

**BEFORE THE A COMMISSIONER APPOINTED
BY THE SOUTHLAND REGIONAL COUNCIL**

IN THE MATTER the Resource Management Act 1991

AND

IN THE MATTER of resource consents to occupy the Coastal Marine
Area with a tide gate and weir and to dam and divert
water

AND

IN THE MATTER of an application by **SOUTHLAND REGIONAL
COUNCIL**

**BRIEF OF EVIDENCE OF DAVID CONNOR
16 August 2024**

FLETCHER VAUTIER MOORE
LAWYERS
PO BOX 3029
RICHMOND 7050

Telephone: (03) 543 8301
Facsimile: (03) 543 8302
Email: cthomsen@fvm.co.nz
Solicitor: Chris Thomsen

1. My full name is Ian David Connor.
2. I am the team leader of Catchment Operations at Southland Regional Council, known as Environment Southland. I have been in that position since 2020 and employed by the Council for more than 20 years. Prior to my current role, I was a land management officer and, before that a senior compliance officer.
3. I hold a Bachelor of Applied Science and a Diploma in Environmental Management.
4. Environment Southland's Catchment Management Division has applied for resource consents to re-authorise the location and operation of tide gate (or locks) and weir on the Titiroa Stream, 160m upstream of the Tokanui-Gorge Road Bridge on State Highway 92. The application is to replace lapsed coastal permits for occupation of the Coastal Marine Area by the tide gate and weir, and the diversion and damming of water. A copy of the lapsed consent is attached to the AEE as Appendix D.
5. Council are seeking a consent term of 15 years on the basis that the gates are a regionally significant piece of infrastructure providing significant benefit to the local community and region as a whole. The gates have been in place for a long time and are relied upon, directly and indirectly, by a lot of people, who deserve certainty through a moderately long consent. We have put together a comprehensive mitigation package and conditions that address the impact of the gates, which Mr. McSoriley discusses in his evidence, justifying that longer term and the investment Council will put into this infrastructure.
6. I am giving this evidence as project sponsor and am authorised by Environment Southland to do so.

Physical Environment

7. The tide gates are on the Titiroa Stream on Council owned land not far from State Highway 92. The gates' role is to reduce tidal influence on the water table of land above the gates.
8. The land above the gates is mostly flat, aside from a line of small hills to the east. The land is dominated by pastoral agriculture, mainly sheep and

beef, with some remnant native bush. The gates are crucial for the ongoing agricultural use of that land.

9. WSP prepared the application and set out the background, including the physical environment. In summary:
 - (a) The Titiroa Stream is located in the Lower Maitara River floodplain to the east of the Maitara River and flows into the Toetoes Estuary. During high flows in the Maitara River, floodwater can flow from the Maitara River across the floodplain to the Titiroa Stream.
 - (b) The Titiroa Stream is tidal and at its relevant reach is a mix of salt and freshwater, depending on the tide.
 - (c) The Titiroa Stream originates in the areas surrounding Waimahaka and is about 20km long. Its catchment is approximately 223km².
 - (d) The Titiroa Stream flows into the Maitara River, via a channel (known as the “cut-off diversion”) located near Carmichael Road upstream of the gates (approx. 9.9km). The other part of the Titiroa Stream continues its journey downstream past the gates to its confluence with the Toestoes estuary
 - (e) The wider Maitara Catchment has been highly modified by 120 years of pastoral agriculture. The upper Titiroa Catchment immediately above the gates is also highly modified for pastoral agriculture, as explained by Mr Frisby in his evidence.
 - (f) The lower parts of the Titiroa Catchment are a mix of pastoral agriculture, wetland and some bush remnants. A total of 444 hectares of Council owned land has been retired from pastoral farming and stock-accessible waterways have been fenced off.
 - (g) There is a good whitebait fishery below the Tokanui-Gorge Road Bridge with around 92 registered whitebait stands.

Description of Gates

10. The tide gates provide drainage outfall, tide protection and flood protection for the Titiroa Stream, including, as I have said, impeding tidal inflow upstream to reduce flooding and improve drainage of low-lying farmland.
11. The gates are around 2.1 km from the confluence with the Toetoes Estuary.

