

**BEFORE THE COMMISSIONER ON BEHALF OF
THE OTAGO REGIONAL COUNCIL**

Application No. RM18.004

BETWEEN

PIONEER ENERGY LIMITED

Applicant

AND

OTAGO REGIONAL COUNCIL

Consent Authority

EVIDENCE OF WILLIAM JOHN NICOLSON

**GALLAWAY COOK ALLAN
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ABBREVIATIONS

AEE	Assessment of environmental effects
DOC	Department of Conservation
F&G	Otago Fish and Game Council
LOMP	Lake Onslow Monitoring Proposal
NPSFM	National Policy Statement for Freshwater Management 2014
NPSFM20	National Policy Statement for Freshwater Management 2020
NRMP	Kai Tahu ki Otago Natural Resource Management Plan
ORC	Otago Regional Council
PEL	Pioneer Energy Limited
PRPS	Proposed Regional Policy Statement
PORPS	Partially Operative Regional Policy Statement
RMA	Resource Management Act 1991
RPW	Regional Plan: Water for Otago
TAC	Teviot Angling Club Incorporated

Introduction

1. My full name is William John Nicolson and I am employed as a Planner and Environmental Scientist at Landpro Limited, a firm of consulting planners and surveyors. I hold the qualification of BAppSc (Hons, First Class) in Environmental Management from the University of Otago. I have been involved in environmental management and planning for the past 10 years, with the past 4 years at Landpro Ltd, providing consultancy services for a wide range of clients throughout New Zealand.
2. I am an associate member of the New Zealand Planning Institute, and an associate member of the Institute of Environmental Management and Assessment.
3. Over the past 10 years, and particularly in the past four with Landpro Ltd, I have undertaken a wide range of resource management-related work for a variety of clients, including preparing resource consent applications, preparing assessments of environmental effects (AEE's), stakeholder engagement and consent management services, with a particular focus on water resources.
4. I confirm that I have read and agree to comply with the Environment Court Code of Conduct for Expert Witnesses (Consolidated Practice Note 2014). This evidence is within my area of expertise, except where I state that I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.
5. In this matter, I have been engaged by Pioneer Energy Limited to provide independent planning and resource management advisory services, including preparation of this evidence.
6. While I was not the author of the consent variation application, I have been involved in this application for over a year and am familiar with the proposal.
7. In preparing this statement I have:

- Reviewed the change application for Water Permits 2001.475.V1 and 2001.476.V3 and subsequent documentation (including s92 responses and application amendment)
- Reviewed the submissions from Fish & Game and Teviot Angling Club Incorporated
- Read the Section 42A report
- Read the technical reports and associated evidence being called by the applicant, including:
 - Mr Jack; PEL Teviot hydroelectricity scheme civil engineer
 - Mr Dungey; aquatic ecology

Scope of Evidence

8. I have read the Section 42A report and generally agree with the findings of the report. I agree with the determination that the adverse effects of the proposal will be insignificant¹. I also agree with Ms Pritchard's determination of the receiving environment², and with the statutory planning analysis set out in the report. I have provided some additional commentary on proposed changes to the recommended conditions to better reflect the matters I cover in my evidence below.
9. My evidence is structured as follows:
 - Summary of proposal
 - Summary of consultation and submissions
 - Existing environment determination
 - Assessment of s42A Report recommendations
 - Statutory planning assessment
 - Proposed conditions of consents

Summary of Proposal

10. A detailed overview of the applicant's proposal is included in Sections 2.1 and 2.2 of the s42A report, however I revisit the key details and key points of contention below.

Original application

¹ Section 42A Report, Otago Regional Council, 14 June 2022 (Section 6.1.10.5).

² Section 42A Report, Otago Regional Council, 14 June 2022 (Section 6.1.1)

11. Application RM18.004 was prepared in late 2017 and, following some initial consultation with F&G and Aukaha, lodged with ORC in early 2018. The application sought to change (via RMA s127) Condition 2 of Water Permit 2001.475 and Condition 3 of Water Permit 2001.476, which limit drawdown of Lake Onslow under both consents to a maximum of 0.2 m over 7 days. The application sought to increase the lake drawdown rate to 0.5 m over 7 days, with no other condition changes sought.
12. The AEE provided in Section 6 of the application report sought to assess the effects of the proposal primarily on the basis of two ecological assessments – those conducted by the Cawthron Institute on Lake Onslow in the 1990's, and an assessment conducted by Ross Dungey in 2017 on Lake Onslow invertebrates.
13. According to the AEE, the Cawthron assessment(s) essentially concluded that the existing drawdown of 0.2m/week is not adversely impacting littoral zone (the nearshore portion of the lake where sunlight penetrates to the bottom sediments), macroinvertebrates or fish³.
14. The Dungey 2017 report consolidated bathymetric and invertebrate surveys from 2016-2017 and provided a literature meta-analysis to assess the response of invertebrate communities to various lake level alteration regimes. The report concluded that the greatest invertebrate density in Onslow and similar hydroelectrical lakes tends to be following a period of very low lake levels, whereby invertebrate populations proliferate following refilling⁴. Conversely, the report stated that there is no evidence to suggest that drawdown rate is a significant influence on macroinvertebrate production. The report concluded that increasing the Onslow drawdown rate to 0.5 m/week is not expected to adversely effect invertebrate production.
15. Based on the findings from the Dungey 2017 report, no mitigation was proposed in the RM18.004 application.

Post-application

³ RM18.004 AEE, Page 4

⁴ Dungey, R. Lake Onslow Lake Bed Profile and Invertebrate Survey (2017), Page 31

16. Following acceptance of the application, ORC identified 4 parties for whom the applicant was required to obtain written approval:
 - i. Teviot Angling Club Incorporated
 - ii. Director General of Conservation
 - iii. Otago Fish and Game Council
 - iv. Aukaha

17. ORC also issued a number of further information requests which resulted in Mr Dungey providing two rounds of supplementary information. The first provided an assessment of water quality effects on Lake Onslow and water quantity effects downstream of Lake Onslow due to the proposal. The assessment concluded that there are no anticipated effects on water quality in Lake Onslow as the proposed change would not alter the existing operating range of the lake, and would therefore not expose new shoreline. The assessment also concluded that the potential increase in discharge from Lake Onslow Dam (within consented limits) due to the increased drawdown is expected to have a positive effect on fish in the Teviot River, by reducing low-flow induced barriers to fish productivity in late summer and moderating temperature fluctuations⁵.

18. The second round of supplementary information provided by Mr Dungey sought to address ORC questions regarding effects of the proposal on critical invertebrate and bully habitat, presence and distribution of macrophytes and shallow turf communities, and effects on macrophytes due to the proposal. Mr Dungey's responses stated that:
 - i. No significant adverse effects on invertebrate and bully communities is expected due to the proposed drawdown (then 0.5m/week), primarily due to the previously documented positive response in invertebrate communities due to shoreline rewetting.

