

**BEFORE THE ENVIRONMENT COURT
I MUA I TE KŌTI TAIAO O AOTEAROA**

**AT CHRISTCHURCH
KI OTAUTAHI**

ENV-2018-CHC-000036

IN THE MATTER

of the Resource Management Act 1991

AND

of an appeal under clause 14 of the First
Schedule of the Act

BETWEEN

**Director-General of Conservation
*Tumuaki Ahurei***

Appellant

(ENV-2016-CHC-000036)

AND

Southland Regional Council

Respondent

**Topic B Tranche 1 Expert Evidence (Planning) of Linda Elizabeth Kirk
for Director-General of Conservation *Tumuaki Ahurei*, Appellant**

Dated 20 December 2021

Department of Conservation Te Papa Atawhai

Planning, Permissions and Land

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Introduction

1. My full name is Linda Elizabeth Kirk. My experience and qualifications are set out in my evidence in chief dated 15 February 2019.
2. I have been involved in the proposed Southland Water and Land Plan (pSWLP) process in the following ways:
 - a. Expert evidence dated 15 February 2019 (and associated Environment Court Hearing – Topic A);
 - b. Evidence as Section 274 Party in Support – Topic A, dated 1 March 2019;
 - c. Evidence as Section 274 Party in Opposition – Topic A, dated 22 March 2019;
 - d. Statement of Evidence in Reply as a Section 274 Party, dated 13 May 2020;
 - e. Brief Setting Out Position Statement in Relation to Expert Conferencing Matters on 6 & 7 August 2020; and
 - f. Environment Court facilitated mediation on Topics B1, B2, B3, B4, B7;
 - g. Planning (Forestry) Joint Witness Statement, dated 9-10 December 2021; and
 - h. Planning Joint Witness Statement, dated 9-10 December 2021.
3. I have been asked by the Director-General of Conservation *Tumuaki Ahurei* (D-G, Director-General) to provide independent planning evidence in relation to her outstanding appeal Topic B matters on the proposed Southland Water and Land Plan (pSWLP).
4. In preparing this evidence, the additional information and documents I have read and considered since my evidence in chief dated 15 February 2019 and statement of evidence in reply dated 13 May 2020 are the:

- a. 1 March 2021 Decisions Version of the pSWLP (Decisions Version);
- b. PSWLP Topic B – agreed changes to provisions – 29 October 2021¹ (as provided by Southland Regional Council in its email dated 29 October 2021);
- c. National Policy Statement for Freshwater Management 2020 (NPSFM);
- d. Resource Management (National Environmental Standards for Freshwater) Regulations 2020 (NES-F);
- e. Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017;
- f. Resource Management (Stock Exclusion) Regulations 2020;
- g. Statement of Evidence of Mr Matthew McCallum-Clark: Topic B Overview for the Southland Regional Council (Council) (dated 22 October 2021);
- h. Supplementary Statement of Evidence of Mr Matthew McCallum-Clark: Topic B Overview (dated 28 October 2021);
- i. Will Say Statement of Mrs Emily Funnell (dated 29 October 2021);
- j. Tracked changes' relief sought by each party filed with the Court in October/ November 2021;
- k. The Will Say statements of each planner and technical expert filed with the Court in October/ November 2021;
- l. The Council's preferred "track changes" relief (as filed to the Court on 11 November 2021), prepared in response to the tracked changes relief sought by the parties on 29 October 2021;
- m. JWS signed by Freshwater Ecology experts (1 December 2021);
- n. JWS signed by Forestry experts (29 November 2021);

¹ My understanding is that these are the mediated provisions that have consent orders pending

- o. JWS signed by Farm Systems experts (22 November and 6 December 2021);
- p. JWS signed by Science experts (26 November 2021); and
- q. JWS signed by Planning experts (10 December 2021)
- r. Topic B Tranche 1 Expert Evidence (Freshwater Ecology) of Emily Pearl Funnell for the Director-General of Conservation *Tumuaki Ahurei* (20 December 2021).