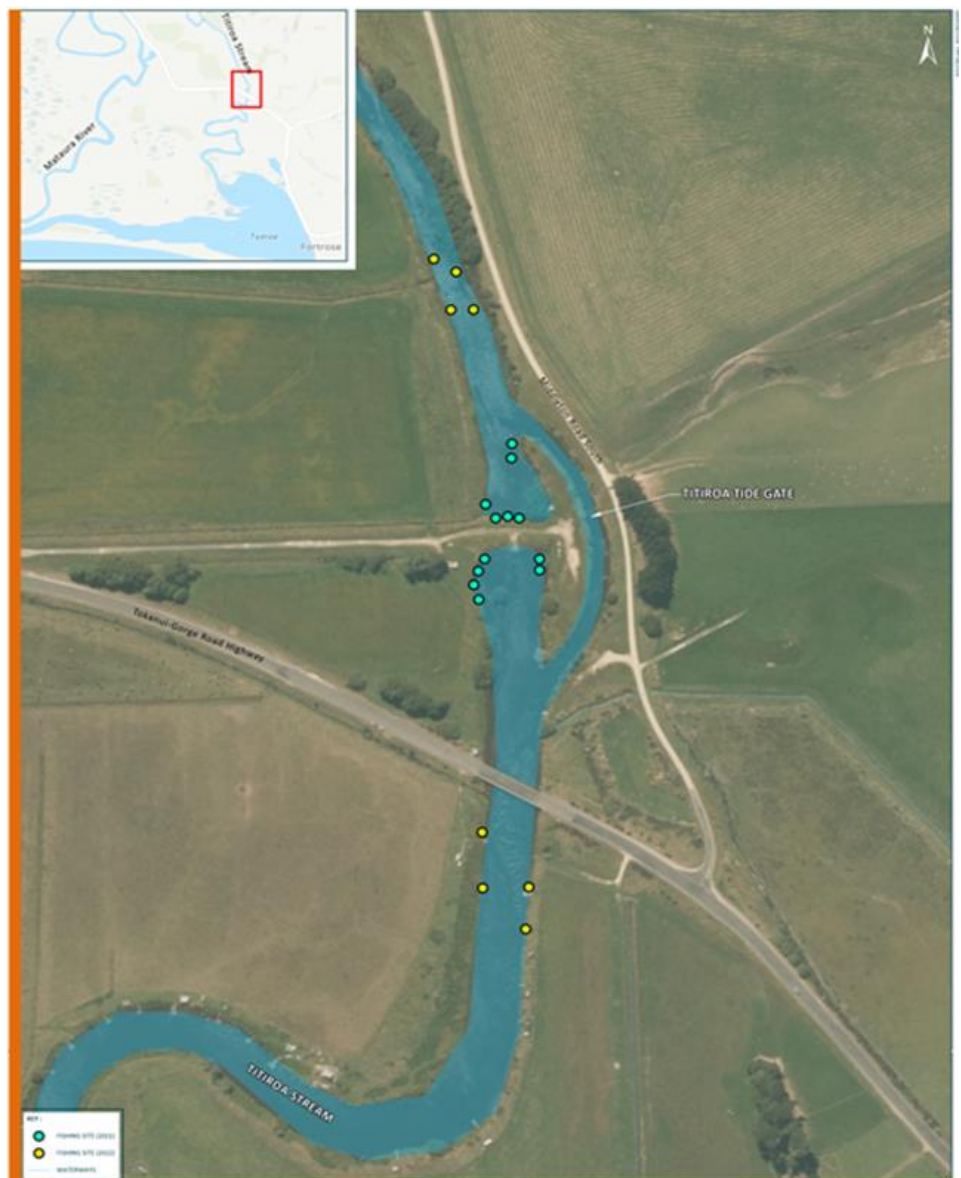


Figure 1: Tide gates and channel sourced from PDP Titiroa Tide Gate Mitigation Options Report¹

12. As Mr Young will explain, the gates were first installed in 1918 and have operated almost continuously since then. The current gates were installed in the mid 1980s but continue to function much as they always have:
 - (a) An earth weir on the main channel prevents the water from moving upstream on a high tide, see figure 1.
 - (b) Downstream of the weir the water is diverted into a channel on the true left of the Stream, see figure 1.
 - (c) The structure comprises of three vertically hung steel gates supported by a concrete structure designed to be fully submersible, see figure 2 below. A rock protected spillover weir allows for high level flood flows to pass directly over the structure.
 - (d) At high tide the pressure of the water pushing upstream closes the gates and prevents the incoming tide from flowing any further. The gates are closed between 4- 6 hours at a time, or half of the tidal cycle dependent on river flows and tides etc.

