extremely challenging to provide effective fish passage at tide and flood gates, thus installation of new gates is strongly discouraged. Where no suitable alternative is feasible, there are several design features that can be used to lower the potential impacts on fish passage.”*¹⁰ In short, the best option for eliminating all interference with fish passage is removal of the tidal gates, dam wall, and diversion channel.

The Titiroa tidal gates have a passive gate design with three side hinged gates. This means a positive head differential on the downstream side (i.e., higher water level) will close the gates and dam water. Conversely, a positive head difference on the upstream side will cause the gates to open and release water downstream. When the tidal gates are closed, no fish can pass.

⁸ *Fish Passage Assessment of the Maitai River North Branch Dam and South Branch Weir*. Cawthron Institute Report No. 2601 for Nelson City Council (September 2014).

⁹ *Ecological Effects of Tide Gate Upgrade or Removal: A Literature Review and Knowledge Synthesis*. Institute for Natural Resource – Report to Oregon Watershed Enhancement Board. Institute for Natural Resource, Oregon State University (2018).

¹⁰ New Zealand Fish Passage Guidelines, p. 70.

Fish & Game acknowledge that water tables and inundation within parts of the Titiroa catchment are likely to be influenced by water levels, including tidal fluctuations, in the Titiroa River given its very low-lying nature. However, the extent of this effect is not adequately described in the application. For example, the application does not map the area of land impacted by different water levels in the Titiroa River and in what circumstances these water levels occur to enable more robust decision-making regarding water level regimes and the necessity for the Titiroa tide gates. Conversely, the passive (non-mechanical) design of the tide gates means that they are continually operational, i.e., open and close, irrespective of necessity for water level control purposes.

Fish & Game submits that mapping should be undertaken to determine the spatial extent of inundated land for a range of water levels to predict areas of drainage affected land and to inform whether the tide gates are necessary and if so, under what circumstances. Similar work was undertaken in the Waituna Lagoon catchment to inform decision making regarding lagoon openings.¹¹

5. Mitigation

The original application provides that mitigation is proposed in the form of ongoing management of the Lower Titiroa Wetland Reserve (being 110ha of land adjoining the Titiroa River), through fencing and stock exclusion to protect marginal grasses and rushes, which are important for Inanga spawning.

The applicant has subsequently filed a report dated November 2022, which suggests mitigation options upstream and downstream of the tide gates to address adverse impacts on Inanga spawning.

In response:

- a. The Lower Titiroa Wetland Reserve forms part of the wider wetland complex associated with Toetoes Estuary and the Lower Mataura River, which is recognised as regionally significant wetland in Southland in Appendix B of the Regional Water Plan for Southland 2010 and Appendix A of the proposed Southland Water and Land Plan and as a Ramsar Wetland of International Importance.

The original mitigation proposal is inadequate and simply reflects minimum stock exclusion requirements under the proposed Southland Water and Land Plan and the Resource Management (Stock Exclusion) Regulations 2020 in relation to rivers and wetlands.

- b. It is unclear whether the report dated November 2022 forms part of the application and if so, what aspects of the suggested mitigations the applicant proposes, when they will be achieved, and how the effectiveness of them will be monitored. There is nothing binding to say these mitigation options will go ahead – for example, no accompanying mitigation plan has been prepared nor is it clear what strategic planning, including financial planning and consenting analysis, the applicant has undertaken to ensure meaningful and timely delivery.

¹¹ See: *Waituna Lagoon level impacts on land drainage and inundation Investigation - stages 1 and 2*, NIWA Client Report DOC16501 prepared for Department of Conservation, February 2016.

Any mitigation or offsets should be assessed for consistency with the RMA and the principles of offsetting (including measurability, net gain in environmental outcome, links to the effects of the activity, and duration. This information is required, and the actions must be consistent with legislative and policy directions.