Code of Conduct

- 5. I confirm that I have read the code of conduct for expert witnesses as contained in section 7.1 of the Environment Court's Practice Note 2014. I have complied with the practice note when preparing my evidence and will do so when I give oral evidence before the Court.
- 6. The data, information, facts and assumptions I have considered in forming my opinions are set out in my evidence to follow. The reasons for the opinions expressed are also set out in the evidence to follow.
- 7. Unless I state otherwise, this evidence is within my sphere of expertise, and I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

Scope

- 8. I have been asked by the Director-General to provide independent planning evidence in relation to her following outstanding appeal Topic B matters on the pSWLP:
 - a. Policy 16(1)(a); and
 - b. Rule 78 – Weed and sediment removal for drainage maintenance.
- 9. This evidence identifies:
 - a. the proposed relief now sought in tracked changes of the pSWLP²;

² pSWLP is the version dated 1 March 2021 and the mediated outcomes (consent orders pending) as stated at paragraph 4 of this Evidence.

- b. the relevant objectives and policies of the pSWLP that support the proposed relief;
 - c. any higher planning framework that supports the proposed relief if required; and
 - d. the reasoning that, in my opinion, supports the proposed relief.
10. In preparing this evidence, I have received and considered a memorandum from Dr Nicholas Dunn, which is attached as Attachment 1 to Mrs Funnell's evidence dated 20 December 2021. This memorandum provides an analysis of the extent of co-occurrence of native freshwater fish habitat that is potentially affected by Rule 78. In the proposed relief sought in Appendix 1, I have confined the relief sought to the matters of the Director-General's appeal, that being non-diadromous galaxias.³

Position Statement

11. In preparing this Evidence, I reiterate that the proposed relief sought is confined to the matters on Policy 16 and Rule 78 as sought in the Director-General's Appeal.⁴
12. In Appendix 1 to this Evidence, is a table which sets out my position (and associated reasoning) with regards to Policy 16 and Rule 78. The proposed relief sought is highlighted in red, and shown in ~~strikethrough~~ for matters to be deleted or underlined for additional wording.
13. The Director-General's Appeal also sought an amendment to Policy 16 to include "*other intensive farming activities*". I understand that this relief is no longer being pursued by the Director-General, and I have not included it in Appendix 1.
14. The table in Appendix 1 also shows the relevant objectives and policies of the pSWLP and the higher order planning framework where relevant, to support the reasoning, that, in my opinion, support the proposed amendments sought.

³ I note that the term "non-migratory galaxias" has now been more correctly referred to as "non-diadromous galaxias" since the Director-General's appeal notice in 2018. Refer to Funnell 29 October 2021, paragraph [9].

⁴ Notice of Appeal dated 17 May 2018, paragraph 8.1 relief

Conclusion

15. The amendments sought for Policy 16 are consistent with the Planning JWS dated 10 December 2021. The policy as redrafted is more directive in managing higher risk activities and aligns with the water quality and safeguarding the life-supporting capacity of ecosystem objectives and policies in the plan. The policy provides clarity in what contaminant discharges are being managed and how, including the directive to require a Farm Environmental Management Plan.
16. The amendments sought for Rule 78 are consistent with the Council's tracked change provisions in response to parties' relief sought (dated 11 November 2021). This redrafting addresses the potential significant adverse effects (such as localised species extinctions) on non-diadromous galaxias that was raised by the D-G. The provision of mapping to aid in the identification of the habitat of threatened non-diadromous galaxias, and the requirement that the gravel removed shall comprise not more than 5% of the total sediment removed, will go some way to reduce the habitat loss that may have occurred if this was not specified in a permitted activity rule.
17. The amendments sought align with the direction of the water quality and safeguarding the life supporting capacity of ecosystem objectives and policies in the Plan, as well as Policies 1 and 9 of the NPSFM 2020. I consider the amendments sought gives some effect to the NPSFM 2020 and can be done at this stage of the planning process as it is reasonably practicable to do so as required under Part 4, clause 4.1(1) of the NPSFM 2020⁵.
18. In my opinion, I consider that the identification of the habitats of non-diadromous galaxias provides a starting point for the protection of habitat of threatened species as required under Policy 1⁶ and Policy 9⁷ of the NPSFM 2020. The inclusion of the identification of habitats of threatened

⁵ NPSFM 2020:

4.1 Timing

(1) Every local authority must give effect to this National Policy Statement as soon as reasonably practicable.

⁶ Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai

⁷ Policy 9: The habitats of indigenous freshwater species are protected.

non-diadromous galaxias at this time provides a clear indication of the required behaviour change in the practice of weed and sediment removal for drainage maintenance. To give better effect to the NPSFM 2020, the inclusion of the identification of habitats of other threatened species in Policy 16 is required.



