Katelin Hazlett

From: Jotform <noreply@jotform.com>
Sent: Thursday, 16 November 2023 6:22 a.m.

To: Henry Jian; Dam Safety

Subject: NEW Dangerous Dams Submission Formsubmission

Dangerous Dams Submission Form

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Your name or representative's name: Organisational name (if applicable): Address: Business hours phone number: After hours phone

number:

Email address:

Signature

Date

Would you like to present your submission in person?

Yes, I would like to present my submission in person.

Please state your submission:

There must be a provision in the regulations which allow for existing dams of a certain age (say 15 years plus) that have no history of failure to be allowed to 'pass' as they have not failed

so are unlikely to in the future.

Also if the failure of a dam will not damage neighbouring

property (or is not a threat to buildings/houses) then it must be exempt or 'pass".

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Submission Form

Proposed Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams 2023

Please access and complete the online submission form on our website (orc.govt.nz/dangerousdams), or alternatively send your completed submission form via email to damsafety@orc.govt.nz, or post a hardcopy of the attached submission form to:

Dangerous Dams Policy 2023 Otago Regional Council 70 Stafford Street Private Bag 1954 Dunedin 9054

Organisational name (if applicable):	New Zealand Transport Agency	Waka k
Address:		
Pusiness hours tolerhone:	atter hours telephone:	
Business hours telephone:	Arter hours telephone:	
	Arter hours telephone:	
	Date: 7 / 12 / 23	

Our submission is:

The New Zealand Transport Agency Waka Kotahi (NZTA) provides a lifeline utility, per clause 6, Part B, Schedule 1 of the Civil Defence Emergency Management Act 2002, as it is the entity that provides the State highway road network. The State highway road corridor is often used by other lifeline utility providers to locate their infrastructure, for example, power and telecommunications infrastructure and 3 Waters infrastructure. Dangerous dams, earthquake-prone dams and flood-prone dams could present a risk to the safe and efficient functioning of the State highway road network, as well as any other lifeline utilities using the State highway road corridor to locate their infrastructure, where those dams are located within a proximity where their failure would adversely impact the State highway road corridor. For these reasons, we consider it vitally important that NZTA (and other lifeline utility providers) are directly notified about any dangerous, earthquake-prone and flood-prone dams that, if they were to fail, could impact the State highway network. In being notified about these dams, NZTA would be better placed to understand the risk presented to the State Highway network by various dams and prepare for dam failure scenarios.

In the section of the proposed policy titled 'The Council's approach to performing these functions', it is noted that the Otago Regional Council will notify the relevant Territorial Authority and the Otago Civil Defence and Emergency Management Group of any dangerous, earthquake-prone and flood-prone dams it receives information about, and, if appropriate, will notify potentially affected communities downstream of a dangerous, earthquake-prone or flood-prone dam by publishing that information and through liaison with the Otago Civil Defence Emergency Management Group. We request that the proposed policy be amended to also explicitly include direct notification of lifeline utility providers, where their lifeline utilities could be impacted directly or indirectly by the failure of a dangerous dam, earthquake-prone dam or flood-prone dam.

Submission on the Otago Regional Council dangerous dams' policy

Introduction

Thank you for the opportunity to submit on the Otago Regional Council (**ORC**) policy on dangerous dams.

I would like to acknowledge from the outset that I realise ORC policy must comply with the Building (Dam Safety) Regulations 2022 (**Regulations**). Notwithstanding this, this submission will suggest recommendations despite ORC possibly being unable to accept them, in the chance that the Regulations may be amended in the future.

Amendments

As a sheep and beef farmer in the Maniototo, Central Otago, there are a few suggestions I would like to make that could benefit both farmers and the ORC in relation to efficiency, practicality and clarity.

Suggested areas for policy amendments as follows:

- 1. The definition of Classifiable Dams (defined in Regulation 5 of the Regulations) as being either:
 - a. 4 or more metres high and storing 20,000 or more cubic metres volume of water or other fluid; or
 - b. 1 or more metres high and storing 40,000 or more cubic metres volume of water or other fluid.