⁵ Dungey, R. Lake Onslow. Supplementary Information (2018), Pages 3-4

- ii. No changes to the distribution of macrophytes is expected due to the proposal, and shallow turf communities should not be adversely affected by the proposal as the lowest consented lake level will remain unchanged.
 - iii. No significant adverse effects on macrophyte communities are expected due to the proposal.
19. ORC commissioned Aquatic Environmental Services Ltd (AES) to provide a technical review of the application, including the s92 responses provided by Mr Dungey. The findings of that review (published August 28th, 2018) are summarised as follows:
- i. Agreement that variability in lake levels can enhance macroinvertebrate productivity, and that some variability is important in encouraging greater aquatic biodiversity. Agreement that natural variability in physical (drought, rainfall) and biological processes between years will obscure any effects of the proposal (then 0.5 m drawdown/week).
 - ii. Following receipt of Mr Dungey's and PEL's further information, sufficient information has been provided with regards to potential effects of the proposal on aquatic biological processes.
 - iii. Agreement that there will be no expected changes in lake productivity or the fishery outside of natural variability. However, because Onslow is a highly valued fishery, basic monitoring of invertebrates around every 5 years, along with monitoring of potential changes in angler use and catches, is recommended.
 - iv. Agreement that a change from 0.2 m to 0.5 m/week drawdown will not have a more than minor effect on the ecological values of the lake and will continue to support a valuable fishery.
 - v. The amended drawdown rate is within the range that lakes naturally experience.
20. Following the AES review, Ms Pritchard reiterated that "the environmental effects from the proposed change to the consent

conditions are no more than minor on the ecological values of the lake and downstream.⁶ Ms Pritchard went on to recommend monitoring in Lake Onslow with surveys 5 and 10 years after implementation of the new drawdown rate. The surveys were to include quantification of physical habitat and substrate, macrophytes, bully, and macroinvertebrate abundance and community composition. Ms Pritchard also recommended reporting on angler use and catch from the lake.

21. In the ~3 years following these recommendations, the application was placed on hold while the applicant consulted with the four parties ORC considered to be affected by the application (TAC, Aukaha, F&G and DOC) and developed a monitoring proposal in line with Ms Pritchard's recommendations and affected party feedback. By June 2021, the applicant had prepared the following:
 - i. A suite of conditions to amend Water Permits 2001.475 and 2001.476, including a requirement for:
 - A reduction in the drawdown rate increase sought to 0.4 m/week (down from 0.5 m/week originally sought),
 - baseline monitoring in 2022,
 - two 2-year monitoring rounds, each following a trigger year (as detailed under Definitions in the proposed varied consents),
 - monitoring of the Onslow fishery via angler-sourced data,
 - post-monitoring reporting to F&G, DOC and Aukaha, and to the satisfaction of ORC,
 - reversion back to 0.2 m/week drawdown if the post-monitoring report finds that more than minor adverse ecological effects have resulted due to the increased drawdown rate.

⁶ Email from Natasha Pritchard to Hilary Lennox, 30 August 2018.

- ii. The Lake Onslow Monitoring Proposal (LOMP), which is connected to the proposed monitoring conditions above, and which requires monitoring of macrophytes, invertebrates, bullies, and fish passage to spawning streams, along with coordination of angler-provided fish and catch data.
22. During and after the drafting of the monitoring proposal and amended conditions, consultation continued with affected parties in the hopes of obtaining written approval. When no resolution was reached with any of the parties, the decision was made to submit the amendments to ORC and request the drafting of a notification decision. Between this date (June 2021) and the notification date (November 2021), several additional s92 further information requests were made and subsequently responded to by the applicant, the contents of which are addressed in Section 2.5 of the s42A report.

Summary of consultation and submissions

Pre-notification consultation

23. Consultation was undertaken with all four affected parties from 2018 through till the applicant requested the notification decision in mid-2021. A brief summary of key issues raised by Aukaha and DOC prior to lodging the amendments and requesting notification of the application, and any mitigation proposed by the applicant, is provided in the below table. I note that much of this consultation was undertaken prior to my involvement in this application.

Suggested by	Summary of change suggested	Applicant's response/proposed mitigation
Aukaha	Consideration of possible effects on water quality in the conditions and/or Lake Onslow Monitoring Proposal	Agreed to include in application. Proposed Condition A2 ("and any other relevant data available") already provides for consideration of publicly available water quality data. The LOMP was updated to include inclusion of water quality data in monitoring and reporting.

Suggested by	Summary of change suggested	Applicant's response/proposed mitigation
Aukaha	Addition of option for Aukaha to coordinate cultural monitoring of Lake Onslow in the conditions, to occur alongside the LOMP.	Prior to notification, discussions were ongoing with Aukaha regarding details of this. It was unclear how this requested addition to the application would sit within the amended consent conditions, and what impact it would have on the function of the amended consents. The applicant was awaiting further clarification from Aukaha.
DOC	Ability for affected parties, including DOC, to review and comment on the post-monitoring report.	Additions/amendments made to proposed Conditions A2 and A3: <ul style="list-style-type: none"> • A2: "...The ERR must be provided to the Consent Authority, the Otago Fish and Game Council, DOC and Aukaha within 60 working days after the second monitoring round required under conditions A1 is completed." • A3: "Should the Otago Fish and Game Council, DOC or Aukaha choose to provide comments on the ERR, the consent holder and/or their ecologist must respond to these comments...and must provide a copy of both the comments received and the response given to the Consent Authority."

24. The applicant has actively and regularly consulted with F&G since the application was lodged, with a plethora of issues raised and mitigation offered, to the extent that it is not prudent to include a detailed summary of that consultation here. In general, however, some of the key issues raised/mitigations sought by F&G have included introducing further controls on the Lake Onslow operating regime in order to minimise the amount of time the lake was drawn down to low levels under the new drawdown scenario, refining the proposed ecological monitoring, and quantifying effects on amenity due to the proposal, particularly with regards to angling. Many of the changes sought by F&G since application lodgement have guided the development of the current set of proposed consent conditions and the Lake Onslow Monitoring Proposal. I consider it more valuable to examine the issues

raised in F&G's submission than to go into more detail regarding pre-notification consultation.

25. My understanding is that there was relatively minimal consultation with TAC until 2020, on the basis that F&G was believed to be consulting with the applicant on TAC's behalf. Two iterations of the monitoring proposal and proposed consent conditions were provided to TAC for comment, however I do not have any record of comments received back from TAC on the proposal.
26. Note that on June 20, 2022, the applicant advised TAC via email⁷ that they would be willing to assist the club in extending the concrete boat ramp beyond the current ~3.5 m depth, should lake levels provide an opportunity to do so in the future. This assistance could include funding. No condition of consent relating to the boat ramp extension has been proffered, due to the complications often associated with making such offers consent conditions.
27. I once again defer to TAC's submission for highlighting any issues raised by this party.