Linda Elizabeth Kirk

20 December 2021

Appendix 1: Kirk's Amendments sought to Policy 16 and Rule 78 of pSWLP

Amendments sought (in red, green or purple)	Relevant pSWLP provisions to support amendments	Reasons
<p>Source: Planning JWS dated 10 December 2021</p> <p>Tracked changes key:</p> <p>Red = changes that show Council's preferred relief</p> <p>Green = changes post first tranche of conferencing</p> <p>[Purple = changes on last day of conferencing]</p> <p>Policy 16</p> <p>1. Minimising Avoid where reasonably practicable, or otherwise minimise remedy or mitigate, any the adverse environmental effects (including on the quality of water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes, and groundwater) from farming activities by:</p> <p>(a) discouraging avoiding the establishment of new dairy farming of cows or new intensive winter grazing activities any new, or further intensification of any existing, dairy farming of cows or intensive winter grazing activities in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A; and</p> <p>(b) ensuring that, for existing farming activities:</p> <p>(i) existing farming activities minimise nitrogen, phosphorus, sediment and or microbial contaminant discharges are minimised;</p> <p>(ii) reduce adverse effects on water quality where the farming activity occurs within the catchment of a waterbody that requires improvement identified in Schedule X; and</p> <p>(iii) demonstrate how (i) and (ii) is being or will be achieved through the implementation of Farm Environmental Management Plans prepared in accordance with (c) below and in addition,</p> <p>(ba) ensuring that for (iii) the establishment of new, or further intensification of existing, dairy farming of cows or intensive winter grazing activities:</p> <p>(i) does not result in an increase in nitrogen, phosphorus, sediment and or microbial contaminant discharges; and</p> <p>(ii) minimises nitrogen, phosphorus, sediment or microbial contaminant discharges through the implementation of farm plans prepared in accordance with (c) below; and</p>	<p>Objectives</p> <p>1, 2, 3, 4, 6, 7, 13, 14, 15, 17, 18</p> <p>Policies</p> <p>1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15A, 15B, 15C, 17, 18, 32, 33, 33A, 34, 39, 39A</p>	<p>The D-G Appeal sought to add “strongly discouraging” in Policy 1(a) to provide a clearer directive to manage higher risk activities in close proximity to Regionally Significant Wetlands and Sensitive Water bodies.</p> <p>The Planners’ JWS (dated 10 December 2021) version of Policy 16 is now “avoid where practicable, or otherwise minimise any adverse environmental effects from farming activities”. The policy has now been redrafted to be more directive and provides clarity in what contaminant discharges are being managed and how, including the directive to require a Farm Environmental Management Plan.</p> <p>I support the Planners’ JWS (dated 10 December 2021) drafting of Policy 16 as I consider that this redrafting more clearly manages the higher risk activities and aligns with the water quality and safeguarding the life-supporting capacity of ecosystem objectives and policies in the Plan. At a minimum, the minimisation of adverse environmental effects is sought which supports the improvement in water quality direction of the Plan where water quality is degraded. Policy 16(ba)(iv) provides the clear directive that higher risk activities in close proximity to Regionally Significant Wetlands and Sensitive Water bodies are to be avoided.</p> <p>The physiographic zone policies provide the initial direction for when decision-makers prohibit or generally not grant resource consents for dairy farming of cows or intensive winter grazing. The use of the terms “avoid” and “minimise” in the chapeau of Policy 16 provides a much stronger and clearer direction of how to implement these physiographic zone policies and other decision-making policies (Policies 39 and 39A), aligns with the</p>

