

Before a Hearings Panel
Appointed by the Otago Regional Council

under: the Resource Management Act 1991

in the matter of: submissions and further submissions on the Proposed
Otago Regional Policy Statement (non-freshwater parts)

and: **Sanford Limited**

Submitter #122

Statement of Evidence of Adrian Low

Dated: 23 November 2022

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STATEMENT OF EVIDENCE OF ADRIAN LOW

INTRODUCTION

- 1 My full name is Adrian David Low.
- 2 I hold a Bachelor of Science and a Master of Science from the University of Otago, and a Post-Graduate Diploma in Planning from Massey University.
- 3 I am a consultant with, and Director of Mitchell Daysh Limited, an environmental consulting practice with offices nationwide. I have been employed by Mitchell Daysh and its predecessor companies for the past 15 years. Previously I was a Senior Resource Officer in the Resource Consents and Compliance department at the Otago Regional Council where I worked for three years.
- 4 I am a member of the Resource Management Law Association, and an Associate Member of the New Zealand Planning Institute.
- 5 I am familiar with the Otago region having lived and worked in Dunedin for several years and contributed to a number of specific projects over an extended period.
- 6 I prepared the Sanford Limited (*Sanford*) submission and further submissions on the Proposed Otago Regional Policy Statement (*Proposed RPS*) and have provided planning advice in respect of their various operations throughout New Zealand since 2018. This includes preparing the resource consent application documents for their proposed offshore salmon farms in Otago and Southland.
- 7 Whilst I appreciate that this is not a case before the Environment Court, I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note 2014. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE

- 8 I confirm that my evidence relates to the Sanford submission on the Proposed RPS, and I have been asked to provide this evidence by Sanford.

- 9 In preparing this evidence I have read and considered the section 42A reports prepared in response to submissions on the proposed RPS, as well as the relevant appendices to their reports and supplementary evidence. I have also read the relevant section 32 reports.
- 10 In this brief of evidence, I will:
- 10.1 Provide an overview of Sanford's key submission points;
 - 10.2 Address where I disagree with the Reporting Officers' recommended provisions; and
 - 10.3 Set out the changes to the Reporting Officers' recommended provisions that I consider should be made to address the Sanford submissions and further submissions.
- 11 To assist the Commissioners, I have set out the changes I consider should be made to the Reporting Officers' provisions in Appendix 1 of my evidence. I have used the version of provisions dated 31 October 2022 as the base document, with my changes shown in redline and yellow highlight.

EXECUTIVE SUMMARY

- 12 Sanford's primary interests in the Proposed RPS relate to how it will impact on its proposed offshore salmon farming operations, and its made submissions on a range of provisions in that context.
- 13 The Reporting Officers have recommended changes to some of these provisions in response to the submissions of Sanford and others. In my view, the Reporting Officers' proposed provisions in their 31 October 2022 version of the Proposed RPS appropriately address the planning issues raised in the relevant Sanford submissions, and no additional changes to those provisions are necessary, except for the proposed provisions which relate to:
- 13.1 Protecting significant indigenous biodiversity in the coastal environment; and
 - 13.2 Protecting indigenous species and ecosystems identified as taoka in the coastal environment.

Protecting Significant Indigenous Biodiversity in the Coastal Environment

- 14 Policy 11 of the New Zealand Coastal Policy Statement 2010 (NZCPS) includes directive two-tiered policy on how effects on indigenous biodiversity in the coastal environment are to be managed. It directs that:

- 14.1 Adverse effects on the taxa, ecosystems, vegetation types and areas specified in Policy 11(a) be avoided; and
- 14.2 Significant adverse effects on the ecosystems, vegetation types and areas specified in Policy 11 (b) be avoided, and other adverse effects on those matters be avoided remedied or mitigated.
- 15 Clauses (a) and (b) of Policy CE-5 in the Notified Version of the Proposed RPS replicate the two-tiered policy direction in Policy 11, and Sanford's submission sought the Notified Version of Policy CE-P5 be retained.
- 16 Sanford's submission also expressed concern that the Significant Natural Area (SNA) criteria in APP2 were overly broad. It sought they be amended to ensure the significance criteria for indigenous biodiversity are specific and targeted to avoid the inclusion of inappropriate areas within SNA.
- 17 In response to other submissions Mr Maclennan, the Reporting Officer responsible for the coastal provisions, has further broadened the significance criteria for classifying SNAs in APP2, and inserted a new clause in Policy CE-P5, which directs all effects on SNAs in the coastal environment be avoided.
- 18 These changes go significantly further than I consider necessary to address the submission points cited by Mr Maclennan as the basis for his proposed changes. They also cut across the directive tiered approach prescribed in Policy 11 of the NZCPS, because the areas covered by the Reporting Officers' proposed SNA criteria would include areas which are covered by Policy 11(a) and Policy 11(b) criteria, as well as other areas which would not be covered by Policy 11 at all.
- 19 The costs associated with Mr Maclennan's proposal to extend a level of protection to indigenous biodiversity in Otago's coastal marine area, which goes significantly beyond that contained in Policy 11 of the NZCPS provisions, have not been properly quantified. But they could be substantial.
- 20 The benefits of Mr Maclennan's proposal are also uncertain and potentially limited, given the rarest and most threatened indigenous biodiversity values in Otago's coastal marine area would already be protected by the Policy 11 approach.

- 21 I propose an alternative approach for addressing the submitters concerns in my strikethrough version. The key elements of that alternative approach are:
- 21.1 Retain Policy CE-5(a) and (b) so that the stringent NZCPS Policy 11(a) and (b) direction applies to activities in Otago's coastal marine area until the Council has completed its data collection and mapping exercise in the regional coastal plan;
 - 21.2 Amend the criteria in APP2 for attributing significance to areas of indigenous biodiversity in Otago's coastal marine area to reduce ambiguities and tighten their scope;
 - 21.3 Amend Policy CE-5(a) so it directs Council to:
 - (a) identify and map SNA-Marine – which are areas which are considered significant under the criteria in APP2 and contain values listed in NZCPS Policy 11(a)(iii) – (vi); and
 - (b) Attribute the stringent 'avoid adverse effects' protection to these areas;
 - 21.4 Amend Policy CE-5(b) so it directs Council to:
 - (a) Identify and map what I have referred to as Important Marine Areas – which are other areas in the coastal marine area that satisfy the amended criteria in APP2 but do not meet the NZCPS Policy 11(a)(iii) – (vi) threshold; and
 - (b) Attribute these areas the NZCPS Policy 11(b) policy direction to avoid significant adverse effects and avoid remedy or mitigate other adverse effects.
- 22 With respect to paragraph 21.2 above, I have made some preliminary suggestions in my strikethrough version for how the criteria in APP2 could be amended based on the evidence of Ms Giles. However, I accept that this exercise would benefit from collaboration involving a variety of experts from council and stakeholders.

Managing Effects on Indigenous Species and Ecosystems Identified as Taoka

- 23 Mr MacLennan's strikethrough version includes an additional clause (h) in Policy CE-P5 which directs that activities which have an adverse effect on indigenous species and ecosystems identified as taoka be avoided, or not allowed.

- 24 I do not read the Kai Tahu submission as seeking the insertion of the strict avoid policy proposed by Mr Maclennan. I read the submission as seeking some clarity around how an effects management hierarchy will apply to species and ecosystems identified as taoka in the coastal environment, and that 'priority' be given to avoiding adverse effects. This is not the same as a policy that requires **any** adverse effects be avoided under **all** circumstances.
- 25 It also seems to me that Mr Maclennan's proposed policy could override the application of kaitiakitanga and rangatiratanga by tangata whenua, by affording them no scope to exercise their own judgement or discretion on whether or how the effects of a proposed activity on species and ecosystems identified as taoka in the coastal environment could be managed. I note in that regard that the provision would apply to the sustainable use of resources by mana whenua themselves, including the use of indigenous species for mahika kai or kaimoana purposes.
- 26 In my view the appropriate response to this issue would be to remove Mr Maclennan's proposed policy, and for the Council to initiate a process involving mana whenua, council, and stakeholders to engage on what the alternative relief should be. I understand from Ms Undorf-Lay that Sanford would be a willing participant in that process.

OVERVIEW OF SANFORD'S KEY SUBMISSION POINTS

- 27 Sanford's primary interests in the Proposed Otago RPS relate to how it will impact on its proposed salmon farming operations which are discussed in the evidence of Ms Undorf-Lay, including, in particular:
- 27.1 Project East, which would involve offshore farming of up to 24,000 green weight tons (*GWT*) of King Salmon per year using two discrete farming areas, in one integrated operation, in the open ocean, northeast of Otago Harbour (see Figure 1 below); and
- 27.2 Its associated onshore hatchery and processing facilities.