Limited notification submissions

28. Following notification, submissions were received from F&G and TAC. I note that no submissions were received from DOC or Aukaha, and no further correspondence has occurred with these latter two parties.

Otago Fish and Game Council submission

29. The following table provides a summary of key issues raised by F&G in their submission, along with my responses.

Issue raised/relief sought in F&G submission	Response
Varying the drawdown rate will alter the operating regime of the lake.	Other than the increased drawdown, none of the consent conditions which influence the lake operating regime will change. Based on the model provided by Mr Jack ⁸ ("the Model"), it is apparent that lake levels under the proposed regime (Scenario C) could indeed be held at the minimum consented level more frequently and for

⁷ Email from Will Nicolson (Landpro) to Helen Maisuria (TAC), June 20, 2022 at 11:15 am

⁸ Onslow level with inflows (Taieri synthetic) – Chart1

Issue raised/relief sought in F&G submission	Response
	longer. However, it is also apparent that the lake could be held at the minimum consented level more frequently and for longer under the <i>existing</i> regime (i.e. 200 mm/wk drawdown – Scenario B). And as can be seen in Table 1 of Mr Jack’s evidence, there would be no change in frequency of lake levels below 3 m when comparing Scenario B with Scenario C (0.688 inflow correction). Finally, as stated in the evidence of Mr Jack (e.g. para 14), it is not presently in PEL’s interests to reduce lake levels to 3 m or more below dam crest, nor will it be in PEL’s interests to do so if the proposed increased drawdown rate is granted.
The applicant has refused to provide information as to how the new operating regime will affect lake levels.	My understanding is that the applicant has not refused to provide information regarding how the new operating regime will affect lake levels – what the applicant has communicated is that it will be very difficult to model what the new operating regime will look like, as this will change year to year and will be significantly altered based on electricity demand and on variables outside of the applicant’s control; most notably natural inflows and rainfall. However, Mr Jack has attempted to provide some basis for assessing effects on lake levels via the proposal, compared to historic lake levels and the current consented baseline ⁹ . Mr Jack has indicated that, just as PEL have not exercised their water allocation to its fullest extent to date, there is no intention to exercise their water allocation to its fullest extent under the proposed amendments. This is because low lake levels put PEL at risk of failing to meet its forward electricity generation commitments, which in turn could result in significant financial losses for PEL ¹⁰ .
The new operating regime will allow for the lake to be drawn down to lower levels more frequently and/or for a greater duration.	See above response. It is apparent from F&G’s submission that they are assessing the potential effects of the proposal against historic lake levels, rather than the existing consented baseline. This is fundamentally flawed ¹¹ and creates an impression that the adverse effects from the proposal will be greater than they have any potential to be. I note that, based on the Model, the estimated difference in mean lake levels between Scenario B (receiving environment) and

⁹ Onslow level with inflows (Taieri synthetic) – Chart1

¹⁰ Brief of evidence of Tony Jack, paras 14 and 15.

¹¹ Mehlhopt, M & Dickson, K, 2022. Memorandum to Joanna Gilroy and Natasha Pritchard.

Issue raised/relief sought in F&G submission	Response
	Scenario C (proposal) is ~0.5 m ¹² . With the correction factor calculated by Babbage applied, there would be no change to the period of time that the lake level would be below 3 m below dam crest due to the proposal, and virtually no change that the lake level would be below 3.5 m ¹³ .
Lowered ecological productivity for brown trout, due to lower lake levels being reached more frequently and/or for longer. F&G state that this would in part be due to dewatering of macrophyte beds down to ~3 m below dam crest, and which take some time to re-colonise.	My understanding is that this statement is in complete misalignment with the findings of both Mr Dungey ¹⁴ and AES in their review of Mr Dungey's work ¹⁵ . Specifically, AES note that "Based on extensive work in natural and man-made lakes throughout the country I agree with the suggestion that variability in lake level can enhance macroinvertebrate productivity." AES go on to say that "I agree that a change from 0.2 to 0.5 m drawdown rate over seven days will not have more than a minor effect on the ecological values of the lake and it will continue to support a valuable fishery." In their submission, F&G discount this conclusion on the basis that AES were under the impression that the varied drawdown will do little to affect the operating regime, however I consider that this is not an acceptable basis for discounting a critical analysis from a recognised specialist in the field – particularly considering AES were reviewing the effects on the basis of 0.5 m/week drawdown, whereas the drawdown now sought has been reduced to 0.4 m/week, meaning any potential effects of the current proposal are even lower than those assessed by AES. Additionally, in an August 2021 memorandum to Ms Pritchard, Annabelle Coates of Babbage agrees with Mr Dungey's conclusions around effects on ecology, stating "The increase in drawdown is considered unlikely to result in increased detrimental effects to ecology. The return period of seven days for the drawdown is very short compared to natural fluctuations. Macroinvertebrates have a rapid recolonisation and reproduction rate and recover quickly following habitat disturbance. Fish have remained present in the lake throughout naturally fluctuating years and the increase in lake bed exposure as a result of the increased drawdown rate is considered unlikely to have significant detrimental effects on fish habitat or

¹² Otago Regional Council, 2022. Section 42A Report (Table 6)

¹³ Evidence of Tony Jack, Table 1

¹⁴ Dungey, 2017. Lake Onslow Lake Bed Profile and Invertebrate Survey

¹⁵ James (AES), 2018. Review of Pioneer Energy Ltd amendment to consent for Lake Onslow

Issue raised/relief sought in F&G submission	Response
	<p>population.”¹⁶ Of further importance is Ms Coates’ response to this submitted issue in her evidence, whereby she notes that because there will be no alteration to the existing minimum consented lake level due to the proposal, “the emphasis that Fish and Game place on the loss of/changes to macrophyte beds is unfounded and has already been addressed in the previous consents.”¹⁷ Based on the above conclusions of multiple specialists, F&G’s claims appear incorrect.</p>
<p>Increased mud flats due to lower lake levels more frequently/for longer. This will create access and/or safety issues for anglers.</p>	<p>I agree that there is likely to be an increase in mud flat generation due to the proposal, however the model provided by Mr Jack indicates that the difference in mud flats that could be generated if the existing consents were exercised to their fullest extent, versus those that could be generated if the proposed consents were exercised to their fullest extent, is likely to be relatively insignificant. F&G do not appear to be comparing effects under the consented baseline with effects under the proposal. Additionally, to mitigate any effects due to increased incidence of mud flats, PEL offered mitigation to F&G as follows:</p> <ol style="list-style-type: none"> 1. Restricting drawdown to 1200 mm/month, in order to moderate changes in the operating regime over a longer time period. 2. Erecting signage at the Lake Onslow boat ramp to identify potentially shallow or hazard-prone areas in the lake to boat users. <p>I note that F&G suggested 1200 mm/month may not be an effective mitigation tool, and that F&G would “likely not oppose a proposal to install quality signage.” No further discussion around the suggested mitigation was forthcoming. Given the anticipated low effects on access and/or angler safety from the proposal, I consider that the proposed amendments to the signage condition (discussed later) sufficiently address this concern.</p>
<p>The adverse effects cannot be determined from the information provided.</p>	<p>I consider that the applicant has provided information regarding the changes to the operating regime and the potential effects of this insofar as they are able to do so. As has been noted throughout these responses, the variability</p>