- c. The success of the mitigation option upstream of the tidal gates is dependent on sufficient juvenile Inanga being able to successfully navigate the tidal gates and reach reproductive maturity. Conversely, the fish passage assessment suggests the tidal gates are having an adverse on upstream movement of Inanga due to closing of the gates and water velocity through the gates when open.
- d. The mitigation option downstream of the tidal gates poses ecological challenges because:
 - i. It is unclear if the unnamed tributary provides suitable habitat for Inanga through their life stages from incubation to maturity and if not, whether juveniles can access suitable alternative habitat upstream or downstream; and
 - ii. An inspection of the unnamed tributary from the roadside on 7 September 2023 and accompanying inspection of aerial images shows that it is extensively modified and exhibits very little natural character in the area where mitigation is proposed. Specifically:
 - The channel form is highly incised and straightened. Tidal fluctuations affect water levels in the lower reaches. Instream habitat is very homogeneous immediately upstream and downstream of Middleton Road, including very little habitat variability, such as run-riffle-pool sequences.
 - Limited instream gravel was observed in the reach immediately upstream and downstream of Middleton Road. The reach upstream of Middleton Road has been the subject of periodic bed excavation / riparian disturbance associated with drainage maintenance – deposited spoil was observed running parallel to the true left bank.
 - Fish passage to the unnamed tributary upstream of Middleton Road is currently comprised by a perched culvert on the downstream side and elevated water velocity due to narrow culvert width relative to channel width. The culvert, which is approximately 10m long, has been retrofitted with spate rope, although the efficacy of this appears questionable due to its degraded state, elevated water velocity, and height above water level.

An assessment is required to establish that juvenile Inanga can access the unnamed tributary.

Photographs of the unnamed tributary are set out in **Appendix 2** of this submission.

6. Omissions

The application does not address the following relevant documents / matters:

- a. The New Zealand Fish Passage Guidelines (2018) for structures up to 4m.

This guidance document sets out recommended practice for the design of instream infrastructure to provide for fish passage. The intent of these guidelines is to set the foundation for the improvement of fish passage management in New Zealand, including in relation to existing structures, such as the tidal gates.

- b. Approvals required under the Freshwater Fisheries Regulations 1983.

The application provides that the tide gates and diversion structure were constructed in 1988, i.e., after the Freshwater Fisheries Regulations came into effect on 1 January 1984. Case law¹² provides that consideration of the issue of fish passage under the RMA incorporates considerations set out in the Freshwater Fisheries Regulations and the Conservation Act. Confirmation is required regarding what, if any, approvals the applicant has obtained from the Director-General under Part 6 of the Freshwater Fisheries Regulations for the tidal gates and diversion channel, including for provision of fish passage.

- c. Consents required under the proposed Southland Water and Land Plan (pSWLP), including for the proposed mitigation activities.

Mapping of the CMA boundary neatly coincides with the geographical location of the tide gates, however, depending on the tidal cycle the tidal gates and diversion channel operate to intermittently:

- i. Divert and temporarily dam saline water within the CMA; and
ii. Divert and dam freshwater beyond the upper limit of the CMA.

The application does not address diversion and damming consent requirements under Rules 49 (Abstraction, diversion, and use of surface water), 55A (General conditions for activities in river and lake beds) and 60 (Dams and weirs) of the pSWLP.

- d. Resource Management (National Environmental Standards for Freshwater) Regulations 2020.
e. The National Policy Statement for Freshwater (2020) (NPS-FM).

The vision for freshwater management has changed. Relevant matters in the NPS-FM include:

¹² *Re Auckland Regional Council* — [2002] NZRMA 241.

- i. The hierarchy of obligations under Te Mana o te Wai, which priorities the health and well-being of the Titiroa River (including all life within it) – to do so, fish need to be able to move freely between and within freshwater ecosystems of the Titiroa River.
 - ii. The ki uta ki tai approach to fish passage remediation, which recognises that fish migrate in both directions: from the mountains to the sea and back.
 - iii. Sections 3.15 and 3.26 of the NPS-FM, which require Environment Southland to produce an action plan for fish passage for the Southland FMU's, including the Maitua FMU. The action plan must (among other things) evaluate risks that instream structures, such as the Titiroa tidal gates, present as a barrier to fish passage, and prioritise structures for remediation.
- f. The Final Regional Forum Report¹³ to Environment Southland and Te Ao Mārama making the following recommendations (among other things) to achieve freshwater outcomes in Southland:
- i. Environment Southland repurposes, where appropriate, its own land for increased ecosystem services that align with FMU Hauora objectives.
 - ii. Environment Southland role-models land repurposing for increased ecosystem services, sharing information, knowledge, and insights from land repurposing projects to inspire and inform other regional landowners and managers to initiate land re-purposing initiatives.

