

BEFORE THE FRESH WATER HEARINGS PANEL APPOINTED BY THE
OTAGO REGIONAL COUNCIL

IN THE MATTER OF of the Resource Management Act 1991

AND

IN THE MATTER OF the Proposed Otago Regional Policy Statement 2021
Fresh Water Planning Instrument Hearing

SUBMITTER Contact Energy Limited

STATEMENT OF EVIDENCE BY CLAIRE HUNTER

28 JUNE 2023

INTRODUCTION AND BACKGROUND

- 1 My full name is Claire Elizabeth Hunter. I am a resource management consultant and Director of Mitchell Daysh Limited, a nation-wide resource management and environmental planning consultancy firm. I have over 18 years' experience in this field. I hold an honours degree (first class) in Environmental Management from the University of Otago. I am a member of the Resource Management Law Association and an Associate Member of the New Zealand Planning Institute.

- 2 My firm has been engaged by Contact Energy Limited (**Contact**) on a number of projects throughout New Zealand. Most recently, I have been assisting Contact on a number of matters relating to its Clutha Hydro Scheme (**CHS**) in Otago, and also providing project management and planning support for its proposed wind farm in Southland. A summary of my recent project and consenting experience is set out in **Appendix A**.

- 3 Through my work, I am familiar with the now partially operative Otago Regional Policy Statement, and I assisted various clients, including Contact with their submissions on the Proposed Otago Regional Policy Statement 2021 (**PORPS**), and appeared before the Hearings Panel on the non-Freshwater Parts of the PORPS.

- 4 In preparing this evidence I have reviewed the:
 - a. Submission and further submission on behalf of Contact;

 - b. Section 42A report - Proposed Otago Regional Policy Statement Parts considered to be a Freshwater Planning Instrument (**FPI**) under section 80A of the Resource Management Act 1991 - 2 June 2023 (**section 42A report**); and

 - c. Further submissions on Contact's submission.

- 5 I have read, agree to comply with, the Environment Court's Code of Conduct for Expert Witnesses. I confirm that the issues addressed in this brief of evidence are within my area of expertise. I confirm that I have not omitted to

consider material facts known to me that might alter or detract from the opinions expressed.

CONTACT ENERGY'S INTERESTS IN THE OTAGO REGION

- 6 Mr Brinsdon explains Contact's interests in the Otago region. It operates the Clutha Hydro Scheme (**CHS**), which is nationally significant infrastructure and contributes approximately 10 percent of Aotearoa New Zealand's overall electricity supply and on average 12 percent of Aotearoa New Zealand's renewable electricity generation.
- 7 The Hāwea, Clyde and Roxburgh Dams were established before the Resource Management Act 1991 (**RMA**) was enacted. In 2001, Contact lodged resource consent applications to continue operating these three structures.
- 8 The National Policy Statement for Freshwater Management (**NPSFM**) directs regional councils to have regard to the importance of the CHS to meeting New Zealand's greenhouse gas emission targets; and maintaining the security of New Zealand's electricity supply; and the importance of its generation capacity, storage, and operational flexibility. The National Policy Statement for Renewable Electricity Generation (**NPSREG**) also requires recognition of the national significance of renewable electricity generation activities by providing for developing, operating, maintaining and upgrading new and existing renewable electricity generation activities.
- 9 Against this background, Contact has a specific interest in the freshwater provisions of the PORPS. In this evidence I address the following matters:
 - a. General themes emerging from Contact's submission – including the importance of REG and the CHS and provision for this in a freshwater context;
 - b. Discussion of Contact's more specific submissions on the freshwater provisions, particularly where I disagree with the recommendations made by the section 42A report writer. The revised provisions which I discuss in this evidence are attached as **Appendix B**.

GENERAL THEMES IN CONTACT'S SUBMISSION

Importance of REG and the CHS in a Freshwater Context

10 The CHS is made up of two power stations on the Clutha River that generate approximately 3,900 GWh of electricity each year. Mr Hunt in his evidence (for non FPI parts of the PORPS) has explained the significance of this Scheme from a decarbonisation and economic perspective. He makes the following points, which are equally relevant to this hearing process (refer to Mr Brinson's evidence, Appendix A for a fully copy):

- a. For a sense of scale, Mr Hunt explains that this is roughly the same as the total consumption of all South Island residential electricity consumers.*
- b. Mr Hunt also sets out that if the generation from Clutha Hydro Scheme needed to be replaced at short notice, the only viable alternative would be increased thermal generation. He estimates that this would also increase New Zealand's emissions by between approximately 1.5 million and 3.6 million tonnes of carbon dioxide equivalent per year.*
- c. The Clutha Hydro Scheme also provides some short-term flexibility (intraday and within a week). This means that in the short term it can generate more when electricity is valued more (eg when demand is high in the morning and evening peaks) and less when electricity valued less (eg overnight).*
- d. To meet its decarbonisation objectives, New Zealand needs to develop new generation sources at an unprecedented rate (as discussed below). Much of that generation will be from wind and solar power. Although these are very cost competitive, their output is subject to fluctuations due to weather and other factors.*
- e. While batteries are expected to help in smoothing out much of the very short-term fluctuation in supply from these sources, they are not suitable for addressing variations which occur from week to week or longer. Other sources of flexibility will be needed. One of the most important sources is expected to be hydro generation that has access to stored water. This type of generation has the twin benefits of being renewable and controllable – both of which will be increasingly important as New Zealand decarbonises its economy.*