¹⁶ Coates, A (Babbage Consulting Ltd), 2021. Review of resource consent RM18.04 – change of conditions, Lake Onslow, Pioneer Energy (page 2, para 3)

¹⁷ Evidence of Annabelle Coates, para 61

Issue raised/relief sought in F&G submission	Response
	<p>of Lake Onslow hydrological inputs in particular, along with changes in electricity demands within and between years, makes it very difficult to accurately predict when the increased drawdown might be utilised. The applicant recognises this, and has provided the Model in an attempt to visualise a <i>worst</i> case scenario assuming the increased drawdown is granted. I stress that both the new/amended conditions and LOMP have been designed to quantify whether any adverse environmental effects occur due to the proposed change, and to provide a means by which the applicant is required to revert back to the current 200 mm/week drawdown if the adverse effects are shown to be more than minor. I consider that this is sound mitigation specifically designed to address the uncertainty cited, while recognising that there may be no need for the monitoring based on the findings and recommendations of Ms Coates, Dr Booth and Ms Pritchard in the s42A report.</p>
<p>In the case that the consent is granted, F&G seek alternative relief in that conditions be imposed such that the varied drawdown rate will not create additional adverse effects over that of the current operating regime. Conceptual examples of such conditions might include:</p> <p>d. [sic] an additional drawdown restriction over a longer period, say 1000mm/month, to provide short term variation without dramatically changing the operating regime;</p> <p>e. an additional restriction on the frequency or duration of low lake level events; and/or</p> <p>f. an additional restriction on the duration that the varied drawdown rate can be utilised before reverting back to the 200mm/week limit.</p>	<p>As noted earlier, conditions have been proposed which are aimed at ensuring the increased drawdown rate will not create significant additional adverse effects compared to the existing operating regime – exactly as sought by F&G. As for the suggested conceptual examples:</p> <p>d. Despite having developed a monitoring regime and adaptive conditions for capturing and addressing any adverse effects that may arise from the proposal, the applicant agreed to offer an additional drawdown restriction of 1200 mm/month, with anything less than this rendering the proposal uneconomic (according to Mr Jack). F&G stated this would not be an effective tool.</p> <p>e. Given the adaptive management conditions proffered, introducing further restrictions via new conditions is unnecessary and would only make the resultant consents more complicated, which F&G themselves state are already “overly complex”. I note that the conditions are complex in order to ensure that significant adverse effects do not continue, should they occur due to the proposal. I also note other dam-related consents in the region do not place limits on frequency or duration of low lake events, despite many governing lakes that are far greater, more popular, and more populous. For example, Consent No. 2001.385.V3, which governs the damming of the Clutha River at Clyde, sets a</p>

Issue raised/relief sought in F&G submission	Response
	<p>maximum level of Lake Dunstan of 194.5 m above datum and a minimum of 193.5 m. This means that, for example, a much larger lake could legally be drawn down up to 1 metre within a day or less. Recognising that I have not compared this to any limits on discharge rates that might curtail level drawdown.</p> <p>f. Again, if the increased drawdown does indeed cause significant adverse environmental effects, the proffered conditions require the consent holder to revert to the original 200 mm/week drawdown. Any additional restriction on duration is therefore unnecessary.</p>

30. TAC's submission adopted the submission and relief sought by F&G and opposed the application, stating that:
- i. It has the capacity to create more frequent, severe or longer low lake level events.
 - ii. Low lake levels impact on angling from the shore and by boat by increasing the amount of mud flats reducing opportunities for angling and creating safety hazards.
31. I note that F&G raised a similar issue in their submission, and I have provided a response to this in the table above.
32. Overall, the applicant has invested heavily in consultation with affected parties, and has sought to incorporate the concerns of these parties in the conditions and monitoring proposal proffered. This consultation is of particular note given the fact that the sports fishery (based on brown trout, which are an introduced species) within the catchment would be severely reduced were the PEL dam (which was constructed for the purpose of hydroelectricity generation and irrigation, not recreation) not in place or operable.
33. F&G's implication in paragraph 11 of their submission that the consultation between them and the applicant was cut unnecessarily short is unreasonable, given that the applicant was actively consulting with F&G from 2017 through to 2021. That an agreement between

F&G and the applicant could not be reached in over 4 years of consultation justifies the applicant's reasoning for requesting that the application be limited notified.

Existing environment determination

34. I agree with Ms Pritchard's determination of what constitutes the existing environment in relation to this proposal¹⁸, which in turn is based on a memorandum prepared by Michelle Mehlhopt and Kate Dickson of Wynn Williams¹⁹. To briefly revisit those determinations, the existing environment equates to the consented baseline, which in this case is the scenario whereby Water Permits 2001.475 and 2001.476.V3 have been exercised to their fullest extent.
35. Any assessment of the effects of the proposal on the environment must therefore compare the existing consented baseline with the proposed changes to consent conditions, as if the resultant varied consents will also be exercised to their fullest extent. I reiterate that, as per Mr Jack's evidence²⁰, the likelihood of PEL exercising the varied consents to their fullest extent (utilising all of the 0.4 m/week drawdown) is very low, as shown by the difference between the grey line in the Model (actual historic lake levels) and the orange line in the Model (max drawdown under existing consents), and due to the fact that depletion of stored water behind the dam would undermine PEL's hydroelectricity generation commitments. Despite this, I recognise and accept the requirement to compare the existing and varied consents exercised to their fullest as a means of establishing potential adverse effects as a "worst case" scenario.