<p>(iii) reduces nitrogen, phosphorus, sediment or microbial contaminant discharges where is the farming activity occurs within the catchment of a degraded waterbody that requires improvement identified in Appendix Schedule X; and</p> <p>(iv) is avoided in close proximity to Regionally Significant Wetlands and Sensitive Water bodies identified in Appendix A; and</p> <p>(v) resource consent is not granted to establish new, or further intensify existing, dairy farming of cows or intensive winter grazing activities where any adverse effects, including cumulatively, on the quality of groundwater, or water in lakes, rivers, artificial watercourses, modified watercourses, wetlands, tidal estuaries and salt marshes cannot be avoided [where [reasonably] practicable], or minimised otherwise remedied or mitigated; or and</p> <p>(c)2- requiring all farming activities to:</p> <p>(a) be undertaken in accordance with implement a Farm Environmental Management Plan which:</p> <p>(i) identifies whether the farming activity is occurring, or would occur, in a catchment of a waterbody that requires improvement which contains a degraded waterbody identified in Schedule X;</p> <p>(ii) identifies and responds to the contaminant pathways (and variants) for the relevant Physiographic Zones;</p> <p>(iii) sets out how adverse effects on water quality from the discharge of contaminants from farming activities will be minimised or, where the farming activity is occurring in a degraded catchment of a waterbody that requires improvement identified in Schedule X, reduced;</p> <p>(iv) is certified as meeting all relevant requirements of this plan and regulation prepared under Part 9A of the RMA; and</p> <p>(v) is independently audited and reported on;</p> <p>(d) actively manage avoid where practicable, otherwise minimise remedy or mitigate, sediment run-off risk from farming and hill country development activities by identifying critical source areas and implementing actions and maintaining practices including setbacks from water bodies, sediment traps, riparian planting, limits on areas or duration of exposed soils and the prevention of stock entering the beds of surface water bodies; and</p> <p>(e) manage avoid where practicable, otherwise minimise remedy or mitigate, collected and diffuse run-off and leaching of nutrients, microbial contaminants and sediment through the identification and management of critical source areas and the contaminant pathways identified for the relevant Physiographic Zones (and variants) within individual properties.</p> <p>3. When considering a resource consent application for farming activities, consideration should be given to the following matters:</p> <p>(a) whether multiple farming activities (such as cultivation, riparian setbacks, and winter grazing) can be addressed in a single resource consent; and</p> <p>(b) granting a consent duration of at least 5 years where doing so is consistent with Policy 40.</p>		<p>stock exclusion from water bodies policy (Policy 18) and the protection of significant indigenous vegetation and habitat and wetlands (Policies 32, 33, 33A); and the maintenance and restoration of existing wetlands (Policy 34).</p>
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<p><u>Minimise means to reduce to the smallest amount reasonably practicable.</u></p>		
<p>Rule 78 – Weed and sediment removal for drainage maintenance</p> <p>(a) The removal of aquatic weeds and plants and sediment from any modified watercourse for the purpose of maintaining or restoring drainage outfall, and any associated bed disturbance and discharge resulting from carrying out the activity, is a permitted activity provided the following conditions are met:</p> <p>(ai) general conditions (e), (f), (g), (h) and (l) set out in Rule 55A;</p> <p>(i) the activity is undertaken solely to maintain or restore the drainage capacity of a modified watercourse that has previously been modified or maintained for drainage maintenance or restoration purposes at that location;</p> <p>(ii) the activity is restricted to the removal of aquatic weeds and plants or sediment deposits, provided that at least 95% of the sediment removed shall have a grain size of less than 2mm;</p> <p>(iia) the removal of river bed material, other than aquatic weeds, plants, mud or silt is avoided as far as practicable;</p> <p>(iii) any incidental bed disturbance is only to the extent necessary to undertake the activity and must not result in lowering of the bed below previously modified levels;</p> <p>(iv) upon completion of the activity, fish passage is not impeded as a result of the activity;</p> <p>(v) the operator takes all reasonable steps to return any fish captured or stranded by the activity to water immediately preferably to a location upstream of the activity;</p> <p>(vi) between the beginning of June and the end of October, there is no disturbance of the spawning habitat of trout; and</p> <p>(xiii) where the modified watercourse is spring-fed, removal of aquatic weeds and plants is only to the extent that is necessary to undertake the activity and is kept to the absolute minimum; and</p> <p>(xiv) the modified watercourse is not shown in Map Series 8 as a habitat of threatened non-diadromous galaxias.</p> <p>Note: <i>In addition to the provisions of this Plan and any relevant district plan, any activity which may modify, damage or destroy pre-1900 archaeological sites is subject to the archaeological authority process under the Heritage New Zealand Pouhere Taonga Act 2014. The responsibilities regarding archaeological sites are set out in Appendix S.</i></p> <p>(b) The removal of aquatic weeds and plants and sediment from any modified watercourse for the purpose of maintaining or restoring drainage outfall and any associated bed disturbance and discharge resulting from the carrying out of the activity that cannot meet one or more of the conditions of Rule 78(a) is a discretionary activity.</p> <p>[Insert Maps based on mapping provided by the Director-General]</p>	<p>Objectives</p> <p>1, 2, 3, 4, 6, 7, 13, 14, 15, 17, 18</p> <p>Policies</p> <p>1, 2, 3, 4, 5, 6, 9, 10, 11, 12, Policy A4 of the National Policy Statement for Freshwater Management 2014 (as amended in 2017), 13, 15A, 15B, 28, 30, 32, 39A</p> <p>NPSFM 2020: Objective</p> <p>1</p> <p>Policies</p> <p>1, 3, 9</p>	<p>I note that the relief sought for Rule 78 has changed since my “Will Say Statement” (dated 29 October 2021). I support the Southland Regional Council’s tracked change provisions in response to parties’ relief sought (dated 11 November 2021).</p> <p>I note that the term “non-migratory galaxias” in the Director-General’s appeal should be replaced with the term “non-diadromous galaxias” as discussed in Mrs Funnell’s evidence, paragraph 11.⁸</p> <p>I agree with the evidence of Mrs Funnell which supports the relief sought as now proposed by the Council as this seeks to address the potential significant adverse effects (such as localised species extinctions) on non-diadromous galaxias raised by the D-G. The provision of mapping to aid in the identification of the habitat of threatened non-diadromous galaxias, and the requirement that the gravel removed shall comprise not more than 5% of the total sediment removed, will go some way to reduce the habitat loss that may have occurred if this was not specified in a permitted activity rule.</p> <p>As Mrs Funnell states at paragraph 22, “<i>the Council’s relief version of Rule 78 will reduce the amount of gravel being removed with weed and sediment removal and protect the gravel habitat for freshwater fish. This will afford a higher level of protection for non-diadromous galaxiids ...</i>”.</p> <p>Due to the threat classification of non-diadromous galaxias, it is not appropriate for weed and sediment removal for drainage maintenance to be a permitted activity where these species may potentially be significantly adversely affected. A discretionary activity status is appropriate in such circumstances. This will allow for the assessment of adverse effects on a case-by-case basis as such effects may be more than minor and require further management in the consenting process.</p> <p>The amendments sought align with the direction of the water quality and safeguarding the life supporting capacity of ecosystem objectives and policies in</p>

