3 December 2025

# Appendix E - Fast-track Approvals Act: complex freshwater fisheries activity approval report

Section 51(2)(e) complex freshwater fisheries activity approval report for – FTAA-2508-1095 Southland Wind Farm



Te Kāwanatanga o Aotearoa

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### 1. Introduction

- 1.1 This report has been prepared by the Department of Conservation (DOC) on behalf of the Director-General of Conservation. This report provides information on risks relating to complex freshwater fisheries activities to assist the Panel in its consideration of the application by Contact, for a complex freshwater fisheries approval for the Southland Wind Farm Project.
- 1.2 As part of the application, Contact is seeking a complex freshwater fisheries approval that would otherwise be sought under regulation 42 of the Freshwater Fisheries Regulations 1983, relating to the construction of culverts that will restrict fish passage.
- 1.3 Minute 1 of the Panel Convener included a number of directions relevant to this report as outlined in the table below.

Direction	DOC comment
The matters set out in clause 4, Schedule 9 of the Act	Provided in this report
How the weighting of matters set out in clause 5, Schedule 9 of the Act is to be approached, having regard to relevant senior court decisions	Addressed in Appendix A
Whether the Director-General disagrees with or wishes to expand upon the expert technical reports or assessments lodged by the Applicant in support of the complex freshwater fishery activity approval sought	Discussed in this report
The Director-General's recommendation either to grant, subject to conditions, or decline the complex freshwater fishery activity approvals sought, together with the basis of such recommendation	Addressed in covering report
Any amendments considered necessary to conditions proposed in the application in the event of a recommendation to grant the complex freshwater fishery activity approval sought, having regard to clause 6, Schedule 9 of the Act. Any proposed amendments are to be track changed.	Attached to this report (Appendix E1)

### 2. Purpose of the report

- 2.1 In accordance with clause 4 of Schedule 9 of the Act, this report must address the following matters:
  - the alignment of the proposed activity with best practice and the New Zealand Fish passage Guidelines; and

- the management of risks to freshwater values or habitat, including prevention of access to or spread of invasive species; and
- the availability and quality of the habitat upstream and downstream from the proposed activity; and
- the presence of threatened, data-deficient, or at-risk species under the New Zealand
   Threat Classification System in the vicinity of the proposed activity; and
- the advantages and disadvantages of providing fish passage upstream or downstream
  of the proposed activity; and
- any conditions that should be imposed in accordance with clause 6 or section 84.

### 3. Overview of DOC's report

- 3.1 DOC's assessment can be summarised into the following key points:
  - DOC supports the use of exclusion culverts to protect vulnerable non-migratory galaxiid populations.
  - However, the presence of galaxiids and absence of trout needs to be confirmed.
     DOC understands that the applicant is undertaking eDNA surveys but the information is not yet available to inform this report.
  - Minor changes to the conditions are suggested. Additional conditions to address the
    presence of galaxiids/absence of trout issue may need to be considered if this is not
    resolved before approval.

### 4. Sources

- $4.1 \quad \text{This report draws on information from the substantive application, in particular:} \\$ 
  - Part F Approvals Related to the Complex Freshwater Fisheries Activities. Provided with the application as F.01 Part F.
  - Riley 2025a. Hydrology Assessment Mimihau Stream Catchment. Provided with the application as H09d Part H.
  - Riley 2025b. Preliminary Design Report Stream Crossing Southland Wind Farm,
     Southland. Provided with the application as H09c Part H.
  - Ryder and Goldsmith 2025. Southland Wind Farm Technical Assessment #8:
     Freshwater Ecology. Provided with the application as H.08 Part H.

 Proposed Complex Freshwater Fisheries Activity Approval Conditions. Provided with the application as I05 Part I.

### 5. The Project

#### Summary of approval sought

- 5.1 Complex freshwater fisheries approval is sought in relation to the construction of three culverts (NSC1, NSC3, and NSC6) within the Project Site. The culvert locations can be seen in Figure 1 below, copied from 'Figure Aquatic Ecology 2' in G04 Technical Report Maps, with the culverts applied for annotated with red circles. NSC1 and NSC3 are located in the Mimihau Stream catchment, while NSC6 is within the Kaiwera Stream catchment.
- 5.2 The proposal is to protect upstream populations of native galaxiid fish by using culverts designed to restrict exotic fish species, including trout, from accessing the headwaters higher in the catchment. The aim is to "protect the known population of Gollum galaxias upstream of the proposed culverts at NSC1 and NSC3 and the assumed presence of Clutha flathead galaxias upstream of the proposed culvert at NSC6 (and likely benefiting from already natural impediments restricting exotic fish access to these headwaters)."1
- 5.3 Note that DOC considers that the Clutha flathead galaxias has been erroneously assigned to the Kaiwera River tributaries and should be Pomahaka galaxias based on morphological and genetic research.<sup>2</sup> Pomahaka galaxias and Gollum galaxias are both classified as Threatened Nationally Vulnerable under the New Zealand Threat Classification Status.