Assessment of Section 42A Report conclusions and related evidence

36. I generally agree with the contents of the s42A report and the key conclusions provided in Section 6 of the report.

¹⁸ Section 42A Report, Otago Regional Council, 14 June 2022 (Section 6.1.1)

¹⁹ Section 42A Report, Otago Regional Council, 14 June 2022 (Appendix 5)

²⁰ Evidence of Tony Jack, para 19

37. I note that the LOMP and accompanying adaptive management conditions were formulated and proposed in good faith as a means of validating the applicant's assessment that the proposal will have insignificant adverse effects on the environment. Notwithstanding this, I agree that the LOMP and related conditions were not specifically designed to capture only those effects that might be caused by the change from Scenario B to Scenario C. I also agree that, on the basis of Ms Pritchard's determination that the proposed change would not result in significant adverse environmental effects when compared to the existing environment, there is no need to adopt the proposed adaptive management/monitoring conditions.
38. With regards to recommendations concerning conditions of consent:
- i. I accept the recommended map reference change.
 - ii. I accept the recommended amendments to Water Permit 2001.475 Condition 15 (signage), with a suggested change to the recommended wording. With regards to sub-condition (c), I understand that it is not PEL's jurisdiction to dictate procedures for boat stranding – however I am not clear on who does have jurisdiction for boat safety on Lake Onslow. Instead, I would suggest that the sign recommend that all boats carry 2 forms of communication to be used in the event that a stranding or emergency occurs on the lake.
 - iii. I accept the recommended changes to Water Permit 2001.475 Condition 18 and Water Permit 2001.476.V3 Condition 6 (review) and the addition of the condition relating to lake level measurement on both consents.
 - iv. I agree with Ms Pritchard's decision not to recommend a condition relating to the addition of rocky areas to Lake Onslow, for reasons provided later in my evidence.
39. With regards to Ms Coates' evidence contained in Appendix 2 of the s42A report, I note that I am not an ecological or biological expert but consider the following:

- i. The summary of existing ecological values under Scenarios A and B, likely ecological effects under Scenario B and assessment of effects under Scenario C aligns with what I understand to be the case, based on earlier reports by Mr Dungey²¹ and AES²². Specifically, Ms Coates' conclusion that "the increased drawdown rate will have a negligible to low effect on ecological values within Lake Onslow, including the trout sport fishery"²³ appears to align with the conclusions of Mr Dungey and AES regarding the effects of the proposal on the ecology and angling value of Lake Onslow.
- ii. Ms Coates' conclusion that adverse effects on the Teviot River due to the proposal will be negligible to low²⁴ is also in accordance with the aforementioned reports produced by Mr Dungey and AES.
- iii. There may be some minor ecological benefit to introducing new rocky areas to the shoreline as suggested in para 63 of her evidence. However, based on the evidence of Mr Dungey²⁵, this benefit is unlikely to be significant or measurable, and is not proportional to the level of resources that would be required to construct these rocky areas. These include the need to transport large machinery, fuel and operators to a remote area (at least 1 hour drive from the nearest sizeable township of Roxburgh) in order to construct the rocky zones, possible ecological complications associated with placing extensive materials on a shoreline/lake bed, and the likely need for a land use consent for alteration of the lake bed under Chapter 13 of the RPW. Given that the effects of the proposal on the ecology of the lake are expected to be insignificant, I do not consider a need to install rocky areas as suggested.

²¹ Dungey, R. Lake Onslow Lake Bed Profile and Invertebrate Survey (2017); Dungey, R. Lake Onslow. Supplementary Information (2018); Dungey, R. Onslow Consent. Supplementary Questions (2018)

²² James, M (AES). Review of Pioneer Energy Ltd amendment to consent for Lake Onslow (2018)

²³ Evidence of Annabelle Coates, para 39

²⁴ Evidence of Annabelle Coates, para 47

²⁵ Evidence of Ross Dungey, para 23

40. With regards to Dr Booth's evidence presented in Appendix 3 of the s42A report, while I am not a recreational expert, I consider the following:
- i. Ms Booth states in paragraph 24(b) that the "primary weakness" of Mr Dungey's 2021 draft amenity report is its reliance on the knowledge of a single individual which results in a lack of comprehensiveness. While I agree that preparing an amenity report based on the opinions and experiences of more than one person is preferable, I consider that:
 - Mr Dungey is as viable a candidate as any to provide an overview of the recreational values of Lake Onslow and surrounds due to his considerable history with the area and his regular visits for both recreational and monitoring purposes; and
 - Mr Dungey's report was not intended to provide an exhaustive analysis of the recreation values of Lake Onslow, but to provide a summary of values from a primarily angler-centric perspective. Given the relatively insignificant anticipated adverse effects of the proposal when compared to the consented baseline, a more comprehensive study is not considered warranted.
 - ii. In Paragraph 30(a) of her evidence, Dr Booth states that one of the bases for her determination of Lake Onslow as a regionally significant angling location is the estimated 1,000 – 4,000 annual angler days.
 - Firstly, this is of such a large range as to be relatively unreliable in any determination of existing recreation, and it should be noted that the 2014/15 survey period indicated angler days at the lower end of this range (1,420 ± 410).
 - Secondly, this is a very small proportion of angling in Otago. According to the same report (Unwin, 2016), total effort for the Otago region was 186,570 ± 8,370 angler

days, with most of that being from within the Clutha Catchment (which includes Lake Onslow and the Teviot River). According to that data, angling at Lake Onslow comprises less than 1% of the regional estimate.

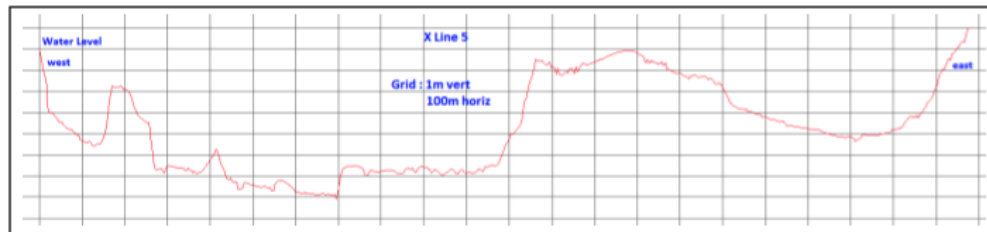
- iii. There is no quantitative or external justification provided for Ms Booth's statement (para 30(c)) that no substitute/alternative exists for the fishery.
- iv. Notwithstanding the above, I agree that Lake Onslow is a fishery of some significance. Recognition of this is one of the key reasons why the applicant has spent so much time consulting with F&G and developing the monitoring proposal. However, the assessment of the ecological experts and the outcome of the modelling indicates that the proposed change in drawdown is not likely to affect the quality of the fishery from any of the key perspectives.
- v. While serious, to provide context I note that the 2009 Lake Onslow drowning referenced in para 47 appears to have occurred when an angler fell into the water while trying to untangle a fishing line snagged in their boat propeller²⁶. The drowning does not appear to be related to any of the variables being considered as part of this proposal.
- vi. With regards to para 58, Dr Booth states that as the lake drops the extent of mudflats increases and navigation for boaties becomes more difficult. While there is no contention that mudflat extent increases with decreasing lake level, I am unclear on how Dr Booth has come to this conclusion around navigation – is this based on personal communications with TAC members, or is it simply inferred? While I have no direct experience of the lake, discussions with Mr Dungey (pers. comm. 15/6/22) indicate that the lake is relatively shallow regardless of level below dam crest, and the risk of stranding is always present. Mr Dungey indicated that there are obstacles just below the surface of the lake when it