¹ November 2022.



Figure 2 – tide gate structure – partially closed on a rising tide.

13. The gates are in good order apart from some leaking around the seals when closed, but I am advised this is not a concern. Since 1986, and to my knowledge, the only maintenance issue has been the repair of a bolt in 2018. Council expects the gates could last for another 40 years subject to maintenance on things like bolts and seals.

Role of the Gates

14. The tide gates and weir are part of the Lower Matura Catchment flood scheme. Mr Young explains the scheme and how the land that benefits from it was acquired by Council and then leased back to the former owners. Environment Southland now owns over 2,280 ha in the Matura catchment and there are seven lessees. The lease income pays for the maintenance of the gates and other catchment activities, principally for flood protection. Both private and Council leased land adjacent to the Titiroa Stream benefit from the gates. Council is aware of significant investment over time from the landowners improving the productive potential of that land. Mr Frisby talks some more about this.

15. The Council intends to manage and protect the integrity of its assets to ensure the benefits of the tide gate and weir are realised. Despite the s 42A report writer's request for more information, I believe it is clear the operation of the structures is necessary to continue to provide protection for the land upstream of the gates from a raised water table, which would create greater flood risk and decrease the productive capacity of the land.
16. To try and estimate the economic value to the region I have made inquiries of Neil Selman who is an economist employed by Council. I understand Mr Selman will be available to answer questions at the hearing and he based his assessment on an area of 516 ha.
17. I am advised that it is estimated the direct annual economic contribution to the region from the pastoral land in this area above the gates is \$1,016,208. Mr Selman's estimate is based on an average stocking rate for sheep and beef farms in Southland of 10.9 units per hectare, meaning there are about 5,624 units over the 516 ha. Beef+Lamb NZ Limited's economic survey provides an average gross farm revenue of \$1,969.28 per hectare, meaning that \$1,016,208 annual farm revenue can be estimated. This amount excludes farm expenditure, which is estimated to be around \$736,000 per annum and downstream economic losses (cartage, meat processing etc).
18. Council is unsure how effectively the area will be able to be farmed if the gates were removed but there is no doubt there will be an effect. Mr Gardner's evidence conservatively identifies around 9 ha where there is likely to be decreased drainage ability as a result of removing the gates (or altering the timing of the gate opening). Whereas Mr Young and others identify an area higher than that would be affected. Additionally, the model does not consider private drains (such as mole drains) and the impact of water pushing up those drains and not being about to leave those drains too. Nonetheless, the loss of productive farmland because of the increase in the water table, leading to re-establishment of rushes and an impact on pasture, is understood to be significant. Thus, Council believes that this will have a significant effect on the catchment's economic contribution to the region.

19. The individual lease income the Council receives is not public information, as there are privacy considerations and potential commercial sensitivity attached to the amount lessees are paying. However, in general terms the lease income is just over \$150,000 annually plus just under \$10,000 in rates. The net leasehold land return is transferred into a revenue reserve for the purpose of funding Council initiatives including flood protection discussed above and as mentioned in Mr Young's evidence. Again, Council believes this income could be compromised by the loss of productive farmland due to a raised water table and, potentially, salt water intrusion.

Mitigation

20. Council has considered the installation of "fish friendly" gates. Fish friendly gates keep the gates open for longer, allowing fish to swim upstream before the gates shut. Mr Gardner's evidence shows that allowing more water to pass upstream will have a measurable effect on the upstream low-lying land and drainage. This is why a mitigation strategy is proposed to address the effects on fish passage. That mitigation strategy mainly consists of inanga spawning habitat restoration and instream works (baffles) and is set out by Ms. Drummond.
21. The proposed mitigation is not inconsistent with the present works being undertaken by Council in and around wetland habitats throughout the region and immediate area. Both upstream and downstream of the gates approx. 444 ha of land has been retired from farming. These include bush remnants, wetlands and tussock areas. It is likely the retention of water below the gates assists with keeping the habitat in the lower reaches of the stream wet and aiding some of the existing Council projects such as Leading on our Land.
22. The cost of the proposed mitigation works is anticipated to ultimately be paid for from lease income, although I expect that some consultation with the community on that will be required.