<sup>&</sup>lt;sup>1</sup> Quoted from F.01 Approvals relating to complex freshwater fisheries activities.

<sup>&</sup>lt;sup>2</sup> Campbell, S.M.C., Dutoit, L., King, T.M., Craw, D., Burridge, P.C., Wallis, G.P., Waters, J.M. 2022. Genome-wide analysis resolves the radiation of New Zealand's freshwater Galaxias vulgaris complex and reveals a candidate species obscured by mitochondrial capture. Diversity and Distributions 00:1–13. DOI: 10.1111/ddi.13629.

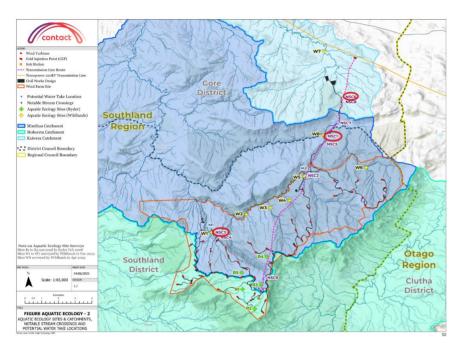


Figure 1. 'Figure Aquatic Ecology 2' from G04 – Technical Report Maps

### 6. Complex freshwater fisheries activities

### Statutory context

- 6.1 Under the Act (clause 7 of Schedule 9), a complex freshwater fisheries activity approval is deemed to be issued under regulation 42 or 43 of the Freshwater Fisheries Regulations (FFR).
- 6.2 Relevantly, regulation 42 of the FFR provides that no person shall construct any culvert or ford in any natural river, stream, or water in such a way that the passage of fish would be impeded, without the written approval of the Director-General.
- 6.3 Under s 4 of the FTAA, a culvert or ford that permanently blocks fish passage meets the definition of a complex freshwater fisheries activity.

### 7. Assessment

7.1 Schedule 9, clause 4 of the Act sets out what this report must include.

The alignment of the proposed activity with best practice and the New Zealand Fish passage Guidelines (clause 4(a))

7.2 The New Zealand Fish Passage Guidelines ("the Guidelines") set out the best-practice approaches and design standards for providing fish passage at instream structures. The

- Guidelines provide a basis for developing suitable infrastructure designs in the majority of situations regularly encountered in New Zealand.
- 7.3 The culverting of waterways described appears to be well aligned with the Guidelines, which note that Gollum galaxias could have increased protection from an exclusion barrier to prevent entry of undesirable fish species (i.e., exotic fish).
- 7.4 The application states that the selected culverts will be approximately 1.0 m above the natural levels to discourage trout passage in accordance with section 6 of the Guidelines. Detailed designs have not been provided, with the application supporting documents stating that "trout passage prevention will need to be considered further at detailed design stage" (Riley 2025b).
- 7.5 DOC suggests a condition that design of culverts takes into account the design considerations for exclusion barriers in section 6 of the Guidelines (see Appendix E1).

### The management of risks to freshwater values or habitat, including prevention of access to or spread of invasive species (clause 4(b))

- 7.6 The proposed exclusion culverts at NSC1, NSC3, and NSC6 are proposed to protect Nationally Vulnerable galaxiid species from predation by exotic/invasive species, particularly trout.
- 7.7 DOC agrees with the statement that the galaxiid species in question are non-migratory, so the culverts do not need to be designed for their passage. Migratory tuna/longfin eel (At Risk Declining) have been detected at NSC1 and NSC6, although in low abundance possibly due to natural barriers, so DOC is not concerned that an exclusion barrier would have a significant negative effect on tuna.
- 7.8 DOC notes that the installation of trout exclusion above NSC6 may be unnecessary if the presence of Pomahaka galaxias is not confirmed. Also, if trout are present above NSC7 then, without a trout removal plan, the installation of a trout exclusion culvert is unnecessary. These points have been raised with the applicant, who has advised that eDNA surveys are being undertaken but the results are not available for this report.
- 7.9 DOC supports the inclusion of a condition that culverts are inspected after extreme rainfall events and that invasive fish are removed if they have breached the barrier and are upstream of the culvert.