Environment Southland owns a large area of low lying / inundation prone land (estimated at approximately 3,100ha) located between the lower Titiroa and Maitua Rivers that is potentially available for repurposing. The Regional Coastal Plan for Southland (2013) recognises that *“The low swampy land between the Maitua River and Titiroa Stream is located on the Maitua Floodway and is inundated to a greater or lesser degree on a regular basis.”* The application does contemplate repurposing any of this land to increase ecosystem services aligned with FMU Hauora objectives for the Maitua FMU. This is a major omission because:

- i. Research commissioned by Environment Southland shows significant reductions in total loads of nutrients (nitrogen and phosphorus)¹⁴ and E.coli¹⁵ are required in the Maitua FMU to achieve the the National Objectives Framework (NOF) national bottom lines in the NPS-FM 2020 .

¹³ *Achieving the Community's Aspirations for Freshwater*. Regional Forum Recommendations Report to Environment Southland and Te Ao Mārama Inc. Board (June 2022).

¹⁴ Snelder, T. *Assessment of Nutrient Load Reductions to Achieve Freshwater Objectives in the Rivers, Lakes and Estuaries of Southland Including Uncertainties - To inform the Southland Regional Forum process*. Report prepared by Land Water People for Environment Southland (November 2021).

¹⁵ Snelder, T. and Fraser, C. *Assessment of Escherichia coli Load Reductions to Achieve Draft Freshwater Objectives in the Rivers of Southland Murihiku - To inform the Southland Regional Forum process*. Report prepared by Land Water People for Environment Southland (August 2021).

- ii. Toetoes Estuary is showing signs of eutrophication (nutrient enrichment) and excess macroalgae growth due to large amounts of nutrients and sediment reaching the estuary.¹⁶
 - iii. Recent findings of the Environment Court on the pSWLP, including mapping of water quality degradation, show that large parts of the Mataura FMU, including Toetoes Estuary, are degraded with respect to suspended sediment, DIN, DRP, E-coli, and MCI.
- g. Climate change predictions for Southland and what this means for management of the lower Mataura FMU, including the Titiroa River catchment.

Climate change advice by NIWA to Environment Southland¹⁷ provides (among other things) that:

- i. Average annual rainfall is project to increase slightly and the number of heavy rain days, particularly during winter and spring, is projected to increase throughout the Southland region;
- ii. Floods are expected to become larger everywhere in Southland; and
- iii. Changes in sea level-rise are expected to be between 0.2-0.3 m by 2040 and increasing to 0.4-0.9 m by 2090. Putting aside storm events, those changes will result in an increasing percentage of normal high tides exceeding the present-day design for coastal infrastructure. Coastal flooding will increase steadily under all scenarios, with increasing incidents of pure tidal flooding (i.e., on sunny days).

The area of land owned by Environment Southland, which the application seeks to protect and preserve for pastoral farming, was strategically acquired by it due to its low-lying nature, drainage difficulties, and vulnerability to periodic inundation through flooding and tidal fluctuations. Discussion / debate needs to be had around the reality of the ongoing challenges, desirability, and economic cost to protect this inherently vulnerable land versus strategic repurposing it for increased ecosystem services that align with FMU Hauora objectives.

7. Alternatives

Fish & Game considers the application does not provide an adequate consideration of alternatives to the proposed damming and diversion activities, including:

- a. Full removal of the tide gates and dame, including infilling of the diversion channel.
- b. Installation of 'active' tide gates if inundation control is demonstrated to be required under specific circumstances, i.e., necessary.

¹⁶ Stevens, L.M. *Fortrose (Toetoes) Estuary 2018: Broad Scale Habitat Mapping*. Report prepared by Wriggle Coastal Management for Environment Southland (2018).