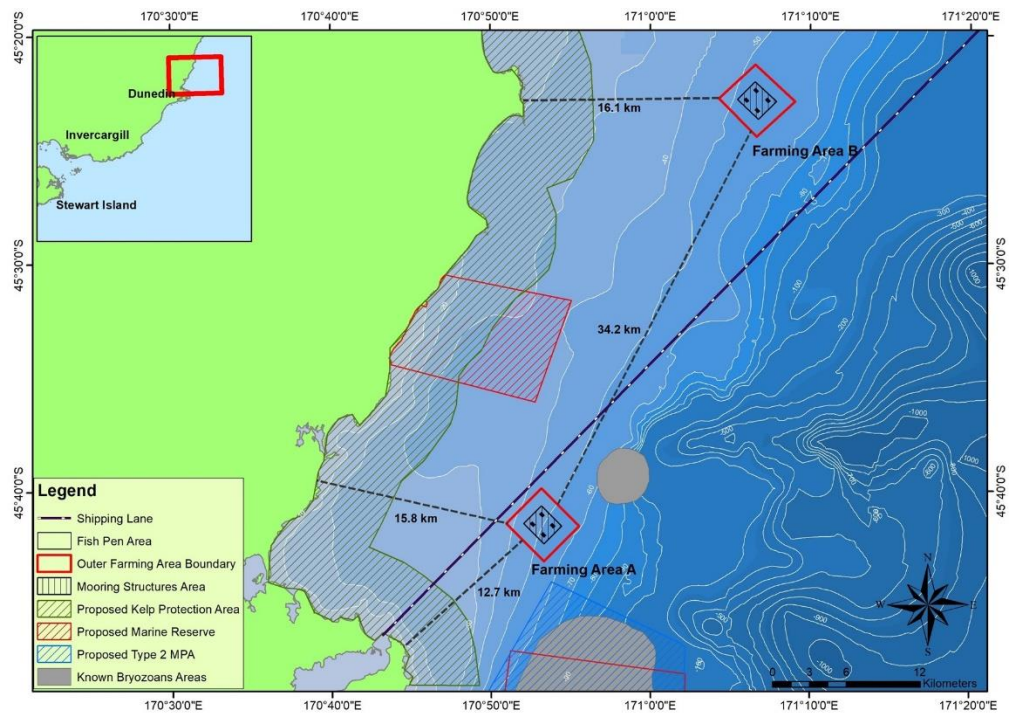


Figure 1: The location of Project East's Two Farming Areas relative to each other, the Otago coastline and some of the key values which contributed to the site selection process

Project East

- 28 Sanford lodged resource consent applications with the Otago Regional Council (ORC) for Project East in 2020. The applications are currently on hold, following significant Covid related disruptions, whilst Sanford provides further information requested by the ORC under section 92 of the RMA. Compilation of that further information is in progress, and the application is expected to be subject to a public notification process in the first half of 2023, with a hearing, if required, later in that year.
- 29 Project East would be located approximately 12 – 16 km offshore of the Otago Coastline and within the Coastal Marine Area (CMA) to which the Proposed RPS and Regional Coastal Plan for Otago applies.
- 30 The location of the two farming areas, shown as A and B in Figure 1, was chosen through a site selection exercise which considered:
- 30.1 the operational requirements of an offshore salmon farming activity, including suitable water depth, water quality, and coastal conditions etc.; and
 - 30.2 environmental imperatives, including avoiding outstanding natural landscapes and natural character areas, avoiding areas of significant ecological value; avoiding coastal

protection areas, avoiding mataitai reserves, and avoiding navigation channels.

- 31 As outlined in the evidence of Ms Undorf-Lay, open ocean aquaculture activities like Project East represent a significant opportunity for Otago, and the Sanford submission seeks that the proposed RPS suitably recognises and provides for these activities in its provisions.