Previous Consent

23. The previous consents were granted for a term of five years from 2015. I understand this term was agreed between Council and the Department

of Conservation and tangata whenua, who were both concerned about the impact of the gates. Part of this agreement was the imposition of conditions 2(a) – (c), requiring:

- (a) A fish survey comparing fish communities upstream and downstream of the gates.
 - (b) A flow profile to assess the impact of stream velocity on native fish species.
 - (c) A salinity survey to determine the upstream extent of the saltwater wedge.
24. Unfortunately, significant staff turnover in the Catchment Division prior to 2020/21, flood events, and a potential internal miscommunication with the Science Division contributed to Council overlooking these conditions.
25. The conditions have now been complied with and the results of the work completed is presented in support of this application.
26. The reasons for the oversight were unfortunate and operational, and I do not believe a shorter consent term is necessary to “manage” the risk of non-compliance into the future as suggested by the s 42A report writer. However, the Council would be happy with a review condition as proposed by Mr McSoriley that would allow a review of the consent if the issues are repeated.

Retrospective Consent

27. This application is for a retrospective resource consent. Regrettably the Council overlooked the need to make the application 6 months before the expiry of the previous consent. Again, staff turnover in the Catchment Division contributed to this oversight.
28. An abatement notice has recently been served on the Council, although agreement has been reached not to require compliance with it pending the outcome of this application.
29. Council regrets and wishes to be on the record as apologising for the oversights regarding the lapse date and conditions.

Engagement with Te Ao Marama

30. Linked to the oversights described above, there has been a real sense of disappointment and opposition to the project from Te Ao Marama Inc (**TAMI**).
31. In those circumstances we have tried to work with our consultants to find ways to address the matters raised in its submission.
32. As a result, some of concerns from Te Ao Marama have been addressed in Ms. Drummond's evidence (e.g. presence of kanakana), along with comprehensive mitigation to address the adverse effects on indigenous species (inanga) and the Stream.
33. Council staff are keen to continue to engage with iwi and other parties. We remain open to discussions of further mitigations to account for Ngāi Tahu's values and interests by way of conditions consent. We will continue to attempt to progress this in advance of the hearing.

Catchment Map

34. Attached as Appendix 1 is a map of the Titiroa Catchment showing some of the key features of this application. An A0 version will be brought to the hearing.
35. Attached as Appendix 2 is a map that shows the Council lease blocks and areas that have been retired from farming and have reverted back to bush or wetland.
36. Finally, I attach a letter received from the chair of the Mataura Catchment Liaison Committee, expressing support for the application.