- f. *Achieving New Zealand's decarbonisation goals will require the development of generation at a pace that is unprecedented. We estimate that it will require the development of around 1,100 GWh of new renewable generation capability on average every year until 2050. This pace of development is more than three times the rate achieved in the 30 years up to 2020.*
- g. *To provide a sense of scale, it is roughly equivalent to adding a new set of Clyde and Roxburgh hydro stations to the electricity system every 3.5 years until 2050. These projections assume that all existing renewable stations will retain their current generation capabilities after their current resource consents expire. However, if the operating capabilities of existing renewable stations are reduced during future consenting processes, the required future scale-up in renewable development would be even greater than this.*

11 The importance of the CHS is clearly demonstrated through Mr Hunt's evidence. It is therefore necessary to ensure that provisions in the PORPS appropriately recognise the importance of this scheme as it exists within the Otago region.

12 Clause 3.31 of the NPSFM also specifically recognises the importance of the CHS. Sub clause (2) requires:

*When **implementing any part of this National Policy Statement as it applies to an FMU or part of an FMU affected by a Scheme**, a regional council must have regard to the importance of the Scheme's:*

- (a) Contribution to meeting New Zealand's greenhouse gas emission targets; and*
- (b) Contribution to maintaining the security of New Zealand's electricity supply; and*
- (c) Generation capacity, storage and operational flexibility.*

13 As a consequence of this, it is my view that the PORPS should have particular regard to the CHS and its importance in terms of its contribution to decarbonisation and maintaining the security of New Zealand's electricity supply. Its generation capacity, storage and operational flexibility are also similarly important.

- 14 Based on the direction set out in the NPSFM, specifically regarding large hydro schemes (including the CHS) and the NPSREG as it more broadly relates to the importance of REG, Contact sought a suite of amendments to the freshwater provisions within the PORPS. These amendments seek to provide better recognition of the CHS and also for REG more generally. In response, the section 42A report writer notes *"that many parts of the NPSREG are addressed in the non FPI part of the pORPS, notably the EIT-INF and EIT-EN chapters. In response to submissions on LF-FW-P7, I have recommended including a new policy LF-FW -P7A which, among other things, requires providing for the allocation of water for renewable electricity generation where water is available and within limits. I consider this addresses the submission point by Contact in part¹".*
- 15 I am familiar with the approach taken by the Council within the non FPI part of the PORPS insofar as these issues are concerned. I do not agree that these provisions as they are currently drafted go sufficiently far in appropriately recognising the importance of the CHS, particularly in the light of the direction that is set out in the NPSFM Clause 3.31, and the NPSREG. I will discuss this further with regard to certain provisions below.

CONTACT'S SUBMISSIONS ON THE FRESHWATER PROVISIONS

SRMR – Issues

- 16 In its submission, Contact sought that the issue statements are amended to appropriately recognise the critical importance of freshwater in supporting hydroelectric (renewable) power schemes. It did so because renewable generation is an essential plank in strategies to achieve climate change mitigation and is thus an essential part of protecting the environment as well as providing for the economic and social wellbeing of people and communities.
- 17 Contact also sought amendments to the issues statements relating to the Central Otago lakes, to be clear that the CHS has had an instrumental effect on the form and function of these waterbodies.

¹ Paragraph 285 of the Section 42A report

- 18 The section 42A report writer has in response to Contact's submissions (and other generators) proposed some amendments to SRMR – I5 to include explicit reference to "renewable electricity generation" as requiring increased demand for freshwater use.
- 19 As part of the non-freshwater hearing process, planning experts representing infrastructure providers prepared a new issue statement specific to infrastructure. In my view, the addition of this new statement would address many of Contact's submission points on the issue statements as they relate to freshwater, as it would assist in achieving an appropriate balance by recognising the benefits of such infrastructure (specifically hydroelectricity generation) alongside the more environmentally focused issue statements.

LF- WAI – O1 Te Mana o te Wai

- 20 Objective LF- WAI – O1 seeks that the mauri of Otago's water bodies and their health and wellbeing is protected, and restored where it is degraded. The latter part of this objective seeks that the management of land and water recognises and reflects that:
- a. *water is the foundation and source of all life – na te wai ko te hauora o ngā mea katoa,*
 - b. *there is an integral kinship relationship between water and Kāi Tahu whānui, and this relationship endures through time, connecting past, present and future,*
 - c. *each water body has a unique whakapapa and characteristics,*
 - d. *water and land have a connectedness that supports and perpetuates life, and*
 - e. *Kāi Tahu exercise rakatirataka, manaakitaka and their kaitiakitaka duty of care and attention over wai and all the life it supports.*
- 21 Contact submitted in partial support of this objective, acknowledging the obligations inherent within the NPSFM and Te Mana o te Wai, but sought amendments to ensure that it gives effect to the NPSFM. In particular, the proposed objective does not capture the concept of balance within

paragraph 1 of Clause 1.3 of the NPSFM where it states, "*restoring and preserving the balance between the water, the wider environment and the community*". Contact also noted that the latter part of this objective appeared to include matters more relevant for policies and could be deleted.