⁸ Topic B Tranche 1 Expert Evidence of Emily Pearl Funnell (freshwater ecology) for Director-General of Conservation Tumuaki Ahurei (dated 20 December 2021).

	<p>the Plan, as well as Policies 1 and 9 of the NPSFM 2020. I consider the amendments sought gives some effect to the NPSFM 2020 and can be done at this stage of the planning process as it is reasonably practicable to do so as required under Part 4, clause 4.1(1) of the NPSFM 2020⁹.</p> <p>As noted by Mrs Funnell at paragraph 10, the Ecology JWS (December 2021) lists the adverse effects of drainage management on freshwater species and attaches a memorandum from Dr Greer which details several key threats on freshwater species. Dr Greer’s memorandum states that <i>“waterway clearance is an intentionally destructive activity; it is not possible to fully mitigate the effects of using an excavator in a modified watercourse. Accordingly, the best method of minimising the effects of waterway clearing is to reduce its frequency and extent (i.e. length of stream) (last paragraph in section 3).</i></p> <p>As Mrs Funnell summarises at paragraph 10 of her evidence, Dr Greer concludes that the <i>“activity is destructive, and the adverse effects on threatened species and non-diadromous galaxiids is likely to be significant”</i>.</p> <p>Therefore, in my opinion, I consider that the identification of the habitats of non-diadromous galaxias only provides a starting point for the protection of habitat of threatened species as required under Policy 1¹⁰ and Policy 9¹¹ of the NPSFM 2020. The inclusion of the identification of habitats of non-diadromous galaxias provides a clear indication of the required behaviour change in the practice of weed and sediment removal for drainage maintenance. To give better effect to the NPSFM 2020, the inclusion of the identification of habitats of other threatened species in Policy 16 is required.</p>
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⁹ NPSFM 2020