### The availability and quality of the habitat upstream and downstream from the proposed activity (clause 4(c))

- 7.10 The applicant has provided information on the habitat in the Mimihau and Kaiwera catchments, and provided information on benthic macroinvertebrate surveys at NSC1, NSC3, and downstream of NSC6.
- 7.11 Based on surveys undertaken by Wildlands for the applicant, habitat quality in the Mimihau and Kaiwera catchments is generally good but declining in places. The Mimihau South Branch supports diverse macroinvertebrate communities with high EPT richness, while

- downstream habitat quality drops to fair due to land use impacts. Kaiwera Stream East Branch shows good to excellent conditions. Freshwater crayfish (kōura), an 'At Risk Declining' species, occur in both catchments, including near proposed culvert sites.
- 7.12 As the proposed exclusion culverts are intended to protect native galaxiids populations, DOC has no further comments on this matter.

### The presence of threatened, data-deficient, or at-risk species under the New Zealand Threat Classification System in the vicinity of the proposed activity (clause 4(d))

- 7.13 The application describes fish presence at NSC1, NSC3, and downstream of NSC6, based on surveys conducted by Wildlands and New Zealand Freshwater Fish Database records.
- 7.14 Based on survey results (Ryder and Goldsmith) Gollum galaxias appear to be widely spread throughout the Mimihau Stream catchment although not common. Ryder and Goldsmith speculate they are most likely present in smaller headwater streams where favourable conditions occur. Tuna/longfin eel appear to be underrepresented at these sites.
- 7.15 NSC1: A survey at the NSC1 site detected seven Gollum galaxias and one longfin eel.
- 7.16 NSC3: Four Gollum galaxias were detected during surveys at the NSC3 site. An eDNA sample confirmed the presence of Gollum galaxias and did not identify the presence of any other rare or threatened species.
- 7.17 NSC6: Downstream of the NSC6 site, brown trout and longfin eels were observed. Upland bullies and Clutha flathead galaxias have also been recorded in the Kaiwera Stream catchment, although DOC considers that the Clutha flathead galaxias are actually Pomahaka galaxias based on morphological and genetic research.
- 7.18 DOC notes that if the presence of Pomahaka galaxias is not confirmed above NSC6 then the installation of trout exclusion culverting is unnecessary. As noted above, the applicant has advised that they are undertaking eDNA surveys to inform this.
- 7.19 Species identified in the complex freshwater fisheries activity approval application are listed in the table below, with Clutha flathead galaxias replaced with Pomahaka galaxias.

Common	Scientific name	New Zealand Threat Classification Status
Gollum galaxias	Galaxias gollumoides	Threatened – Nationally Vulnerable
Pomahaka galaxias	Galaxias "pomahaka"	Threatened – Nationally Vulnerable
Brown trout	Salmo trutta	Introduced and Naturalised
Longfin eel	Anguilla dieffenbachii	At Risk – Declining

### The advantages and disadvantages of providing fish passage upstream or downstream of the proposed activity (clause 4(e))

- 7.20 The restriction of fish passage at three of the proposed stream crossings is proposed for the protection of non-migratory galaxiid habitat upstream.
- 7.21 This is aligned with the New Zealand Fish Passage Guidelines, which supports the use of exclusion culverts where preventing passage will protect desired species or habitats.
- 7.22 As previously noted, the presence of galaxiids above NSC6 has not been confirmed, so it remains uncertain whether any population would benefit from the proposed exclusion of brown trout. If trout are present above NSC7 then, without a trout removal plan, the installation of a trout exclusion culvert is unnecessary.
- 7.23 The exclusion culverts do not need to be designed for galaxiid passage, as these species are non-migratory. Potential negative effects on migratory tuna are not likely to be significant.

### 8. Proposed conditions

### Conditions in accordance with Schedule 9, clause 6 of the Act

- 8.1 The Panel may impose conditions under Schedule 9, clause 6 of the Act on an approval that the panel considers necessary to manage the effects of the activity on freshwater fish species, taking into account:
  - a. Best practice standards; and
  - b. The New Zealand Fish Passage Guidelines.
- 8.2 The Applicant has proposed conditions (I.05) which:
  - Set out general culvert design requirements under Rule 70 of the NES-Freshwater
     Regulations 2020 for other culverts that will provide fish passage
  - require a Fish Passage Risk Assessment post-completion (and remediation if required),
  - require annual inspections of the exclusion culverts to ensure the barrier is maintained, and
  - set out extreme rainfall event response.
- 8.3 DOC is largely satisfied with the conditions proposed by the applicant, which have taken into account most of the pre-lodgement feedback DOC provided.