- 22 In response to this submission (and others who have raised similar issues) the section 42A report writer states at paragraph [747] that "*protecting the mauri of the wai is described as the outcome of applying of the concept of Te Mana o te Wai. I consider that the requirement in LF-WAI-O1 to protect the mauri of Otago's water bodies is therefore consistent with the NPSFM*".
- 23 Clause 3.1(1) of the NPSFM explains the concept of Te Mana o te Wai. It states that:

Te Mana o te Wai is a concept that refers to the fundamental importance of water and recognises that protecting the health of freshwater protects the health and well-being of the wider environment. It protects the mauri of the wai. Te Mana o te Wai is about restoring and preserving the balance between the water, the wider environment, and the community.

- 24 I think the latter part of this explanation is important. It is appropriate to recognise that Te Mana o te Wai is about achieving a balance between the different priorities. The three priorities are all "acceptable" outcomes, and, in my view, that is why they each need to be given priority. The ranking ensures that in making decisions the advancing of a lower order priority cannot be pursued in a way that means a higher order priority is no longer being met. That is not the same as saying that a higher order priority can be pursued without consideration of lower order priorities. Were that to happen there would be no 'balance'.
- 25 Clause 3.2 of the NPSFM also provides further guidance to regional councils as to how the concept of Te Mana o te Wai should be expressed in each region, as follows:

*(1) Every regional council **must engage with communities and tangata whenua to determine how Te Mana o te Wai applies to water bodies and freshwater ecosystems in the region.***

(2) Every regional council must give effect to Te Mana o te Wai, and in doing so must:

- (a) *Actively involve tangata whenua in freshwater management (including decision making processes), as required by clause 3.4; and*
- (b) *Engage with communities and tangata whenua to identify long term visions, environmental outcomes, and other elements of the NOF; and*
- (c) *Apply the hierarchy of obligations, set out in clause 1.3(5):*
 - (i) *When developing long term visions under clause 3.3; and*
 - (ii) *When implementing the NOF under subpart 2; and*
 - (iii) *When developing objectives, policies, methods and criteria for any purpose under subpart 3 relating to natural inland wetlands, rivers, fish passage, primary contact sites, and water allocation; and*
- (d) *Engage the application of a diversity of systems of values and knowledge, such as matauranga Maori, to the management of freshwater; and*
- (e) *Adopt an integrated approach, ki uta ki tai, to the management of freshwater (see clause 3.5);*

(3) Every regional council must include an objective in its regional policy statement that describes how the management of freshwater in the region will give effect to Te Mana o te Wai. (my emphasis added)

26 Clause 3.2(3) of the NPSFM is specific to a regional policy statement and requires that every regional council must include an objective that describes how the management of freshwater will give effect to Te Mana o te Wai. Replicating the NPSFM (or in this case only parts of it, such as the reference to mauri) is not likely to be consistent with this requirement. In my view giving effect to Te Mana o te Wai in Otago will more properly be achieved via the "Visions and Management" provisions which commence at LF – VM – O2. These have been specifically developed for each FMU / rohe within Otago, and in my view are superior at giving effect to Te Mana o te Wai

through specific actions and outcomes. It also achieves the “balance” I discussed earlier.

- 27 The more general provisions intended to give more overarching effect to the NPSFM (LF – WAI – O1 and LF – WAI – P1) seem to me to be superfluous and could be deleted from the PORPS as a result.

LF–WAI–P1 – Prioritisation

- 28 LF-WAI-P1 essentially replicates objective (1) of the NPSFM. The notified version seeks that in the management of all freshwater in Otago, prioritise:
- a. *first, the health and wellbeing of water bodies and freshwater ecosystems, te hauora o te wai and te hauora o te taiao, and the exercise of mana whenua to uphold these,*
 - b. *second, the health and wellbeing needs of people, te hauora o te tangata; interacting with water through ingestion (such as drinking water and consuming harvested resources) and immersive activities (such as harvesting resources and bathing), and*
 - c. *third, the ability of people and communities to provide for their social, economic, and cultural wellbeing, now and in the future.*
- 29 Contact submitted that climate change will significantly affect the health and wellbeing of freshwater bodies and freshwater ecosystems within Aotearoa New Zealand, and the region.
- 30 It also submitted that REG is a core component of climate change mitigation. The submission notes that REG, and in the case of the region hydroelectric generation, is also essential to human health and wellbeing. It is vital in delivering basic human needs, including life-sustaining support and heating of our homes. REG is also critical to the region's and nation's economy.
- 31 At a fundamental level, given that LF-WAI-P1 bears significant similarities to the priorities set out in the overarching objective of the NPSFM, I question whether this policy has much utility. Put simply, the NPSFM already adequately covers the matters included within the policy. However, if the panel is minded to retain it, I hold the opinion that REG activities are in fact

very much aligned with all three of the priorities set out. For each of the priorities identified:

- a. The generation of electricity from a renewable resource that avoids contributing to GHG emissions and assists to avoid climate change effects in turn assists to prioritise the health and wellbeing of water bodies and freshwater ecosystems that would otherwise be adversely affected by GHG emissions;
- b. The generation of electricity is essential to meet the health needs of people. It is fundamental to the health needs of people in many ways, such as providing electricity to run hospitals or to run water treatment plants and pumping systems to provide drinking water. The continued operation of the CHS has a direct bearing in this regard;
- c. The generation of electricity is essential to enabling people and communities to provide for their social, economic, and cultural wellbeing, now and in the future. Renewable electricity is also fundamental to community wellbeing, of which hydroelectricity is a critical component, as described by Mr Hunt to enabling New Zealand to decarbonise its economy.