Onshore Hatchery and Processing Facilities

- 32 Sanford has significant existing and ongoing investment in the Otago region. It has its main Salmon hatchery in Kaitangata, south of Dunedin, and a supporting hatchery in North Otago.
- 33 As is outlined by Ms Undorf-Lay, Sanford will also need to expand its hatchery and processing facilities in the lower South Island to support both its existing Stewart Island farm and its new offshore Salmon farms in the area.
- 34 These onshore facilities generally require a large geotechnically stable building platform, access to a reliable water supply, access to a means of disposing of wastewater and good transport links. Identifying suitable sites is not simple and thus far, suitable sites have been limited to those with rural or industrial zoning which have access to a natural water supply.

Sanford's Submission

- 35 Sanford made submissions on proposed provisions of the Proposed RPS contained in:
- 35.1 Chapter 3 Definitions;
 - 35.2 Chapter 5 Significant Resource Management Issues for the Region;
 - 35.3 Chapter 6 Integrated Management;
 - 35.4 Chapter 8 Coastal Environment;
 - 35.5 Chapter 10 Ecosystems and indigenous biodiversity;
 - 35.6 Chapter 12 Hazards and risks; and
 - 35.7 Chapter 15 Urban form and development.
- 36 The Reporting Officers have recommended changes to some of these provisions in response to the submissions of Sanford and others. In my view, the Reporting Officers' proposed provisions in their 31 October 2022 version of the Proposed RPS appropriately address the planning issues raised in the relevant Sanford

submissions, and no additional changes to those provisions are necessary, except for the proposed provisions which relate to:

- 36.1 Protecting significant indigenous biodiversity in the coastal environment; and
 - 36.2 Protecting indigenous species and ecosystems identified as taoka in the coastal environment.
- 37 The Reporting Officer responsible for the coastal provisions, Mr MacLennan, has recommended that a directive 'avoid adverse effects' policy apply to the areas and values which are covered by each of these criteria. For the reasons set out below it is my view that Mr MacLennan's assessment does not give sufficient consideration to the ramifications his proposed 'avoid' policies could have on the use and development of Otago's CMA, including on offshore salmon farming. It is my view that when you consider those ramifications, Mr MacLennan's proposed avoid policies cannot be justified in a section 32 context.

PROTECTING SIGNIFICANT NATURAL AREAS IN THE COASTAL ENVIRONMENT

- 38 Otago's coastal environment differs from its terrestrial counterpart insofar as Policy 11 of the New Zealand Coastal Policy Statement 2010 (*NZCPS*) includes directive two-tiered policy on how effects on indigenous biodiversity in that environment are to be managed. It states [**emphasis added**]:

Policy 11: Indigenous biological diversity (biodiversity)

To protect indigenous biological diversity in the coastal environment:

a. avoid adverse effects of activities on:

- i. indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists;*
- ii. taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened;*
- iii. indigenous ecosystems and vegetation types that are threatened in the coastal environment, or are naturally rare;*
- iv. habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare;*

- v. *areas containing nationally significant examples of indigenous community types; and*
 - vi. *areas set aside for full or partial protection of indigenous biological diversity under other legislation; and*
- b. **avoid significant adverse effects and avoid, remedy or mitigate other adverse effects** of activities on:
- i. *areas of predominantly indigenous vegetation in the coastal environment;*
 - ii. *habitats in the coastal environment that are important during the vulnerable life stages of indigenous species;*
 - iii. *indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable*
 - iv. *to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh;*
 - vi. *habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes;*
 - vi. *habitats, including areas and routes, important to migratory species; and*
 - vii. *ecological corridors, and areas important for linking or maintaining biological values identified under this policy.*

39 The section 32 assessment which underpins NZCPS Policy 11, demonstrates that each of the values it lists in clause (a) or (b) for specific management, were carefully considered, and it justified their inclusion as follows [**emphasis added**]:

The complete protection of all indigenous biological diversity from subdivision, use, and development would restrict use and development in the coastal environment to an extent incompatible with the purpose of the Resource Management Act.

Indigenous biological diversity is under continued decline and the degree of threat to indigenous ecosystems, habitats and species varies considerably in the coastal environment.

In response to these matters, it is considered appropriate to define a two-tier approach to protecting indigenous biological diversity from the adverse effects of subdivision, use, and development in the coastal environment.