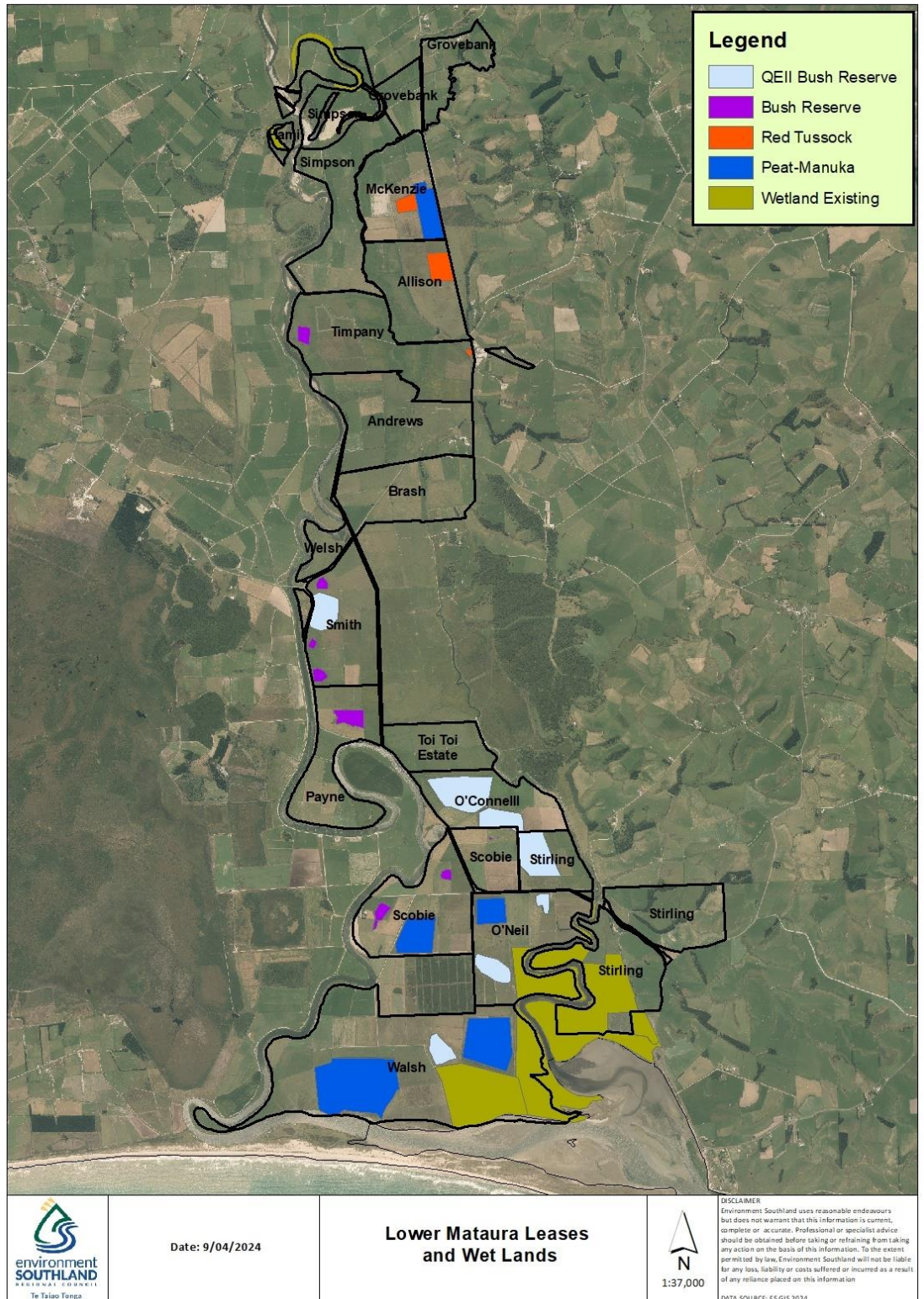
Dave Connor

16 August 2024

Appendix 1
Map of Titiroa Catchment – key features

Appendix 2

Map of Lower Matura Leases and Wetlands



Appendix 3

Letter from Mataura Catchment Liaison Committee

15 August 2024.

**Catchment Management Division
Environment Southland
Invercargill.**

**Dear Sir/Madam,
Re: Titiroa Tide Gates and Weir Infrastructure.**

The Mataura Catchment Liaison Committee serves as an advisory committee to Environment Southland and provides a vital connection with the catchment community, representing their interests on matters concerning the Mataura river and its tributaries.

The Titiroa Gates have served for flood and tidal management since 1917 and provide protection for low lying farmland of an estimated area of 11 500 Hectares adjacent to the Titiroa Stream. The gates provide security to landowners and people accessing that area that would otherwise be compromised.

The application acknowledges the minor to insignificant effect on fish passage and the migration of inanga galaxids and the inference that either is compromised is vacuous given the information available from fishermen and white-baiters that have near record catches there in recent years. The consent application overstates the adverse effects in our opinion and needs to be supported with contrary physical evidence.

The Titiroa Gates also protect land assets and ensure the land is viable for farming and the obligatory good management of noxious weeds and vermin by occupiers as owners and leaseholders. That is important as without their presence the weeds and vermin might otherwise dominate were the flood-able land be allowed to revert.

Land owners and occupiers might have freehold or lease hold title and that should be respected in any renewal of the consent. These people rely upon the Gates for their livelihood and contribute to the regional and national economy. Furthermore recreational fishers get enjoyment from their pursuit, so there is a well-being and healthy benefit to occupiers and the general public both.

Environment Southland recently opted to use lease-land surpluses to subsidise rates so the lease of land in the Titiroa catchment is pivotal to the application of this decision or funding would fall back onto ratepayers. Lease-land reserves and surpluses are generated from lease income from farming activities. No leases means no income.

Recent Environment Southland initiatives for flood management and slow the flow programs are enhanced with infrastructure like the Titiroa Gates and therefore the Gates contribute to the general good of catchment management, and their removal would be a greater adverse effect.

In conclusion the Mataura Catchment Liaison Committee strongly supports the Titiroa Tide Gates and Weir Infrastructure consent application.

**Thank you.
For further information please contact the writer:**

**Yours faithfully
Hugh Gardyne
Chairman Mataura Catchment Liaison Committee.**