- 32 The section 42A report writer recommends rejecting Contact's submission on this matter. Regarding Contact's submission on Clause (1) seeking to acknowledge that climate change could have adverse effects on the health and wellbeing of the waterbody and freshwater ecosystems, the section 42A report writer responds:

[817] *Contact seeks to specifically reference resilience to climate change and emission reduction in clause (1). The amendments sought introduce new tests – "protection from" and "resilience to" climate change. By my reading, the inclusion of "emission reduction" would mean that reducing emissions is the only avenue available for protecting the health and wellbeing of water bodies and freshwater ecosystems from climate change. I do not consider that is appropriate.*

- 33 I am not clear if this submission is recommended to be rejected based on a potential drafting issue, or whether the concept (i.e., that water bodies are

susceptible to the adverse effects of climate change) is being disagreed with. I suspect it is a drafting issue and as such this could be amended as follows:

(1) first, the health and wellbeing of water bodies, freshwater ecosystems, including from the adverse effects of climate change.

- 34 The section 42A writer also considers that there is a risk in expanding the second priority (clause (2)) beyond its current scope on the basis that many other activities would also make the same argument regarding their importance. At paragraph [820] the report states that while they “*accept that renewable electricity generation supports the wellbeing of people and communities, this does not arise as a result of direct contact with water*”. I cannot see how this statement could be correct with regard to hydroelectric generation activities and its outputs.
- 35 Notwithstanding this, I accept that specific reference to the critical importance of REG within LF-WAI-P1 is likely unnecessary. I say this on the basis that it is clear and obvious that the achievement of all three priorities relies at least in part on REG providers successfully continuing to generate and in the light of Mr Hunts evidence to expand generation over the forthcoming decades. I however agree with the section 42A report writer that it could be problematic to be too specific regarding the activities that fall within or outside the second and third priorities. Making this list exclusive also potentially inadvertently limits the proponents of other critically important activities from being able to demonstrate consistency with one or more of the priorities.
- 36 This being so, I do think that there is still a need to add a further objective or policy within the freshwater section of the PORPS that specifically recognises the importance of hydroelectrical activities and the CHS that exists within the Otago region. The evidence of Mr Hunt is clear about the national and regional importance of the CHS. Its importance is also recognised by the NPSFM.
- 37 I, therefore, think that if the more general Te Mana o te Wai concepts are to remain within the PORPS, a further policy within this section which

recognises and protects the CHS (or, more broadly, hydroelectric generation activities in Otago) is also necessary. In my view, this would assist in showing how Te Mana o te Wai should be given effect to within the Otago region. It would also align with the balancing obligations inherent within the NPSFM and Policy 4 of the NPSFM, which directs that "*Freshwater is managed as part of New Zealand's integrated response to climate change*".

38 I suggest that such a policy could read:

Existing hydroelectric generation is recognised as an essential use of freshwater in Otago, due to its:

- a. *Contribution to reducing greenhouse gas emissions and assisting climate change mitigation;*
- b. *Critical importance in supporting the health and wellbeing of communities;*
- c. *Contribution to the region's economic resilience and efforts to decarbonise the economy.*

LF-VM-O2 – Clutha Mata-au FMU vision

39 The CHS is within the Clutha Mata-au FMU and, therefore, subject to LF-VM-O2.

40 In response to a number of submitters (including Contact) and the proposed addition of LF – FW -O1A (discussed below), the section 42A report writer has recommended some reasonably extensive drafting amendments to this objective. I am generally supportive of the intent of most of these amendments, but note that Contact requested modifications to Clause (6), which is specific to the CHS, as set out below:

(6) *the national significance of the ongoing operation, maintenance and upgrading of the Clutha hydro electricity scheme, including its generation capacity, storage, and operational flexibility and its contribution to climate change mitigation, is recognised, provided for and protected,*

41 The section 42A report writer disagrees that these refinements are necessary because "*clause (6) is an appropriate recognition of the national*

significance of the Clutha Mata-au hydroelectricity generation scheme and assists with giving effect to the NPSREG". The author considers that "Regional plans will be the primary way that management regimes, including the management of the effects of particular activities, are established..²"

- 42 As set out above the NPSFM and the NPSEG require regional councils to have regard to the national importance of the CHS specifically, and in doing so, must consider the significance of Scheme's contribution to greenhouse gas emission reduction, maintaining New Zealand's electricity supply and its generation capacity, storage and operational flexibility.
- 43 Policy, 4 of the NPSFM, also provides the policy basis for the exception mechanism Part 3, Subpart 4 for the CHS. These provisions allow regional councils to maintain attributes below national bottom lines if it is necessary to secure the benefits of the Waikato, Tongariro, Waikato, Manapouri and Clutha schemes, while ensuring water quality is maintained or improved. Quite clearly these schemes are critically important to overall health and wellbeing in social, economic and cultural terms.
- 44 In light of this, I consider that the PORPS does not sufficiently recognise the CHS's importance and does not currently provide sufficient guidance on how the regional plans will balance the functional requirements of this Scheme, with setting FMU limits and outcomes within the broader Clutha Mata-au. I, therefore, agree with Contact that the amendments to Clause (6) are necessary.
- 45 The section 42A report writer also recommends retaining the obligation specific to the Lower Clutha rohe (Clause (7)), requiring that *opportunities to restore the natural form and function of water bodies are promoted where possible*. Given the substantial modifications that have occurred due to the CHS throughout this catchment, there may be limited "possibilities" to restore the natural form and function in all respects fully even within these lower parts of the catchment. Given the existing environment, it would be

² Paragraph 1041 of the section 42A report

appropriate, in my view, to amend this to promote such opportunities *where practicable*, which would resolve Contact's submission on this point.