This definition sets the bar too low for dams that need to checked as it captures too many small ponds and dams. Simply put, there is a high cost with minimal benefit for having these small dams inspected when the risk is clearly minimal. Defining dams by those which are structured with 1 metre high dam walls also captures many dams that were historically constructed by farmers without consents. Previously, if a dam wall was below 3 metres or 20,000m3, consents were not necessary (hence the reason they were constructed by farmers and local contractors.). These unconsented dams in particular will be disproportionally expensive to have engineers inspect because due to being constructed by farmers there is consequently no plans or specifications in existence. These are small dams that common sense would say are not dangerous. Regulations and policy should not apply with retrospective effect; however, this policy will now mean that small dams constructed for the reason being that no consent was needed, will now need to be consented.

Other than increasing the threshold for classifiable dams in the Regulations, the definition could be refined in other ways. Firstly, one such refinement may be to take into consideration when the dam was constructed. In recent years there has been an uptake in irrigation storage ponds on farms and these have been constructed by engineers and consented. If an engineer has built a dam and it has been consented by an engineer in the last 10-20 years, then ORC policy could exempt these dams from needing an engineer assessment in the immediate future. A second refinement of the definition, may be to consider the location of the dam in relation to public infrastructure, and undertake a risk assessment in relation to any main roads, housing, power lines etc (in the event a dam breaks). This in turn would allow the small number of engineers available to concentrate their efforts on dams with a higher likelihood of being dangerous and damaging public infrastructure.

2. Clarity around timing – aligning with irrigation consents

The policy lacks clarity around timing, in particular a date by which farmers must have engaged an engineer to inspect their dam in order to determine whether it is "dangerous". Although no hard deadline gives flexibility, it would be useful to know what ORC's expectations are in this regard. The current wording states "that they will take the necessary steps, in a timely manner, to comply with the Act". The wording of "a timely manner", could create uncertainty and stress for dam owners who may worry that they may face penalties if they are unable to contract an engineer in "a timely manner", which subject to engineer availability may be a problem.

A possible solution to reducing this uncertainty, could be to amend the policy from requiring dam owners to comply with the Act in "a timely manner" to aligning it with corresponding irrigation consents to which the dam relates. This would streamline costs and workloads for farmers making it more practical, and mean that low risk dams that are in all likelihood not dangerous are inspected at a later date, allowing high risk dams to be at the front of the queue.

3. Introduction of low-cost alternatives

For farmers that believe their dam to very low risk and safe, this policy gives them little benefit but yet another high cost in an already high cost environment. The policy has no scope to allow farmers to adopt cheaper measures or alternatives to an expensive engineer report.

As a suggestion, for dams that meet criteria for being low-risk, (e.g. small size, built in the last 10-20 years, no risk to public infrastructure), the policy could be amended to allow alternatives to an engineer report, whether that be indefinitely or for a certain period of time until an engineer report is required (e.g. when an irrigation consent expires). These alternatives for farmers could include:

- sending in an annual operations and maintenance report (as is required to be kept as part of consents for certain dams currently);
- interlinking a health, maintenance and risk assessment with freshwater farm plans; and
- providing ORC with GPS locations of the dams and maps that detail location and size.
- Consider alternatives for stock water dams.

Conclusion

ORC's policy currently states that "this policy applies to dams everywhere in Otago, and irrespective of the age and intended life of the dam". It is disheartening to see no apparent attempt by ORC to target the policy at dams that are actually high risk so that resources can be appropriately allocated. As always, farmers will welcome efforts that reduce cost, minimise additional workloads and incorporate common sense so that an efficient outcome can be achieved for all parties involved.

If the reader has any questions in relation to this submission please free to contact me.

Dawn Sangster.



SUBMISSION ON PROPOSED POLICY ON DANGEROUS DAMS, EARTHQUAKE-PRONE DAMS AND FLOOD-PRONE DAMS 2023

Clause 6, First Schedule of the Resource Management Act 1991

To: The Otago Regional Council

70 Stafford Street

Dunedin 9054

Submitter: PORT BLAKELY LIMITED

C/- Saunders & Co Attention: Shona Walter

Proposal: Proposed Policy on Dangerous Dams, Earthquake-prone dams and

Flood-prone dams 2023

Address for service of submitter:

SUBMISSION ON PROPOSED DANGEROUS DAMS POLICY 2023

Name of submitter

1 Port Blakely Limited (the Submitters)

Proposal to which submission relates

- 2 The Submitters oppose the Otago Regional Council's (ORC) Proposed Policy on Dangerous Dams, Earthquake-prone dams and Flood-prone dams 2023 (Proposed Policy).
- The Submitters could not gain an advantage in trade competition through this submission.
- 4 Port Blakely Limited (**Port Blakely**) owns and manages a block of land in the Otago Region. On this land is located the Phoenix Dam.
- The legal description of Port Blakely's land is Section 96 Block X Tuapeka East Survey District and Section 7-10 and Section 21-23 Block XIII Tuapeka East Survey (Port Blakely's land). The location of the Phoenix Dam is shown in **Appendix 1**.
- The Phoenix Dam has a High PIC classification and was recently considered a flood-prone dam. On 17 November 2023, directions under s330 RMA were issued by the ORC and the Clutha District Council (**CDC**), directing Port Blakely to undertake emergency works to mitigate likely adverse effects of the failure of the embankment of the Phoenix Dam.
- Parts of the Phoenix Dam were built pre-1900. Some of the dam's structure is likely to be considered an archaeological site and come under the protection of the Heritage New Zealand Pouhere Taonga Act 2014.
- 8 As the occupier of land where a flood-prone, heritage dam is located, Port Blakely is in a unique position to provide useful feedback on the Proposed Policy.

Details of the submission

Reasons for opposition

8 The following specific reasons are advanced.

Section 3 Principles

- There should be an obligation on the ORC to provide on request any technical reports they have which provide details about the state of a dangerous, earthquake-prone or flood-prone dam.
- The provision of technical reports will help persons potentially affected by dangerous, earthquake-prone or flood-prone dam, to plan for and implement risk-mitigation measures.

11 The Submitters seek:

(a) Amendment to Section 3 (Principles), paragraph 3 to include an obligation on the ORC to provide on request any technical reports in their possession which provides details about the sate of a dangerous, earth-quake prone or flood-prone dam.

Section 4 Council's approach to performing it's functions

4.1 Information on dam status

- On the final page of the Proposed Policy, it states the ORC will record the heritage listing of all dangerous, earthquake-prone and flood-prone dams and supply this information to the Territorial Authority. The Territorial Authority will then include that information on the Land Information Memorandum (**LIM Report**).
- Though the above is a sound policy it does not go far enough. There should be a policy which requires the ORC to supply information about <u>all dams</u> on their register to the Territorial Authority and for the Territorial Authority to include information about any dam on the relevant LIM Report.
- When Port Blakely purchased the block of land on which the Phoenix Dam is located,
 The LIM Report which relates to Port Blakely's land contains indirect references to
 the Phoenix Dam, but nothing that directly referred to the state of the dam and its
 heritage values. Port Blakely became aware of the Phoenix Dam when it was already
 in a poor state and not long after that, the dam was classified a High PIC dam.

- A mechanism to ensure the safety of dams are managed in a more proactive way, is to make sure future buyers of land are well informed about the presence of a dam on the property and any risks and heritage values associated with that dam.
- The Proposed Policy in its current state does not provide for the above and without a requirement to register all dams on the LIM Report, there is a real threat future landowners in the Otago District will be unaware they are purchasing land with a dam on it.

4.3 Directing and taking action

- 17 With reference to the emergency works that occurred around the 17 November 2023 on the Phoenix dam, Port Blakely worked closely with the ORC and CDC to provide access to the site and to keep the emergency services informed of what was going on.
- Port Blakely staff were also directly contacted by members of the public about the emergency works being carried out and the staff members involved did their best to manage the situation. However, Port Blakely thinks that more could have been done by the ORC and CDC to lead that discussion with the public.
- Having regularly updated information in the media about an unfolding emergency and a 24-hour contact phone number for concerned citizens to call would help keep people safe in an emergency. It would also help maintain trust in public authorities.

20 The Submitters seek:

- (a) Amendment to Section 4, subsection 4.1, paragraph 1 to require that all information in the ORCs registry of dams be sent to Territorial Authorities for inclusion on any relevant LIM Report.
- (b) Amendment to Section 4, subsection 4.3, to require the ORC to regularly update the public about an emergency situation concerning a dangerous, earthquake-prone or flood-prone dam and to provide a 24 hour phone number for members of the public to call in the event of an emergency.

Decision sought

21 The Submitters seek:

(a) Relief by way of the amendments to the Proposed Policy at Sections 3 and 4,

as detailed in paragraphs 9 to 20 above.