¹⁷ *Southland Climate Change Impact Assessment*. NIWA Client Report No: 2018120CH prepared for Environment Southland, Invercargill City Council, Southland District Council and Gore District Council (August 2018).

Active gate designs using automatic electric or hydraulically powered gates that only operate when water levels reach a critical elevation can significantly reduce impact on fish movements and upstream physical habitat. The New Zealand Fish Passage Guidelines provide that use of active gate designs is best practice.

- c. Installation of a 'self-regulating' or 'fish friendly' gate design if inundation control is demonstrated to be required. 'Self-regulating' or 'fish friendly' gates hold the gate open for a longer period compared to a passive gate design.

8. Review

The proposed consent conditions do not provide for any utilization of reviews. Fish & Game considers a consent of this nature if granted should be subject to a rigorous review process, i.e., bi-annual, or yearly reviews, including reporting on progress and effectiveness of any mitigation, given the importance of it to offset the effects of the damming and diversion activities.

9. Consent duration

The applicant seeks a 15-year consent duration. Fish & Game considers that this is too long for the following reasons:

- a. The applicant has not complied with the terms of its previous consent. Further, the tide gates are currently operating without a consent in circumstances where s 124 of the RMA does not apply. Specifically:
 - i. The applicant was granted a consent of 5-years duration on 29 October 2015, which expired on 29 October 2020. The applicant was required by 30 June 2017 to undertake a fish survey upstream and downstream to determine if the tide gates were impeding spawning and migration of indigenous fish and if so, the scale of the effect. The applicant did not undertake a fish survey as required – no explanation is provided for this failure.
 - ii. An application for a replacement consent was not submitted by the applicant until 8 March 2021, i.e., after its consent expired on 29 October 2020. This means that:
 - rights of continuance are unavailable to the applicant under s 124 of the RMA; and
 - the tide gates have been operating without resource consent since 30 October 2020.
- b. There are significant cultural and recreational values associated with the Mataura FMU, including the Titiroa River and Toetoes Estuary. The Mataura FMU is in a degraded state – there is a substantial gap between current state and the desired environmental outcomes.

Continued operation of the tidal gates will not result in any improvement in fish passage nor is there any proposal to remove the tide gates.

- c. No monitoring is proposed to:
 - i. Evaluate with whether the tide gates are providing fish passage over the life of the structure, including after significant natural events;
 - ii. Check the structure is in good condition and functioning as intended or maintenance is required; or
 - iii. To determine the success or otherwise of the proposed Inanga spawning habitat restoration.
- d. Sections 3.15 and 3.26 of the NPS-FM require Environment Southland to produce an action plan for fish passage within the Maitava FMU. Granting a 15-year consent for operation of the tide gates, which pose a barrier to fish passage, has the potential to undermine implementation of the action plan.
- e. No explanation is provided as to why a 15-year consent duration is required.

Planning assessment:

As presented, the adverse effects of the proposed damming and diversion activities are not adequately avoided, remedied, or mitigated. Proposed consent conditions do not provide for an improvement in fish passage. The application is contrary to:

1. The purpose of sustainable management defined in Part 2 of the RMA. Consent conditions proposed by the applicant do not:
 - a. Safeguard the life-supporting capacity of water and ecosystems; or
 - b. Avoid, remedy, or mitigate adverse effects.
2. Matters of national importance outlined in s 6 of the RMA, including: 6(a) and (c).
3. Other matters outlined in s 7 of the RMA, including: 7 (a), (aa), (d), (f) and (h) of the RMA.
4. The objectives and policies of the New Zealand Coastal Policy Statement (2010), including:
 - a. Objectives 1 and 5; and
 - b. Policies 1, 3, 5, 11 (including Policy 11(a)(i)) and (b)(iv), 13, and 14.
5. The objectives and policies of the Regional Coastal Plan for Southland (2013), including:
 - a. Outcome 7.4.1.1;
 - b. Objective 7.4.3.1; and
 - c. Policy 7.4.3.1.
6. The objectives and policies of the Southland Regional Policy Statement (2017), including:

- a. Issue BRL. 1, Issue BIO. 1 and .2, and COAST. 4;
 - b. Objectives BRL. 1, BIO. 1, .2, and .3, and COAST. 1 and .3; and
 - c. Policies BRL. 1, BIO. 1, .2, .3, .4, .5, and .9, and COAST. 1, and .2.
7. The objectives and policies of the National Policy Statement for Freshwater (2020), including:
- a. The fundamental objective of Te Mana o te Wai and hierarchy of obligations that firstly prioritises the health and well-being of waterbodies and freshwater ecosystems;
 - b. Policies 1, 3, 4, 5, 9, and 10;
 - c. Sections 3.5 (integrated management - ki uta ki tai), 3.8(3)(c), 3.15 and 3.26 (fish passage);
 - d. The effects management hierarchy; and
 - e. Appendix 1A – Compulsory values – Threatened Species.
8. The objectives and policies of the pSWLP, including:
- a. Objectives 1 and 2, (including the accompanying interpretation statement), 14, 15, 17, 18 and 19; and
 - b. Policies 3, 20, 26A, 28, 32, 37, 40, and 41.

Decision that Fish & Game wish the Council to make:

That the application be declined.

Fish & Game wish to be heard in support of its submission at a hearing if needed.

Fish & Game wish to be involved in any pre-hearing meeting that may be held for this application.

If others make a similar submission, Fish & Game will consider presenting a joint case with them at a hearing.

Fish & Game has served a copy of its submission via e-mail on the applicant.



Jacob Smyth
Resource Management Officer
Fish & Game New Zealand – Southland Region

Date: Monday, 11 September 2023

Cc: Environment Southland – Catchment Management Division

C/- WSP
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Attention: Luke McSoriley – Work Group Manager - Planning

Sent via e-mail: luke.mcsoriley@wsp.com

Appendix 1 – Aerial images of the Titiroa River



Image 1 – Date taken: 15 / 03 / 1951. Source: Retro Lens, NZ.



Image 2 – Date taken: 01 / 03 / 1962. Source: Retro Lens, NZ.



Image 3 – Date taken: 31 / 03 / 1968. Source: Retro Lens, NZ.



Image 4 – Date taken: 11 / 04 / 1983. Source: Retro Lens, NZ.



Image 5 – Date taken: 17 / 10 / 1985. Source: Retro Lens, NZ.



Image 6 – Date taken: 17 / 10 / 1985. Source: Retro Lens, NZ.

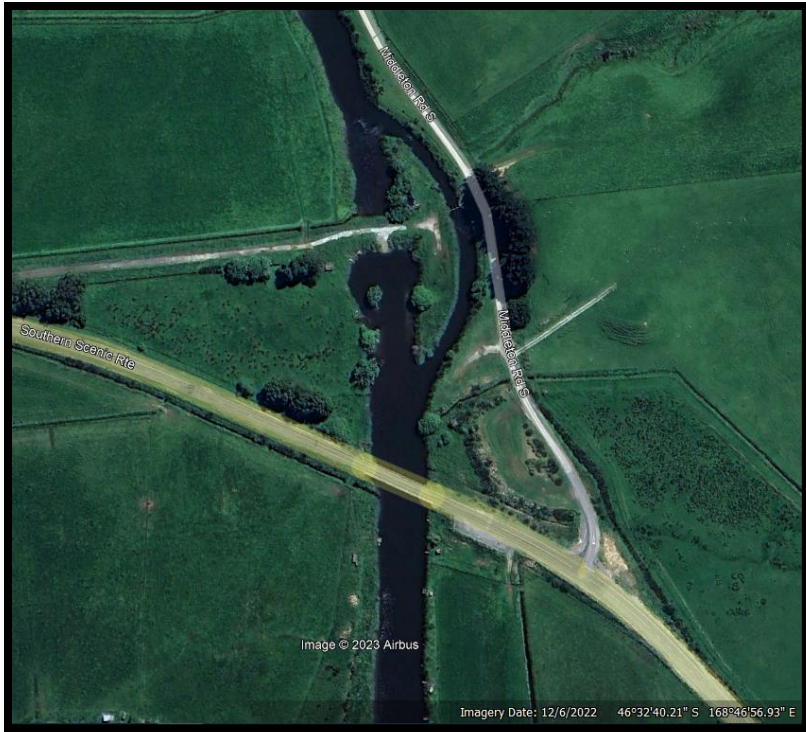


Image 7 – Date taken: 12 / 06 / 2022. Source: Google Earth.