²⁶ Stuff.co.nz, 2011. 'Event' led to drowning. Accessed online 16/06/2022

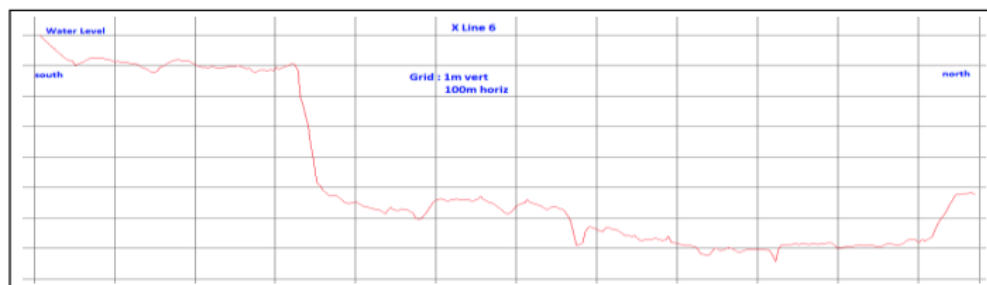
is full or close to full (i.e. above 2.5 m below crest), and it may be that lowering the lake in fact exposes these hazards, limiting that particular impediment to navigation. The point being that one cannot unequivocally state that navigational hazards increase with decreasing lake levels.

- vii. The above is illustrated by the profiles provided in Appendix 2 of Mr Dungey's report attached to the AEE (Ross Dungey Consulting, 2017). For example, profiles 5 and 6 indicate a high incidence of "shallow" obstructions within ~1.5 m below dam crest, then comparatively steep drop-offs below this level.

Profile – Line 5



Profile – Line 6



- viii. Following discussions with Mr Jack (pers. comm. 15/6/22), the concrete boat ramp is usable down to a lake level of approximately 3.5 m below crest, not 3.2 m as suggested in para 60 of Dr Booth's evidence.
- ix. I agree with Dr Booth's assessment in para 73 that the expected difference in recreational effects between Scenarios A and B is greater than between B and C.
- x. In para 74 Dr Booth discusses the possibility of a recreational "tipping point", which I understand to mean that the effects on

recreation due to Scenario C (or any scenario, for that matter), particularly due to barriers to access, may reach a certain extent that they cause a sharp dropoff in use of the lake for angling. Such a tipping point may exist, however I draw attention to the fact that angler use of Onslow appears to have dropped off in recent years (from 3,450 ± 570 in the 2001/02 survey to 1,420 ± 410 in the 2014/15 survey) despite the fact that “high, stable lake levels from 2011 onwards have created a more productive fishery²⁷.” If lake levels have been higher and the fishery more productive over the past decade, the aforementioned tipping point does not appear to be reflective on the perceived recreational health of the lake and surrounds. The same consideration can be applied to paras 86 and 87 of Dr Booth’s evidence.

- xi. Dr Booth’s assessment of effects on public access to the lake (paras 90-98) lacks certain critical contextualisations, including:
- Much of the outer extent of Lake Onslow is owned by the applicant, including the majority of the existing shoreline when the lake is comparatively full. In addition, land adjoining the shoreline is primarily privately owned. Public land (comprising the assumed former extent of the lake before it was dammed at the present location, along with Crown land (marginal strip) around the margins of this original lake extent) is difficult to access when the lake is comparatively full, and access is provided at the discretion of the applicant and other private landowners.
 - Dr Coates provides no statistical comparison between lake levels in Scenarios B and C in her assessment. If mean lake levels are expected to drop from 3.96 m below crest under Scenario B to 4.44 m below crest under Scenario C, consideration of effects on boat ramp-related access becomes irrelevant, as the boat ramps would be virtually

²⁷ Otago Fish and Game Council submission, para 23

unusable in the existing environment scenario. Therefore, there is little to no effect on boat ramp access.

- If the issue with mudflats in relation to access is primarily influenced by how dry (and therefore how hard) the mud is, then based on the Model, the proposal (Scenario C) could result in a positive effect to angler access when compared to the existing environment (Scenario B). This is because the lake will be held at the minimum level (~5.2 m below crest) for longer periods²⁸, meaning mud would have more time to dry out than in Scenario B.
- xii. With regards to boat stranding (paras 99-101 of Dr Booth's evidence), I refer back to my own point (vi) above. Strandings are a possibility at any lake level, and there is no quantitative analysis showing that strandings will be more frequent in Scenario C than they are at present – certainly, the difference in potential strandings between Scenarios B and C would be very difficult to measure. Dr Booth once again refers to the boat-related angler fatality in 2009, in a sentence concerning strandings (para 96). Without context, this implies that the fatality was due to stranding, however based on the information available I do not consider this to be the case.

Statutory Planning Assessment

41. The original application gave regard to certain policies of the RPW, while my 29 July 2021 response to a further information request from Ms Pritchard provided an assessment of the proposal against the provisions of the following documents:
- i. National Policy Statement for Renewable Electricity Generation 2011 (NPSREG);
 - ii. National Policy Statement for Freshwater Management 2020 (NPSFM);

²⁸ Section 42A Report, Otago Regional Council, 14 June 2022 (Section 6.1.6, page 31)

- iii. Partially Operative Regional Policy Statement for Otago 2019 (PORPS);
 - iv. Proposed Regional Policy Statement for Otago 2021 (PRPS);
 - v. Kai Tahu ki Otago Natural Resource Management Plan 2005;
 - vi. Te Rūnanga o Ngāi Tahu Freshwater Policy Statement 1999.
42. I consider that these assessments provided in the further information response sufficiently address the information requirements set down by RMA Schedule 2(1)(g). Additionally, I agree with Ms Pritchard's assessment of the NES-FW 2020 in the s42A report²⁹, and adopt that assessment here.
43. Given the importance of the NPSREG and the NPSFM to the present proposal, I have revisited and/or provided an additional assessment against the provisions of these documents in the following paragraphs.

National Policy Statement for Renewable Electricity Generation 2011

Objective - To recognise the national significance of renewable electricity generation activities by providing for the development, operation, maintenance and upgrading of new and existing renewable electricity generation activities, such that the proportion of New Zealand's electricity generated from renewable energy sources increases to a level that meets or exceeds the New Zealand Government's national target for renewable electricity generation.

44. The proposed increase in the rate of drawdown can be seen as an upgrade to an existing renewable electricity generation activity, enabling provision of more renewable energy when it is in high demand³⁰. Declining the proposal would be inconsistent with this objective.