### 8.4 If approved, DOC suggests:

- Reference to the New Zealand Fish Passage Guidelines (2024) be added, in particular the design consideration in section 6 regarding exclusion barrier.
- If not confirmed before approval, absence of invasive fish upstream of the culverts needs to be confirmed prior to construction.
- Conditions added to minimise impacts during construction, such as avoiding peak migration season, avoiding wet concrete use in flowing water, and sediment controls.
- 8.5 This recommendation includes consideration of section 83 of the Act DOC considers that each condition would not be more onerous than necessary to address the reason for which it is set.

#### 9. Additional information

#### Conservation legislation, statutory planning documents, and policy

- 9.1 The Conservation Act 1987 is relevant to consider alongside the freshwater fisheries approval sought for this Project.
- 9.2 The FFR are deemed to be administered under the Conservation Act 1987. A function of the Department under the Conservation Act 1987 is "to preserve so far as is practicable all indigenous freshwater fisheries, and protect recreational freshwater fisheries and freshwater fish habitats" (section 6(ab)). A key component of preserving indigenous freshwater fisheries is ensuring native fish have access unobstructed by man-made barriers to habitats required to complete their life cycle. This function supports the resolution of issues identified in this report by way of conditions.

### 10. Treaty of Waitangi settlement considerations and obligations

#### Treaty of Waitangi settlement obligations

- 10.1 Under section 7 of the Act the Panel must act in a manner that is consistent with obligations arising under existing Treaty Settlements.
- 10.2 Ministry for the Environment (MFE) provided a report which sets out the section 18 matters it considered relevant to the application. DOC was not consulted by MFE on this report.
- 10.3 DOC has read the report and agrees that the Treaty settlement relevant to this application is the Ngāi Tahu Claims Settlement Act 1998.
- 10.4 None of the species affected by the complex freshwater fisheries approval application are taonga species under Schedule 97, although they may still have significance to Māori.

- 10.5 Freshwater fish habitats are referenced in the Deed of Settlement documents e.g., "the Department will consult with Te Runanga and provide for its participation in the conservation and management of customary freshwater fisheries and freshwater fish habitats" 3
- 10.6 The Mimihau Stream is a tributary of the Mataura River, which has a Statutory Acknowledgement.<sup>4</sup>

#### Treaty of Waitangi principles

- 10.7 DOC's work in preparing this report has been carried out in a manner that, as far as possible, gives effect to the principles of the Treaty of Waitangi (arising from the obligation on DOC from section 4 of the Conservation Act). The principles most applicable to DOC's role are:
  - Partnership mutual good faith and reasonableness.
  - Informed decision-making Both the Crown and Māori need to be well informed of the other's interests and views. Consultation is a means to achieve informed decision-making.
  - Active protection requires informed decision-making and judgement as to what is reasonable in the circumstances.
  - Redress requires recognition of existing rights and interests.
- 10.8 For this application, this has included:
  - DOC engagement with Treaty partners on the application. We note this has occurred
    within the context of the fast-track process with prescribed timeframes, and where
    the applicant has an obligation to consult and Treaty partners have a right to be
    invited to comment. The scope of engagement also recognised DOC's role to
    provide reports and comments on the application, and not in its usual role as
    decision-maker.
  - identifying for the Panel any relevant information from Protocols or relationship agreements prepared in accordance with Settlements (eg taonga species);
  - ensuring that the information in this report is informed by any information from Treaty partners and the impact the activity would have on their interests.
- 10.9 DOC has advised Kaitiaki Röpü Ki Murihiku (Kā Rūnaka representatives of Waihōpai, Arowhenua, Hokonui and Öraka-Aparima) and Te Rūnanga o Ngãi Tahu of the application, sharing relevant publicly available information. DOC understands that affected Māori entities will be invited by the Panel to provide comments on the application.
- 10.10 The applicant has noted in their freshwater fisheries application that it has informed Te Ao Marama Inc (representing Murihiku Rūnaka on RMA and other processes) of the complex

 $<sup>^{\</sup>rm 3}$  DOS Attachment 12.147 Form of protocols (pages 807 - 818).

<sup>&</sup>lt;sup>4</sup> Clause 12.2 and Attachment 12.27 , Section 12 of the Deed

freshwater fisheries activities it is seeking in this application, and that Te Ao Marama Inc understood the intent and did not raise any concerns.