The first tier provides the highest level of protection for indigenous biological diversity. This is applied to indigenous biological diversity that is most at risk of irreversible loss. The appropriate management response is the avoidance of adverse effects. This approach aligns with the recently released Statement of National Priorities on Rare and Threatened Indigenous Biodiversity and the findings from the five year Review of the New Zealand Biodiversity Strategy. The review raised concern over the continued decline of rare and threatened indigenous biological diversity on private land particularly in lowland and coastal environments [Green and Clarkson 2005]. It suggested the future challenge is to focus on strengthening protection towards our most rare and threatened indigenous biological diversity [Green and Clarkson 2005]. This first tier captures the rare, threatened and significant elements of indigenous biological diversity found in the coastal environment.

- 40 Clauses (a) and (b) of Policy CE-5 in the Notified Version of the Proposed RPS replicate these matters and Sanford's submission sought the Notified Version of this policy be retained.
- 41 It was not clear in the Notified Version of the Proposed RPS, how the criteria in APP2, for identifying SNAs, were intended to apply to the coastal marine area. However, Sanford's submission expressed concern that the criteria in APP2 for identifying SNAs were overly broad and could set the bar too low for what areas are significant in Otago's coastal marine areas if they were applied to that environment. Its submission sought they be reviewed and refined in that context.
- 42 Mr Maclennan's report notes that three submissions seek amendments to the notified provisions to clarify the relationship between Policy CE-5 and the significance criteria in APP2. At paragraph 241 of his report, he states the following when describing the submissions:

Several submitters also seek associated cross-references to the significance criteria for indigenous biodiversity set out in APP2 [00137.055 DOC, 00120.042 Yellow-eyed Penguin Society, 00230.038 Forest and Bird]. They consider this would assist in clarifying the relationship between the ECO chapter and the CE chapter.¹

and the following at paragraph 256 in his analysis of those submissions:

¹ At paragraph 241.

Other submissions on CE-P5 request explicit links to APP2 – Significance criteria for indigenous biodiversity be included within the policy. I agree with this amendment.

- 43 In response to these submissions Mr Maclennan has inserted a new clause in Policy CE-P5 which directs adverse effects be avoided (not allowed) on any SNA identified in accordance with APP2 as follows:

CE-P5 – Coastal indigenous biodiversity

Protect indigenous biodiversity in the coastal environment by:

(1) identifying and avoiding adverse effects on the following ecosystems, vegetation types and areas:

[...]

(g) significant natural areas identified in accordance with APP2, and ...

- 44 Based on Ms Giles evidence, the areas which could potentially be attributed SNA status when assessed against the Reporting Officers' version of APP2 are not limited to areas containing values covered by Policy 11(a) of the NZCPS. They could also include areas attributed SNA status due to them containing values covered by Policy 11(b) criteria, and areas attributed that status due to them containing values which would not be covered by Policy 11 at all.²
- 45 This, combined with Mr Maclennan's proposed Policy CE-P5(g), would represent a significant broadening of the protection afforded to indigenous biodiversity in Otago's coastal marine area relative to that which currently applies under the NZCPS and other existing planning documents, and relative to that included in the notified version of the Proposed RPS. It would also cut across the directive tiered approach contained in Policy 11 of the NZCPS, and Policy CE-P5(a) and (b) described above. If retained Mr Maclennan's proposed amendments could have significant implications for the use and development of Otago's CMA, including for offshore salmon farming.
- 46 I have read the submissions cited by Mr Maclennan as underpinning his proposed change. The Forest and Bird submission seeks Policy CE-P5 be retained as notified, whilst I read the DoC and Yellow Eyed Penguin Trust submissions as seeking Policy CE-P5 acknowledge that identifying and mapping significant natural areas is part of the proposed approach for protecting indigenous biodiversity in the coastal environment. I do not read these submissions as seeking the

² Ms Giles, paragraph 16 – 19.

strict 'avoid adverse effects' policy direction should apply to all areas identified as significant when assessed against the APP2 criteria.