Policy A - Decision-makers shall recognise and provide for the national significance of renewable electricity generation activities, including the national, regional and local benefits relevant to renewable electricity generation activities These benefits include, but are not limited to:

²⁹ Section 42A Report, Otago Regional Council, 14 June 2022 (Section 6.3.2)

³⁰ Evidence of Tony Jack, paras 14 and 16

a) maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions;

b) maintaining or increasing security of electricity supply at local, regional and national levels by diversifying the type and/or location of electricity generation;

c) using renewable natural resources rather than finite resources;

d) the reversibility of the adverse effects on the environment of some renewable electricity generation technologies;

e) avoiding reliance on imported fuels for the purposes of generating electricity

45. The proposal will enable PEL to increase electricity generation while avoiding greenhouse gas emissions. The proposal will increase security of electricity supply from local to national level by enabling more holistic use of Lake Onslow as a man-made storage reservoir, which (along with irrigation) is the key reason for its creation³¹. The proposal will enable continued use of a renewable natural resource (water). As has already been discussed throughout my evidence, the proposed consent conditions have been formulated to ensure that any adverse effect from the proposal can be reversed or avoided, by reverting back to the current drawdown should significant adverse effects be highlighted from the monitoring. The proposal will enable further reduction in national reliance on imported and/or fossil fuels for generation.

46. Based on the above, declining the proposal would be inconsistent with this policy.

Policy B - Decision-makers shall have particular regard to the following matters:

a) maintenance of the generation output of existing renewable electricity generation activities can require protection of the assets, operational capacity and continued availability of the renewable energy resource; and

b) even minor reductions in the generation output of existing renewable electricity generation activities can cumulatively have significant adverse effects on national, regional and local renewable electricity generation output; and

³¹ Mr Jack in para 14 of his evidence states that the current drawdown limit effectively prevents PEL from efficiently utilising Lake Onslow for hydroelectricity generation. Increasing the drawdown would address this barrier to generation.

c) meeting or exceeding the New Zealand Government's national target for the generation of electricity from renewable resources will require the significant development of renewable electricity generation activities.

47. The proposal will protect the existing generation of renewable electricity while enabling increased generation when conditions and the market dictate. As I have noted in my further information response, subpart (b) of this policy is particularly relevant, as the proposal seeks to improve the generation output of the Lake Onslow/Teviot hydro system by enabling increased drawdown and more flexibility in the management of outflows. This will have a cumulative *positive* impact on local to national renewable energy generation output, and furthermore contribute towards meeting national targets for renewable electricity generation per subpart (c).
48. Importantly, Lake Onslow is an existing renewable electricity asset that is not being utilised to its full potential, meaning declining the proposal (which is aimed at addressing this issue) will be very much inconsistent with this policy.

Policy D - Decision-makers shall, to the extent reasonably possible, manage activities to avoid reverse sensitivity effects on consented and on existing renewable electricity generation activities.

49. Lake Onslow was created for two purposes: hydroelectricity generation and irrigation water storage. Pioneer holds water permits that authorise the impoundment, take and discharge of water from the Teviot River/Lake Onslow – these are lawful activities under the RMA.
50. Use of the lake as an amenity resource, such as for angling, has occurred as a secondary, unintended consequence of the creation of the lake. PEL has, however, supported angling and other amenity by funding the original boat ramp at Onslow, sponsoring the annual Teviot fishing competition, and of course continuing to permit and encourage recreation on land owned by PEL (which includes much of the lake). In this instance, declining or further constraining the proposal (such as via additional conditions proposed by F&G in their submission) would be contrary to this policy, as amenity will have created a reverse sensitivity effect on the primary, consented, purpose of Lake Onslow.

National Policy Statement for Freshwater Management 2020

Objective

- (1) *The objective of this National Policy Statement is to ensure that natural and physical resources are managed in a way that prioritises:*
- (a) *first, the health and well-being of water bodies and freshwater ecosystems*
 - (b) *second, the health needs of people (such as drinking water)*
 - (c) *third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future.*

51. The health and well-being of Lake Onslow and the wider Teviot River catchment has been a focal point for assessment, consultation and development of the proposed adaptive management regime. Based on the various reports and responses prepared by Mr Dungey in support of the application, the reviews conducted by AES and Babbage, and the evidence of Ms Coates, adverse effects on the health and wellbeing of freshwater associated with the proposal will be negligible.
52. There will be no known effects on the health needs of people due to the proposal, and the proposal will enable PEL to more efficiently operate the Teviot hydroelectricity scheme to maximise energy generation potential. This is expected to have positive ramifications for both the applicant and for the wider community, through the provision of more readily available renewable energy. Adverse effects on cultural values due to the proposal are not anticipated³², insofar as I am able to determine this from a non-expert perspective.

Policies 1, 2, 4, 6-10, 15

53. I consider that the assessments of the proposal against these policies in both my July 2021 s92 response (pages 20-22) provide sufficient coverage, and I adopt those assessments here.
54. I note, however, that I did not provide an assessment against Policy 4 in my July 2021 response. This is a particularly important policy due to the role that hydroelectricity generation will play in achieving New Zealand's climate change targets. Given the primary purpose of Lake Onslow is for hydroelectricity generation, increasing the productive capacity of this resource via a very narrow change in existing consents (i.e. only

³² Landpro Ltd, July 2021. S92 response, pages 10-14

modifying drawdown and no other parameters) is an important consideration in relation to this policy.

55. Finally, with regards to Policy 10 (the habitat of trout and salmon is protected), Mr Dungey's work to date, along with peer reviews by specialists from AES and Babbage, has indicated that there will be no significant effects on the ecology of Lake Onslow due to the proposal – including trout habitat. When viewing anticipated effects on trout habitat through the comparison of Scenario B with Scenario C, the potential for adverse effects on trout habitat due to the proposal is even smaller. This is reinforced by the evidence of Ms Coates. Overall, I continue to consider that the habitat of trout in Lake Onslow and the Teviot River is protected, in light of the proposal.

Clause 3.31 – Large hydro-electric generation schemes

56. As Ms Pritchard correctly states, this clause does not include the Teviot hydroelectricity scheme in its list of “large” hydroelectric schemes. It is worth noting, however, that Clause 3.31(2) requires regional councils to have regard to the importance of large hydroelectric schemes in their contribution to New Zealand's greenhouse gas emission targets, security of electricity supply, generation capacity, storage and operational flexibility.
57. While the subject scheme does not appear to be large enough to qualify for this assessment, the same principles of the clause can be applied here. Namely, the proposal will make a contribution (albeit relatively small) to offsetting national greenhouse gas emissions, it will improve national security of electricity supply, and it will improve the generation capacity and operational flexibility of the scheme.

Regional Plan: Water for Otago 2004

58. The application provided an assessment of the proposal against the relevant policies of the Regional Plan: Water for Otago (2004). In that assessment, RPW Policies 5.4.2, 5.4.4, 5.4.8 and 5.4.9 were considered in relation to the proposal. For completeness, I have provided additional

assessment against a number of other RPW objectives and policies most relevant to the proposal, as summarised in the below table.