10.11 DOC has not identified any specific conditions that should be imposed to achieve consistency with Treaty principles.

### 11. Appendices

Appendix E1: Complex Freshwater Fisheries Activities Proposed Conditions – marked up with DOC's proposed changes.

## SOUTHLAND WIND FARM – PROPOSED COMPLEX FRESHWATER FISHERIES ACTIVITY APPROVALS CONDITIONS

No.	Co	ndition
1	<ul> <li>a) All culverts constructed for the Southland Wind Farm shall comply with the following conditions in accordance with Rule 70 of the Resource Management (National Environm Standards for Freshwater) Regulations 2020:</li> </ul>	
		<ul> <li>The culvert shall provide for the same passage of fish upstream and downstream as would exist without the culvert, except as required to carry out the works to place, alter, extend, or reconstruct the culvert;</li> </ul>
		ii. The culvert shall be laid parallel to the slope of the bed of the river or connected area;
		iii. The mean cross-sectional water velocity in the culvert shall be no greater than that in all immediately adjoining river reaches;
		iv. The culvert's width where it intersects with the bed of the river or connected area(s) and the width of the bed at that location (w), both measured in metres, shall compare as follows:
		1. Where $w \le 3$ , $s \ge 1.3 \times w$ ;
		2. Where $w > 3$ , $s \ge (1.2 \times w) + 0.6$ ;
		v. The culvert shall be open-bottomed or its invert must be placed so that at least 25% of the culvert's diameter is below the level of the bed;
		vi. The bed substrate shall be present over the full length of the culvert and stable at the flow rate at or below which the water flows for 80% of the time; and
		vii. The culvert shall provide for continuity of geomorphic processes (such as the movement of sediment and debris).
	b)	Condition (1)(a) shall not apply to culverts NSC1, NSC3 and NSC6, as identified on the map included in Appendix 1 to these conditions. Fish passage at these culverts will be impeded in accordance with this approval, taking into account the design considerations in section 6 of the New Zealand Fish Passage Guidelines 2024.
2		thin twenty (20) working days following the completion of the construction of all culverts required the Southland Wind Farm, the Approval Holder shall complete a fish passage risk assessment

for each of these culverts using the Fish Passage Assessment Tool

(https://niwa.co.nz/freshwater/management-tools/fish-passage-assessment-tool). In the event the Tool indicates risk to fish passage of medium or greater at the location of any culvert where there is known fish habitat upstream, excluding at culverts NSC1, NSC3 and NSC6, the Approval Holder

shall undertake an assessment of the culvert to ensure fish passage is provided for.

**Commented [DOC1]:** Reference to the NZ Fish Passage Guidelines suggested, as detailed designs not provided.

No.	Condition
3	Following the completion of the construction of culverts NSC1, NSC3 and NSC6, the Approval Holder shall undertake inspections of these culverts annually to ensure the barrier to fish passage is maintained for the life of the operation of the Southland Wind Farm.
4	In the event of an extreme rainfall event during the operation of the Southland Wind Farm (>100mm in a 24-hour period as recorded at a meteorological mast within the Project Site), the Approval Holder shall undertake an inspection of the culverts identified as NSC1, NSC3 and NSC6 to ensure the fish barrier at each of these culverts has not been breached.
	If it is discovered that one or more invasive fish species have breached the barrier and are upstream of any one of these culverts, the Approval Holder shall engage a Suitably Qualified and Experienced Person to remove the invasive fish species and undertake any required enhancements to the existing barrier to ensure exotic fish passage is impeded.
<u>5</u>	Works must be undertaken, where possible, outside the peak migration times for the species in each of the streams as set out in the document https://www.mpi.govt.nz/document-vault/7992. Where peak migration times cannot be avoided due to the urgency of these works the Approval Holder will work with a qualified ecologist to minimise any impacts on freshwater fish
<u>6</u>	The Approval Holder must avoid using wet concrete within flowing water.
Z	While undertaking construction works the Approval Holder must have sediment control measures in place to prevent the entry of sediment into the water which can affect fish passage.
<u>8</u>	The Approval Holder must avoid, or minimise where not possible to avoid, works undertaken in flowing water.

**Commented [DOC2]:** In addition, if not confirmed before approval, absence of invasive fish upstream of the culverts needs to be confirmed prior to construction.

**Commented [DOC3]:** Additional conditions suggested relating to minimising impacts during construction