LF – FW – O1A – Region wide objective for freshwater (new)

46 As noted above, the section 42A report writer proposes the addition of a new region wide objective for freshwater to sit within the visions and management section of the PORPS. This reads as follows:

LF-FW-O1A – Region wide objective for freshwater

In all FMUs and rohe in Otago and within the timeframes specified in the freshwater visions in LF-VM-O2 to LF-VM-O6:

- (1) Freshwater ecosystems support healthy populations of indigenous species and Mahika kai that are safe for consumption;
- (2) The interconnection of land, freshwater (including groundwater) and coastal water is recognised;
- (3) Indigenous species can migrate easily and as naturally as possible;
- (4) The natural character, including form and function, of water bodies reflects their natural behaviours to the greatest extent practicable;
- (5) The ongoing relationship of Kai Tahu with wahi tapuna, including access to and use of water bodies, is sustained;
- (6) The health of water supports the health of people and their connections with water bodies;
- (7) Innovative and sustainable land and water management practices provide for the health and wellbeing of waterbodies and freshwater ecosystems and improve resilience to the effects of climate change; and
- (8) Direct discharges of wastewater to water bodies are phased out to the greatest extent practicable.

47 For the most part, the outcomes specified in this new objective are stated appropriately, however, the issue that Contact raised in its submission on LF-VM-O2 regarding indigenous species migration continues to prevail. Clause (3) uses the term "as naturally as possible". I have concerns with this on the basis that the term 'possible' is overly broad, in the sense that, often

anything can be 'possible' however, what is possible may not be operationally and/or economically practicable.

- 48 Conversely, the section 42A report writer considers that this Clause is drafted to sufficiently recognise that there will be situations where natural solutions are not possible³.
- 49 However, despite this view, I note that later in the document, the section 42A report writer acknowledges that using this term in a different context may be too stringent.⁴
- 50 Given that there is some discrepancy as to how the term "as far as naturally possible" can be interpreted, I think it is appropriate to amend the wording of this Clause to make its intent clear:

(1) Appropriate provision is made for indigenous species to migrate to and from the coastal environment.

- 51 I am also unclear as to how the term "*to the greatest extent practicable*," as it applies throughout this objective, would be applied. As drafted, it could imply that 'practicability' should be interpreted on a sliding scale. And that the application of the "greatest extent practicable" would therefore mean something more than "to the extent practicable or reasonably practicable", or even, the best practicable option. If this is the intent, I am not sure how an applicant could feasibly demonstrate that they have gone a step further in establishing whether something can be practicably achieved to any *greater extent*.
- 52 I am also unsure how this Clause would be applied in the CHS and the Clutha Mata-au context, where it would be unlikely to ever be practicable to, for example, alter the flow regimes in order to fully restore the character and behaviours of the natural river system. Achieving such outcomes (i.e. reflect natural behaviours) would require significant operational restriction, leading to adverse outcomes from a decarbonisation and security of electricity supply perspective. This outcome would also be at odds with Policy 4 of the

³ Paragraph 918 of the Section 42A report.

⁴ Paragraph 1478 of the Section 42A report.

NPSFM and Clause 3.31. To avoid any uncertainty, I think it would be preferable to remove the word "greatest" where it occurs within this objective.

LF -FW -O8 – Freshwater

53 In its submission, Contact raised a number of concerns with this objective. As a result of the section 42A report writers' recommendation to include a new objective for freshwater as noted above, a consequential amendment is the deletion of LF – FW – O8. I have no issues with the deletion of this objective on this basis.

LF – FW – O9 – Natural Wetlands

54 Contact opposed this objective in part in its submission. This was because it fails to reflect the recognised policy exception for specified infrastructure to occupy wetlands (where there is a functional need, and an effects management hierarchy has been applied) in Clause 3.22 of the NPSFM.

55 I agree that the current drafting of this objective does not properly give effect to the NPSFM. The NPSFM and National Environmental Standards for Freshwater (NESFW) provides a pathway for certain activities to occur within natural wetlands, including specified infrastructure, which would include the likes of wind farms or new hydro schemes.

56 Once a functional need has been demonstrated, such activities within wetlands may occur (following a consent process to determine this) subject to the application of the effects management hierarchy. The application of the effects management hierarchy anticipates that there may be unavoidable adverse effects on wetlands, and that these can be remediated, mitigated, offset or compensated for. Clause (3) of this objective, which requires an absolute "no reduction" in wetland ecosystem health, hydrological functioning, amenity values, extent or water quality, appears to be at odds with this. This differs from Clause (2), which now refers to "no net decrease, and preferably an increase". This better aligns with the NPSFM in my view, and for this reason, I consider that clauses (3) and (4) which are expressed in absolute terms, could be amalgamated, and re-drafted as follows:

LF-FW-09 – Natural wetlands

Otago's natural wetlands are protected or restored so that:

- (1) *mahika kai and other mana whenua values are sustained and enhanced now and for future generations,*
- (2) *there is no net decrease, and preferably an increase, in the range extent and diversity of indigenous ecosystem types and habitats in natural wetlands,*
- (3) *where appropriate there is an improvement in wetland ecosystem health, hydrological functioning, amenity values, ~~extent~~ or water quality, and, if applicable, their flood attenuation and water storage capacity is maintained or improved.*

LF – FW – P7 – Freshwater

57 Contact submitted in partial support to this policy as it relates to the use of freshwater resources but also sought that greater recognition was placed on the importance of hydroelectric activities, particularly the CHS. Contact also sought amendments to this policy to suitably recognise that the presence of these dam structures has altered the ability to provide for unassisted fish passage.