- 47 I also found no assessment in Mr MacLennan's report, of the significant potential costs associated with his proposed new provisions.
- 48 In my view, when you consider Mr MacLennan's proposed new avoid adverse effects policy for SNAs in the coastal marine area, through a section 32 lens, it cannot be justified.
- 49 The costs associated with Mr MacLennan's proposed policy, which would effectively prevent the use and development of all activities which would have an adverse effect on any area which meets one or more of the significance criteria contained in his version of APP2 (and in turn are to be attributed SNA status), have not been properly quantified.³ These of course could be substantial, based on Ms Giles evidence that:
- 49.1 It is not clear based on the current knowledge of Otago's coastal environment as to what areas would be covered by the new SEAs if the proposed APP2 criteria were to be applied; but
- 49.2 the areas could be large, and in turn the application of Mr MacLennan's proposed policy direction could be widespread and quite disruptive.⁴
- 50 In my view, the benefits to indigenous biodiversity from Mr MacLennan's proposed policy are also uncertain, and potentially limited, noting that:
- 50.1 The policy direction in Policy 11 of the NZCPS and the notified version of Policy CE-5 would already apply when managing effects on any SNA identified in accordance with APP2, depending on whether the values attributed to the SNA are included in clause (a) or (b) of those provisions; and
- 50.2 Suitably protecting many of the areas which could be covered by the proposed SEA criteria in the Reporting Officers' version of APP2 will not require all effects to be avoided.⁵ Some areas / values which would be captured under those criteria, are more robust, and tolerant of activities, than others, and

³ I could find no acknowledgement of these potential costs in Mr MacLennan's report.

⁴ Ms Giles, paragraph 23.

⁵ Ms Giles, paragraph 25.

some which are of lower ecological value and/or more robust and tolerant of the effects of activities.⁶

51 I propose an alternative approach for addressing the submitters concerns in my strikethrough version of the provisions contained in Appendix 1 of my evidence. The key elements of my alternative approach are:

51.1 Retaining Policy CE-5(a) and (b) so that the stringent NZCPS Policy 11(a) and (b) direction on how effects on indigenous biodiversity are to be managed, applies to activities in Otago's coastal marine area, until the Council has completed its mapping exercise in the regional coastal plan;

51.2 Amending the criteria in APP2 for attributing significance to areas of indigenous biodiversity in Otago's coastal marine area, to reduce the ambiguities identified by Ms Giles, and to tighten their scope;

51.3 Amending Policy CE-5(a) so it directs Council to:

(a) identify and map SNA-Marine – which are areas which are considered significant under the criteria in APP2 and contain values listed in NZCPS Policy 11(a)(iii) – (vi); and

(b) Attribute the stringent 'avoid adverse effects' protection to these areas;

51.4 Amending Policy CE-5(b) so it directs Council to:

(a) identify and map what I have referred to as *Important Marine Areas* – which are other areas in the coastal marine area that satisfy the amended criteria in APP2 but do not meet the NZCPS Policy 11(a)(iii) – (vi) threshold; and

(b) Attribute these areas the NZCPS Policy 11(b) policy direction to avoid significant adverse effects and avoid remedy or mitigate other adverse effects.

52 With respect to paragraph 50.2 above, I have made some preliminary suggestions in my strikethrough version for how the criteria in APP2 could be amended based on the evidence of Ms Giles. However, I accept that this exercise would benefit from collaboration involving a variety of experts from council and stakeholders.

⁶ Ms Giles, paragraph 47.

MANAGING EFFECTS ON INDIGENOUS SPECIES AND ECOSYSTEMS IDENTIFIED AS TAOKA

- 53 Mr MacLennan's strikethrough version includes the following additional clause (h) in Policy CE-P5 [**emphasis added**]:

CE-P5 – Coastal indigenous biodiversity

Protect indigenous biodiversity in the coastal environment by:

- (1) **identifying and avoiding adverse effects on the following ecosystems, vegetation types and areas:***

'''

(h) indigenous species and ecosystems identified as taoka in accordance with ECO-M3, and

- 54 This policy directs that activities which have an adverse effect on indigenous species and ecosystems identified as taoka be avoided, or not allowed. It affords no discretion to adopt an effects management approach and not meeting the strict 'avoid' directive could be determinative of a consent application. Because of these implications it is important that great care is taken when inserting a policy like this into the Proposed RPS and in my view that care has not been properly applied here.
- 55 Firstly, it is uncertain how broadly the proposed avoid policy would apply and what its implications for use and development of the coastal environment, and in turn costs, may be. However, it would seem reasonable to expect its application may be relatively widespread, noting the following explanatory text in the Proposed RPS [**emphasis added**] "**All natural resources – air, land, water, and indigenous biological diversity – are taoka**" and "Kāi Tahu regard **all** indigenous species as taoka."
- 56 I also do not read the Kai Tahu submission as seeking insertion of the strict avoid adverse effects policy proposed by Mr MacLennan. I read the submission as seeking some clarity around how an effects management hierarchy will apply to species and ecosystems identified as taoka in the coastal environment. Nowhere does it request a policy that requires **any** adverse effects on indigenous species and ecosystems identified as taoka be avoided under **all** circumstances.
- 57 It also seems to me that Mr MacLennan's proposed policy would override the application of kaitiakitanga and rangatiratanga by tangata whenua, by affording them no scope to exercise their own judgement or discretion on whether or how the effects of a proposed activity on species and ecosystems identified as taoka in the coastal