4.1 Timing

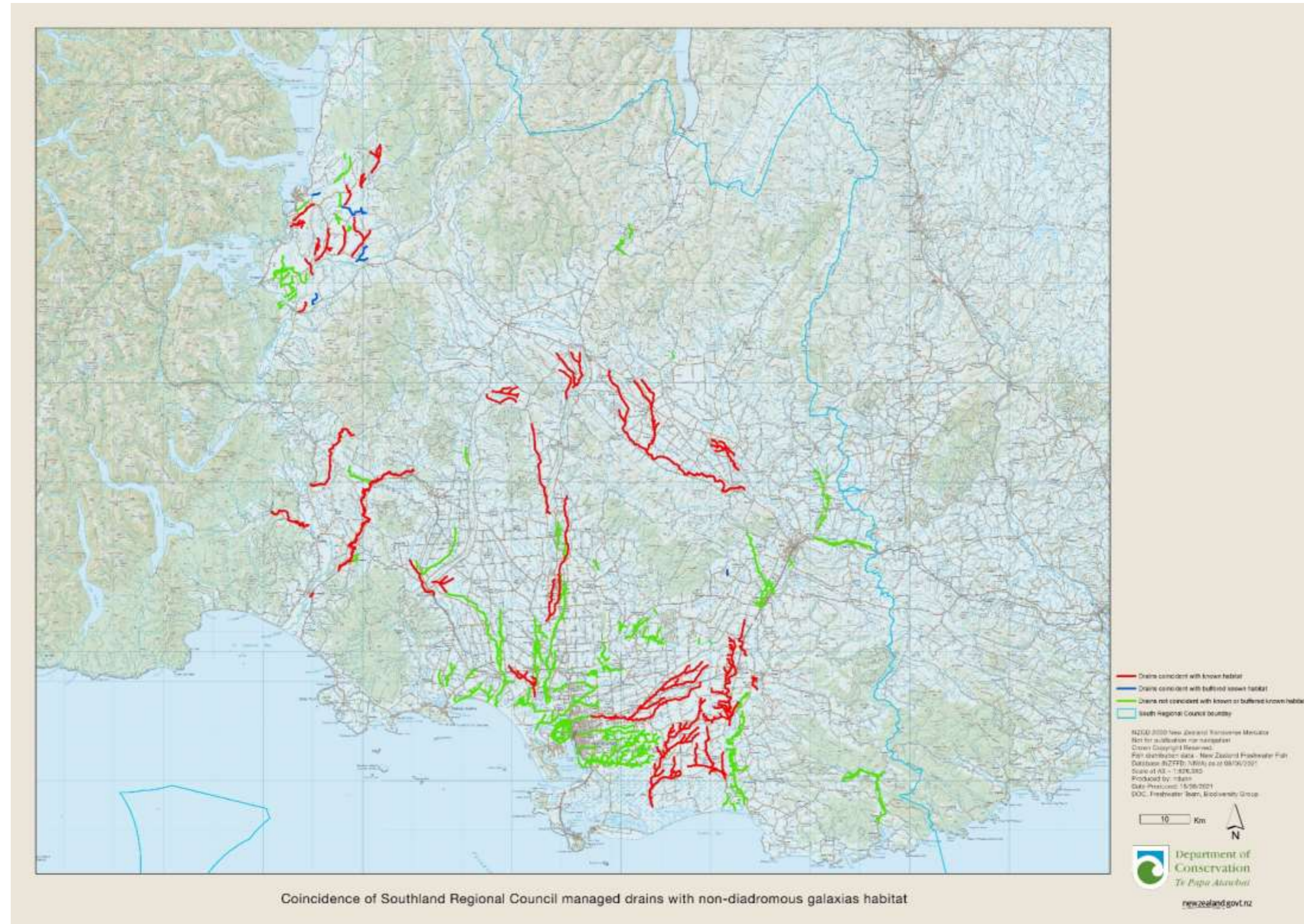
(1) Every local authority must give effect to this National Policy Statement as soon as reasonably practicable.

¹⁰ Policy 1: Freshwater is managed in a way that gives effect to Te Mana o te Wai

¹¹ Policy 9: The habitats of indigenous freshwater species are protected.