58 In response to Contact (and other submitters) the section 42A writer has also proposed a new policy, falling from Policy LF – FW-P7(6). The direction in this Clause was that "fresh water is allocated within environmental limits and used efficiently". The section 42A report writer concurs with submitters that the PORPS should give more direction on the allocation and efficiency of water use, the benefits to be derived from using water and provision for water storage⁵. To address this matter, the section 42A report recommends amendments to policy LF-FW-P7, and the addition of a new policy LF-FW-P7A - Water allocation.

⁵ Paragraph 1407 of the Section 42A report

LF-FW-P7A – Water allocation and use

Within limits and in accordance with any relevant environmental flows and levels, the benefits of using fresh water are recognised and over-allocation is either phased out or avoided by:

- (1) allocating fresh water efficiently to support the social, economic, and cultural wellbeing of people and communities to the extent possible within limits, including for:
 - (a) community drinking water supplies,
 - (b) renewable electricity generation, and
 - (c) land-based primary production,
- (2) ensuring that no more fresh water is abstracted than is necessary for its intended use,
- (3) ensuring that the efficiency of freshwater abstraction, storage, and conveyancing infrastructure is improved, including by providing for off-stream storage capacity, and
- (4) providing for spatial and temporal sharing of allocated fresh water between uses and users where feasible.

59 I support the section 42A report writers' recommendations insofar as renewable electricity generation is specifically recognised as an activity that relies on secure water access. I also consider that this policy supports my evidence above, where I propose that amendments are necessary to the Clutha Mata-au FMU objective and/or a new provision is inserted which provides for the importance of renewable electricity generation and the CHS.

60 Turning back to LF-FW-P7, I note that while Contact's proposed drafting regarding Clause (2) relating to fish passage has not been accepted, the section 42A report writer has recommended the following amendments, which I consider to be acceptable:

- (2) the habitats of indigenous freshwater species associated with water bodies are protected and sustained, including by providing for fish passage,

61 I agree with the section 42A report writer that this amendment more accurately reflects the wording used in Policy 9 of the NPSFM and reduces uncertainty about what "associated with waterbodies" means in a practical sense.

LF – FW – P9 – Protecting Natural Wetlands

62 LF-FW-P9 as notified, reflects the wording in clause 3.22 which was contained in the NPSFM prior to the 2023 amendments. As the Panel will be aware that policy was significantly amended in December 2022, with the changes taking effect from 5 January 2023. Contact's submission sought that this policy was aligned with the amended NPSFM and, more specifically, that it provided a consenting pathway for specified infrastructure.

63 Acknowledging these amendments to the NPSFM the section 42A report writer recommends replacing this provision with the following:

Protect natural wetlands by implementing clause 3.22(1) to (3) of the NPSFM, except that:

(1) In the coastal environment, natural wetlands must also be managed in accordance with the NZCPS, and

(2) When managing the adverse effects of an activity on indigenous biodiversity, the effects management hierarchy (in relation to indigenous biodiversity) applies instead of the effects management hierarchy (in relation to natural wetlands and rivers).

64 With respect to the Clause (2) the section 42A report writer considers it appropriate to refer to the effects management hierarchy as it applies to indigenous biodiversity (of the non-freshwater parts of the PORPS) because this is "more stringent" than the approach adopted via the NPSFM⁶.

65 The ECO provisions of the non-freshwater parts of the PORPS have been the subject of extensive evidence, from Contact and other submitters. A particular criticism of these provisions is the effect of Appendices 3 and 4

⁶ Paragraph 1478 of the Section 42A report.

(APP3 and APP4), which place limitations on when offsetting and compensation can be considered.

- 66 Under the notified drafting (and within the legal closing of the ORC) of APP3 and APP4, if certain impacts are to arise (e.g. the loss of any individuals of threatened taxa; and/or removal of its habitat), the activity is automatically 'ruled out' for offsetting or compensation. In other words, offsetting and compensation cannot be part of the environmental effects management matrix when specified species of conservation value or their habitat will be lost, even though the loss may be capable of being offset or compensated to produce a net gain for the species of interest.
- 67 Such limitations could, therefore, inadvertently preclude the ability to achieve good biodiversity outcomes in Otago through valid offsetting and compensatory means. However, it is these limits which the section 42A report writer seems to prefer as they purport to "increase the stringency" and therefore increase the protection for biodiversity.
- 68 On behalf of Contact for the non-freshwater parts of the PORPS, Dr Vaughn Keesing provided evidence that the limits set out in APP3 (offsetting) will likely "*be more problematic than beneficial to ecology.*"⁷ He identifies a number of flaws associated with the PORPS approach to limit setting and offsetting and compensation and observes "*that if those pathways are easily removed, then we will see greater biodiversity decline over the longer term as opposed to allowing an activity with management imposed through conditions.*"⁸ Dr Keesing states that the draft NPSIB does not set such low limits.⁹ Instead, it gives examples where offsetting would be inappropriate, including because of the irreplaceability or vulnerability of the indigenous biodiversity affected.
- 69 Based on this evidence, I am unclear why the section 42A report writer considers it necessary to "increase the stringency" of this provision. Preventing or avoiding an activity does not necessarily mean it will be

⁷ Paragraph 10.39 of Dr Keesing Evidence on the Non Freshwater Parts of the PORPS, dated 23 November 2022.