environment could be managed. I note in that regard, that the provision would apply to the sustainable use of resources by mana whenua themselves, including the use of indigenous species for mahika kai or kaimoana purposes.

- 58 In my view the appropriate response to this issue would be to remove Mr Maclennan's proposed policy, and for Council to initiate a process involving mana whenua, council, and stakeholders to engage on what the alternative relief should be. I understand from Ms Undorf-Lay that Sanford would be a willing participant in that process.

CONCLUSION

- 59 In my view, the Reporting Officers' proposed provisions which relate to protecting significant indigenous biodiversity in the coastal environment using SNAs, and the provisions relating to indigenous species and ecosystems identified as taoka, require some refinement. Mr Maclennan's proposed new 'avoid adverse effects' policies could impose significant additional restrictions on development in Otago's coastal marine area, and in turn costs.
- 60 I have proposed an alternative approach for protecting significant indigenous biodiversity in the coastal environment in my strikethrough version contained in Appendix 1 of my evidence. It includes new provisions requiring the identification and mapping of Significant Natural Areas – Marine and what I have referred to as *Important Marine Areas*. It also includes preliminary suggestions for refining the criteria in APP2 based on the evidence of Ms Giles. However, I accept that this exercise would benefit from collaboration involving a variety of experts from council and stakeholders.
- 61 In my view the appropriate response to the provisions relating indigenous species and ecosystems identified as taoka in the coastal environment, would be to remove Mr Maclennan's proposed new Policy CE-P5(g), and commit to a process involving mana whenua, council, and stakeholders to engage properly on what the alternative relief should be.

Dated: 23 November 2022

Adrian Low

ATTACHMENT 1 – MY STRIKETHROUGH VERSION OF PROVISIONS

Definitions:

<p>Significant natural area</p>	<p>means areas of significant indigenous vegetation and significant habitats of indigenous fauna that are located outside the coastal environment that are located outside the coastal environment.</p>
<p>Significant Natural Area - Marine</p>	<p>Means an area of indigenous biodiversity which: (a) Meets any one or more of the criteria specified in APP2 and is an area to which Policy CE-P5(1)(c) – (f) applies; and (b) is identified and mapped in a regional coastal plan.</p>
<p>Important Marine Areas</p>	<p>Means an area of indigenous biodiversity which: (a) Meets any one or more of the criteria specified in APP2 and is not an area to which Policy CE-P5(1)(c) – (f) applies; and (b) is identified and mapped in a regional coastal plan.</p>

CE-P5 – Coastal indigenous biodiversity Protect indigenous biodiversity in the coastal environment by:

- (1) identifying and avoiding adverse effects on the following ecosystems, vegetation types and areas:
 - (a) indigenous taxa that are listed as threatened or at risk in the New Zealand Threat Classification System lists,
 - (b) taxa that are listed by the International Union for Conservation of Nature and Natural Resources as threatened,

- (c) *indigenous ecosystems and vegetation types in the coastal environment that are threatened or are naturally rare,*
- (d) *habitats of indigenous species where the species are at the limit of their natural range, or are naturally rare,*
- (e) *areas containing nationally significant examples of indigenous community types, and*
- (f) *areas set aside for full or partial protection of indigenous biodiversity under other legislation, and*

(g) Significant Natural Areas – Marine.