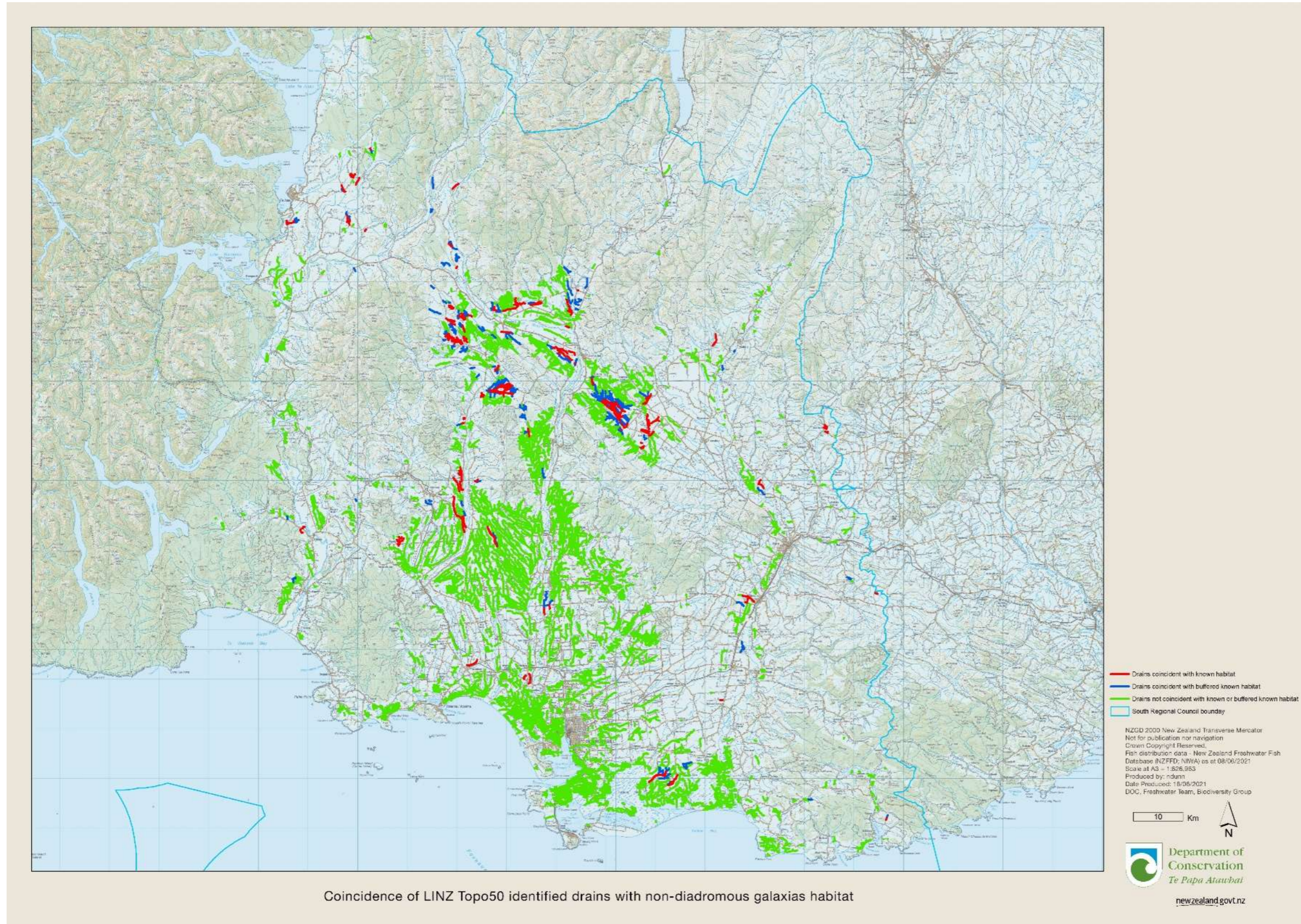
Schedule X Maps¹²:

Map 1: Southland Regional Council managed drains coincidence with non-diadromous galaxias habitat



¹² Dunn, Dr N., 2021, "Memo: Assessment of Southland Regional Council proposed Southland Water and Land Plan – Rule 78 weed and sediment removal rule testing", dated 18 June 2021, internal memorandum, Department of Conservation.

Map 2: LINZ Topo50 identified drains coincidence with non-diadromous galaxias habitat



Coincidence of LINZ Topo50 identified drains with non-diadromous galaxias habitat