⁸ Paragraph 10.40.

⁹ Paragraph 10.9 of Dr Keesing Evidence.

protected. The example that Dr Keesing also uses in this evidence is a new renewable electricity development which may need to occupy "naturally uncommon habitats" which are also freshwater habitats such as a lake margin, or gravel outwash. He notes that these are often in a currently degraded state, and therefore are not currently being protected, and the loss of such habitat could be offset or compensated for a better outcome.¹⁰ If the limits to offsetting and compensation in APP3 and APP4 remain in their current form and apply throughout the PORPS, then such opportunities would be lost.

70 Based on this evidence, it is my view that Clause (2) of this policy should be deleted.

LF – FW – P10 – Restoring Natural Wetlands

71 Contact opposed this provision on the basis that it was not consistent with the NPSFM. The section 42A report writer has recommended some further amendments to this policy, including replacing "where possible" with "to the greatest extent practicable" so it reads as follows:

Improve the ecosystem health, hydrological functioning, ~~water quality~~ and extent of natural wetlands that have been degraded or lost by requiring ~~where possible~~ to the greatest extent practicable:

- (1) An increase in the extent and ~~quality~~ condition of habitat for indigenous species,*
- (2) The restoration of hydrological processes,*
- (3) Control of pest species and vegetation clearance, and*
- (4) The exclusion of stock*

72 As set out above, it is uncertain how an applicant would be able to demonstrate that these matters have been achieved to the "greatest extent practicable". I also consider that given that the NPSFM provides a consenting pathway for certain activities to impact natural wetlands, these

¹⁰ Paragraph 10.40.

outcomes will not always be able to be achieved. I propose the following amendments to this provision to recognise these situations:

Where it is appropriate and can be practicably achieved, improve the ecosystem health, hydrological functioning, ~~water quality~~ and extent of natural wetlands that have been degraded or lost by: ~~requiring where possible to the greatest extent practicable:~~

LF – LS – P18 – Soil Erosion

- 73 Contact generally supports this provision, but seeks to include “where practicable” within clauses (1) and (2) to recognise that in some instances (e.g. the development of a wind farm) the ability to retain topsoil in situ or to maintain vegetative cover may be limited by practical considerations.
- 74 The section 42A report does not support Contact's proposal to subject the policy to a practicability test¹¹. This is because they consider the notified wording provides flexibility for resource users to adopt practices based on the activity being undertaken.
- 75 The section 42A report says that Clause (1) of the policy describes what effective management practices are, in that they must retain topsoil in-situ and minimise the potential for soil to be discharged to waterbodies. The author recommends the following addition to this Clause:

Where vegetation removal is necessary or there is no vegetative cover implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and

- 76 I primarily have concerns with the reference to the requirement in this policy to "retain topsoil in-situ". I do not think it would be physically possible to retain soil in its original place (as I understand the term 'in-situ') if earthwork / soil disturbance activities are being undertaken. I also do not think that the changes which the author has made make grammatical sense with the

¹¹ Paragraph 1722 of the Section 42A report.

chapeau of this policy, nor do they seem to make sense with the last part by referring to 'soil exposure'.

77 I consider that this Clause should be amended as follows:

implementing effective management practices to retain topsoil in-situ and minimise the potential for soil to be discharged to water bodies, including by controlling the timing, duration, scale and location of soil exposure, and

CONCLUSION

78 The notified text of the FPI parts of the PORPS lacked policy recognition of the benefits of water use for the generation of electricity. Contact submitted that there was insufficient regard to the importance of the CHS.

79 The presence of the CHS is an existing physical resource which contributes a significantly to New Zealand's renewable electricity generation supply and will continue to play an important role as we move to a more decarbonised and electric economy. This is recognised in both the NPSFM and the NPSREG.

80 The PORPS needs to suitably recognise that this scheme exists within the regional context, and it is important that the policy framework protects existing operational capacity and provides for further flexibility in the future. I have proposed amendments to assist in achieving this outcome as set out in this evidence.

Claire Hunter

28 June 2023

APPENDIX A

Summary of Recent Experience of Claire Hunter

- Fortescue Future Industries – Southern Green Hydrogen Plant – Advice on the feasibility of a site for a hydrogen production plant.
- Willowridge Developments Limited – prepared and presented evidence in the Environment Court for an earthworks plan change being proposed by the Otago Regional Council, which sought to only impose limits on earthworks on residential sites.
- Bathurst Resources Limited, Canterbury Coal Mine – Assisted in the peer review of current applications and process and provided advice in terms of strategy going forward. Preparation of section 92 responses to Environment Canterbury as part of the regional council consents being sought. Ongoing planning advice and liaison with regulatory authorities regarding the Canterbury Coal Mine closure plans. Preparation of additional consents and addendum Assessment of Environmental Effects. Preparation and presentation of evidence at the hearing and involvement in the Environment Court mediation that has followed.
- OceanaGold – Involved in various projects relating to OceanaGold’s Waihi and Macraes sites, including potential new development opportunities. Presented planning evidence at the Deepdell North Stage 3 hearing which was granted consent in 2020. Currently the lead planning consultant on various new developments being progressed at the Macraes site in the Waitaki District. Also advising OceanaGold on various planning issues relating to the Otago region.
- OceanaGold – Planning advice and preparation of submissions and further submissions on the Proposed Otago Regional Policy Statement 2021. Provision of planning evidence during the hearings.
- Contact Energy – Planning advice and preparation of submissions and further submissions on the Proposed Otago Regional Policy Statement 2021. Provision of planning evidence during the hearings.
- Contact Energy – Provision of advice regarding a section 128 review of conditions on its Clutha Hydro Scheme consent relating to landscape and visual amenity. Proffered revised conditions which were approved by the Otago Regional Council as being successful in addressing the issue.
- Contact Energy – Preparation of dredging consents to enable sediment removal from within the Bannokburn Inlet. Involved in consultation with key stakeholders and the Councils.