~~(g) significant natural areas identified in accordance with APP2, and~~

~~(h) indigenous species and ecosystems identified as taoka in accordance with ECO-M3, and~~

- (2) *identifying and avoiding significant adverse effects and avoiding, remedying or mitigating other adverse effects on the following ecosystems, vegetation types and areas:*
 - (a) *areas of predominantly indigenous vegetation in the coastal environment,*
 - (b) *habitats in the coastal environment that are important during the vulnerable life stages of indigenous species,*
 - (c) *indigenous ecosystems and habitats that are only found in the coastal environment and are particularly vulnerable,*
 - (d) *areas sensitive to modification, including estuaries, lagoons, coastal wetlands, dunelands, intertidal zones, rocky reef systems, eelgrass and saltmarsh,*
 - (e) *habitats of indigenous species in the coastal environment that are important for recreational, commercial, traditional or cultural purposes,*
 - (f) *habitats, including areas and routes, important to migratory species, and*
 - (g) *ecological corridors, and areas important for linking or maintaining biological values identified under this policy, and*
 - (h) Important Marine Areas.**

APP2 – Significance criteria for indigenous biodiversity

An area **outside the coastal marine area** is considered to be a significant natural area if it meets any one or more of the criteria below:

An area within the coastal marine area is considered to be a Significant Natural Area – Marine if it meets any one or more of the criteria below and is an area to which Policy CE-P5(1)(c) – (f) applies

An area within the coastal marine area is considered to be an Important Marine Area if it meets any one or more of the criteria below and is not an area to which Policy CE-P5(1)(c) – (f) applies

<p>Representativeness</p>	<p>(a) An area that is an example of an indigenous vegetation type or habitat that is typical or characteristic of the original natural diversity of the relevant ecological district or coastal marine biogeographic region. This may include degraded degraded examples where they are some of the best remaining examples of their type or represent all that remains of indigenous vegetation and habitats of indigenous fauna in some areas.</p> <p>(b) An indigenous marine ecosystem (including both intertidal and sub-tidal habitats, and including both faunal and floral assemblages) that makes up part of at least 10% of the natural extent of each of Otago’s original marine ecosystem types and reflecting the environmental gradients of the region and reflecting the environmental gradients of the region.</p> <p>(c) An indigenous vegetation marine ecosystem, or habitat of indigenous marine fauna (including both intertidal and sub-tidal habitats, and including both faunal and floral components), that is characteristic or typical of the relevant natural marine ecosystem diversity of Otago.</p>
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<p>Rarity</p>	<p>(d) An area that supports:</p> <p>(i) An indigenous species that is threatened, or uncommon, or an important population of species that is at risk risk, or uncommon, nationally or within an ecological district or coastal marine biogeographic region, or</p> <p>(ii) Indigenous vegetation or habitat of indigenous fauna that has been reduced to less than 20% of its former extent nationally, regionally or within a relevant land environment, ecological district, coastal marine biogeographic region or freshwater environment including wetlands, or</p> <p>(iii) Indigenous vegetation and habitats within originally rare ecosystems., or</p>
<p>Diversity</p>	<p>(e) An area that supports a high diversity of indigenous ecosystem types, or a high diversity indigenous taxa for its type or has changes in species composition reflecting the existence of diverse natural features or gradients.</p>
<p>Distinctiveness</p>	<p>(f) An area that supports or provides habitat for:</p> <p>(i) Indigenous species at their distributional limit within Otago or nationally, or</p> <p>(ii) Indigenous species that are endemic to the Otago region and are threatened (locally or nationally) or rare, or</p> <p>(iii) Indigenous vegetation or an association of indigenous species that is distinctive, of restricted occurrence, or has developed as a result of an unusual environmental factor or combinations of factors.</p>

<p>Ecological context</p>	<p>(g) The relationship of the area with its surroundings (both within Otago and between Otago and the adjoining regions), including:</p> <p>(i) Vegetation or habitat of indigenous fauna An area that has important connectivity value allowing dispersal of indigenous flora and fauna between different areas that have themselves been identified as significant under these criteria, or</p> <p>(ii) Indigenous vegetation or habitat of indigenous fauna An area that has an important buffering function that helps to protect the values of an adjacent area or feature that has itself been identified as significant under these criteria, or</p> <p>(iii) Indigenous vegetation or habitat of indigenous fauna An area that provides is important habitat for indigenous fauna during some part of their life cycle, either regularly or on an irregular basis, e.g. for feeding, resting, nesting, breeding, spawning or refuges from predation, or</p> <p>(iv) A wetland which plays an important hydrological, biological or ecological role in the natural functioning of a river or coastal ecosystem.</p>
<p>Vulnerable and sensitive species</p>	<p>(h) An area that contains sensitive habitats, biotopes or species that are fragile (to anthropogenic effects or have slow recovery from anthropogenic effects).</p>