Appendix 2 – Images of unnamed tributary - Titiroa River

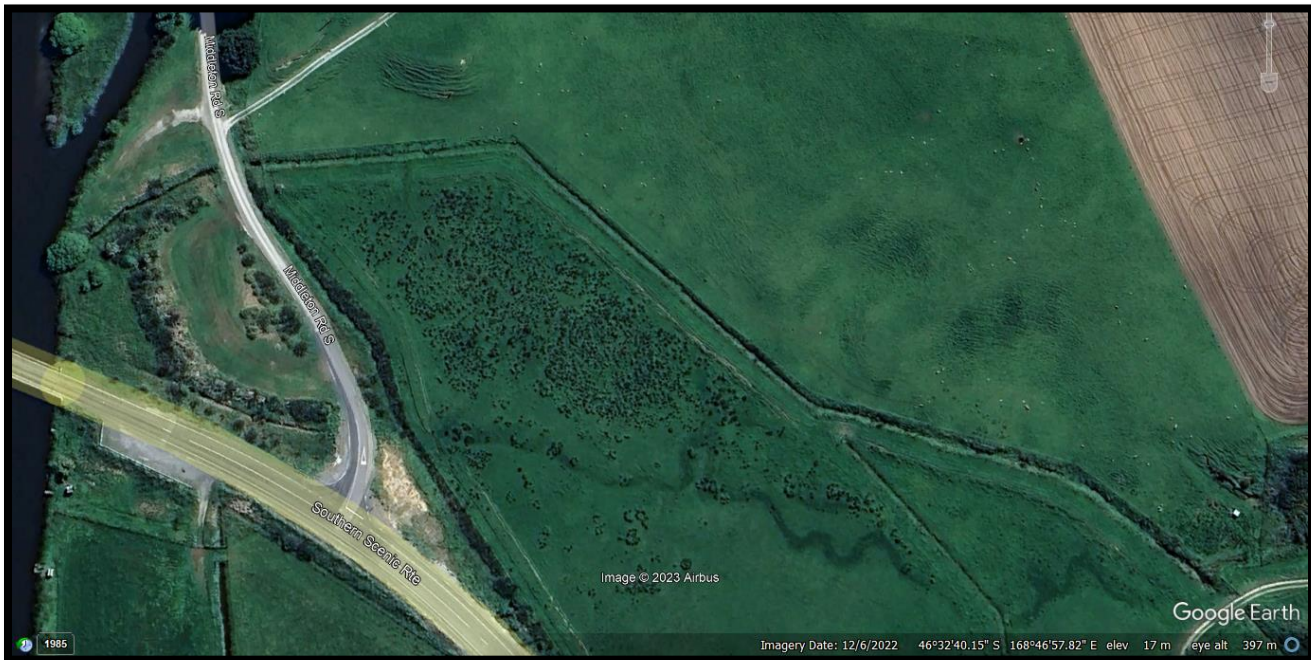


Image 1 – Aerial image of unnamed tributary – Titiroa River. Date taken: 12 / 06 / 2022. Source: Google Earth.



Image 2 – Perched culvert on downstream side of unnamed tributary at Middleton Road. Date taken: 10 / 09 / 2023. Source: Jacob Smyth.



Image 3 – Culvert on upstream side of unnamed tributary at Middleton Road. Date taken: 10 / 09 / 2023. Source: Jacob Smyth.



Image 4 – Unnamed tributary upstream of Middleton Road. Date taken: 10 / 09 / 2023. Source: Jacob Smyth.



Image 5 – Upstream side of unnamed tributary at Middleton Road. Date taken: 10 / 09 / 2023.
Source: Jacob Smyth.