- Contact Energy – Providing strategic and planning advice to Contact Energy on its proposal to develop a wind farm in Southland (current 2023).
- Alliance Group Limited – Planning advice and preparation of applications with regard to the renewal of key discharge consents (water, land and air) for its Lorneville Plant.
- Alliance Group Limited – Review of Canterbury Proposed Regional Air Plan, preparation of submission and evidence.
- Alliance Group Limited – Review of various Southland Regional and District Plan changes and preparation of submissions. Participation in Environment Court mediation to resolve Alliance Group Limited’s appeal on the Southland Proposed District Plan.
- Alliance Group Limited – Preparation of resource consent application for the renewal of its Mataura Plant’s hydroelectric power scheme.
- Alliance Group Limited – Preparation of statutory assessment to accompany resource consent application to renew its Pukeuri Plant biosolids discharge consent.
- Aurora Energy Limited – Successfully obtained a resource consent and subdivision for a new large-scale substation in Camp Hill, Hawea. Claire’s involvement in this project followed an earlier application which was declined by Hearing Commissioners due to its controversial location in Hawea.
- Wellington International Airport Limited – Management of technical inputs and reports for the proposed runway extension, preparation of regional and district council resource consent applications.
- Wellington International Airport Limited – Preparation of advice and submissions on the Greater Wellington Proposed Natural Resources Plan. Active involvement in preparing evidence for the various hearing streams on behalf of Wellington International Airport Limited.
- Wellington International Airport Limited – Lead author of the main site and eastern site notice of requirements.
- Wellington International Airport Limited – Provision of planning advice and preparation of submissions and further submissions on Plan Change 1 to the Wellington Regional Policy Statement.
- Liquigas Limited – Preparation of submissions and planning evidence on the Second-Generation Dunedin City Plan in order to protect the existing and proposed operational capacity of its LPG Terminal in Dunedin.

- Liquigas Limited – Reconsenting of its significant South Island LPG Terminal located at Port Otago, Dunedin. The application sought to increase the storage of LPG significantly at the site and was processed as a non-notified consent.
- Environmental Protection Authority – NZTA Expressway between MacKays Crossing to Peka Peka, Kapiti Coast project; Transmission Gully project plan change and notices of requirements and resource consents – Assisting in the review and section 42A report writing for the notice of requirement and various consents required.
- Ravensdown Fertiliser Limited – Preparation of regional council resource consents (air and coastal discharges) to enable the ongoing operation of the Plant in Ravensbourne in Dunedin City. Recently engaged to re-consent the Plant in 2025.
- Queenstown Airport Corporation – Provision of resource management advice for the airport and its surrounds, in particular, the runway end safety area extension and preparation of the notice of requirement, gravel extraction applications to both regional and district councils and other alterations required to the aerodrome designation.
- LPG Association of New Zealand Limited – Preparation of evidence and hearing attendance representing the LPGA with respect to Dunedin City Council’s Plan Change 13 – Hazardous Substances, and participation in mediation to resolve LPGA appeal.
- LPG Association of New Zealand Limited – Preparation of planning evidence on the Second-Generation Dunedin City Plan.
- Invercargill Airport Limited – Preparation of plan change provisions and section 32 analysis to provide for the future growth and expansion of Invercargill Airport in the Invercargill District Plan.
- Invercargill Airport Limited – Preparation of notices of requirement to amend a number of existing designations in the Invercargill District Plan including obstacle limitation surfaces and the aerodrome.
- Southdown Holdings Ltd – Preparation of proposed conditions of consent for large scale irrigation in the Upper Waitaki catchment, Canterbury.
- Trustpower Limited – Review of Otago Regional Council Plan Change 6A and preparation of submissions and evidence at the hearing on behalf of Trustpower Limited. Participation in Environment Court mediation to resolve issues.
- Trustpower Limited – Review of Clutha District Plan Energy Generation Plan Change and preparation of submissions and evidence at the hearing on behalf of Trustpower Limited.

- Trustpower Limited – preparation of proposed conditions of consent for the Wairau Hydroelectric Power Scheme.
- Trustpower Limited – management of the necessary technical inputs, consultation and preparation of resource consents necessary to enable the ongoing operation of the Wahapo Hydroelectric Scheme on the West Coast, South Island.
- Meridian Energy Limited – Preparation of the regional and district council consents for the Proposed Project Hayes Wind Farm in Central Otago.
- Meridian Energy Limited – Preparation of the regional and district council consents for the Proposed Mokihinui Hydro Scheme on the West Coast, South Island.
- SouthPort Limited – Prepared and presented evidence on behalf of SouthPort Limited in regards to proposed plan changes to the Invercargill District Plan.