Policy/ Objective	Wording	Assessment against proposal
Objective 5.3.4	To maintain or enhance the amenity values associated with Otago's lakes and rivers and their margins.	The application has given due consideration to how the proposal may impact the amenity values at Lake Onslow, including effects on access. Given the expected minor difference in effects between Scenario B and C, particularly when incorporating the suggested 0.688 corrected inflows, the proposal is considered to generally maintain amenity values at Onslow. It is unclear whether Objective 5.3.5 refers to public access to lakes and rivers situated on public land, and it should be noted that much of the lake is located over private land. That being said, the proposal will not impede existing public access to the lake.
Objective 5.3.5	To maintain or enhance public access to and along the margins of Otago's lakes and rivers.	
Objective 5.3.6	To provide for the sustainable use and development of Otago's water bodies, and the beds and margins of Otago's lakes and rivers.	The proposal seeks to enhance the sustainable use of Lake Onslow as a renewable energy resource, by enabling more efficient generation regimes.
Policy 5.4.8	To have particular regard to the following features of lakes and rivers, and their margins, when considering adverse effects on their natural character: (a) The topography, including the setting and bed form of the lake or river; (b) The natural flow characteristics of the river; (c) The natural water level of the lake and its fluctuation;	The topography and bathymetry of Lake Onslow has been given due consideration in the application. The hydrological characteristics of Lake Onslow and the wider Teviot River have been altered by historic infrastructure, however this is captured in the existing resource consents and no change is proposed to limits on river flows, water levels or water quality. The proposal seeks to amend the drawdown rate of the lake, however the limits of fluctuations will not change. No significant adverse effects on ecology are anticipated.

Policy/ Objective	Wording	Assessment against proposal
	(d) The natural water colour and clarity in the lake or river; (e) The ecology of the lake or river and its margins; and (f) The extent of use or development within the catchment, including the extent to which that use and development has influenced matters (a) to (e) above.	Clause (f) is particularly important, as the extent of development in the catchment is significant. I note that the explanation to this objective states that “Lakes and rivers with a high degree of natural character can be more significantly affected by activities than those which have already been substantially modified.”
Objective 6.3.1	To retain flows in rivers sufficient to maintain their life-supporting capacity for aquatic ecosystems, and their natural character.	The existing consented residual flow requirement for the Teviot River below the Onslow dam has been imposed to ensure that the life-supporting capacity of the river is maintained. No change to this condition of consent is proposed.
Objective 6.3.7	To minimise the adverse effects from fluctuations in the levels of controlled lakes.	The proposal seeks to increase the drawdown rate of Lake Onslow to support improved hydroelectricity generation potential of a reservoir for which the primary purpose is hydroelectricity generation. There may be adverse effects of this increase on ecological and/or amenity values, however the multitude of assessments and reviews provided over almost 5 years in relation to the application indicate that these adverse effects are likely to be less than minor – particularly when comparing Scenario B to C with the 0.688 correction factor applied.
Policy 6.5.2	Where lake levels are already controlled, to recognise and provide for the purpose of that control if limits are to be placed on operating levels.	Lake levels at Onslow are already controlled and subject to conditions of consent. No changes to minimum and maximum lake levels are proposed as part of the application.
Policy 6.5.3	To limit the operating levels of any controlled lake, where appropriate, to avoid or	It is acknowledged that this policy includes consideration of the potential effects of lake level rates

Policy/ Objective	Wording	Assessment against proposal
	<p>mitigate adverse effects on:</p> <p>(a) Natural and human use values identified in Schedule 1;</p> <p>(b) The natural character of the lake;</p> <p>(c) The amenity values supported by the lake;</p> <p>(d) Lake margin stability; and</p> <p>(e) The needs of Otago's people and communities.</p>	<p>of change (i.e. drawdown). As has been indicated in surveys and documentation provided by Mr Dungey, and in reviews and/or evidence provided by AES and Ms Coates, the adverse effects on the ecology of Lake Onslow and the Teviot River, and on quantifiable aspects³³ of Lake Onslow and Teviot River angling, are likely to be insignificant. The lake is artificially created, and there is a significant need in Otago and the wider country for more renewable electricity, which this proposal seeks to address.</p>
Policy 6.5.4	<p>In regulating the management of flows, other than in association with a small dam or any dam designed to contain contaminants, to have regard to provision for:</p> <p>(a) The requirements of:</p> <p>(i) Natural and human use values identified in Schedule 1;</p> <p>(ii) The natural character of the water body; and</p> <p>(iii) Amenity values supported by the water body; and</p> <p>(b) The periodic release of sufficient quantities of water at appropriate flow rates, where necessary to remove excess algal growth or an accumulation of sediment downstream of the dam; and</p> <p>(c) The existing needs of consumptive users of water, while taking into</p>	<p>As indicated in the s42A report (page 64), RPW Schedule 1A and 1D values associated with Onslow and the Teviot are not expected to be significantly adversely affected by the proposal. Lake Onslow is not natural in origin, and effects on amenity values are expected to be low to negligible.</p> <p>Release of flushing flows to control downstream algal growth is already required by conditions of consent, and no change to these conditions are proposed.</p> <p>No effects on consumptive users of water (namely the Teviot Irrigation Company) will occur due to the proposal.</p>

³³ Evidence of Ross Dungey, para 32

Policy/ Objective	Wording	Assessment against proposal
	account, where appropriate, the extent to which the water body has been modified by resource use and development.	

59. Overall, the proposal is consistent with the provisions of the NPSREG, NPSFM and RPW.

Proposed Consent Conditions

60. I accept the conditions proposed by Ms Pritchard in Appendix 1 of the s42A report, with the following exception. My suggested amendments to this recommended condition are provided in underlined italics.
61. Consent No. 2001.475.V1, Condition 15:
 Prior to 1 December 2023, the Consent Holder must erect and maintain public warning signs adjacent to the concrete boat ramp at approximately NZTM 2000 E1334593 N4949886. The signs must:
 (a) Be maintained in good repair at all times by the Consent Holder.
 (b) Be at least 500 millimetres by 500 millimetres and have wording that can be clearly read from 1 metre away;
 (c), Warn the public of safety and navigation risks associated with the lake, especially at lower lake levels. The signage must include a recommendation that all boats carry two forms of communication that will work when wet.

Conclusion

62. I am of the view that the adverse effects of the proposed activity will be no more than minor, and that the proposal is generally consistent with all relevant objectives and policies, including those of the NPSREG and NPSFM. Therefore, I support the recommendation that the consents should be varied in accordance with the conditions provided in Appendix 1 of the s42A report and incorporating my proposed change above.

Date: 20 June 2022

William Nicolson