General relief

22 Port Blakely seeks the following general relief that applies to all the specific relief

requested above:

(a) that the Proposed Policy be rejected in its current form;

(b) that the Proposed Policy provisions be amended to reflect the issues raised

in this submission;

(c) that the relevant Proposed Policy be amended as required to support and

implement the particular relief described above; and/or

(b) such other relief as may be required to give effect to this submission,

including alternative, consequential or necessary amendments to the

Proposed Policy that address the matters raised by Port Blakely.

Conclusion

23 The Submitter does wish to be heard in support of this submission.

24 If others make a similar submission, the submitter will consider presenting a joint

case with them at the hearing.

Thank you for the opportunity to submit on the Proposed Policy.

Dated 15 December of 2023

Shona Walter

Counsel for and on behalf of

The Submitters (Port Blakely Limited)



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Amendments

As a representative of a dairy farming company in the Maniototo, Central Otago, there are a few suggestions we would like to make that could benefit both farmers and the ORC in relation to efficiency, practicality and clarity.

Suggested areas for policy amendments as follows:

- 1. The definition of Classifiable Dams (defined in Regulation 5 of the Regulations) as being either:
 - a. 4 or more metres high and storing 20,000 or more cubic metres volume of water or other fluid; or
 - b. 1 or more metres high and storing 40,000 or more cubic metres volume of water or other fluid.

This rule will have the unintended consequence of capturing a number of small dams which present little or no risk of collapse or inundating any area of significance (houses, buildings etc).

A simpler risk assessment model may be more suitable for dams below a certain height of storage capacity.

Having discussed the new regulations with Dam engineers, the problem they see is a lack of resource in this area of expertise and many feel they will be adding unnecessary cost to farmers, doing inspections on dams that present very little or no risk.

2. Clarity around timing – aligning with irrigation consents

Landowners in the main prefer defined dates and timeframes, rather than language such as "in a timely manner". The unintended consequence of this will be landowners leaving the process to the last minute before applying for consent.

An alternative solution to reducing this uncertainty, could be to amend the policy from requiring dam owners to comply with the Act in "a timely manner" to aligning it with corresponding irrigation consents to which the dam relates. This would streamline costs and workloads for farmers making it more practical, and mean that low risk dams that are in all likelihood not dangerous are inspected at a later date, allowing high risk dams to be at the front of the queue.

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For farmers that believe their dam to be very low risk and safe, this policy gives them little benefit yet another high cost in an already high-cost environment. The policy has no scope to allow farmers to adopt cheaper measures or alternatives to an expensive engineer's report.

As a suggestion, for dams that meet a level of criteria for being low-risk, (e.g. small size, built in the last 10-20 years, no risk to public infrastructure), the policy could be amended to allow alternatives to an engineer report, whether that be indefinitely or for a certain period of time until an engineer report is required (e.g. when an irrigation consent expires). These alternatives for farmers could include:

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- · Consider alternatives for stock water dams.

Conclusion

ORC's policy currently states that "this policy applies to dams everywhere in Otago, and irrespective of the age and intended life of the dam". It is disappointing to see no apparent attempt by ORC to target the policy at dams that are actually high risk so that resources can be appropriately allocated. Getting buy in from landowners will be difficult if they can't see obvious benefits in the new regulations

If the reader has any questions in relation to this submission please free to contact me.

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This rule will have the unintended consequence of capturing a number of small dams which present little or no risk of collapse or inundating any area of significance (houses, buildings etc).

A simpler risk assessment model may be more suitable for dams below a certain height of storage capacity.

Having discussed the new regulations with Dam engineers, the problem they see is a lack of resource in this area of expertise and many feel they will be adding unnecessary cost to farmers, doing inspections on dams that present very little or no risk.

2. Clarity around timing – aligning with irrigation consents.

Landowners in the main prefer defined dates and timeframes, rather than language such as "in a timely manner". The unintended consequence of this will be landowners not applying the necessary urgency to the process.

An alternative solution to reducing this uncertainty, could be to amend the policy from requiring dam owners to comply with the Act in "a timely manner" to aligning it with corresponding irrigation consents to which the dam relates. This would streamline costs and workloads for farmers making it more practical, and mean that low risk dams that are in all likelihood not dangerous are inspected at a later date, allowing high risk dams to be at the front of the queue.

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- interlinking a health, maintenance and risk assessment with freshwater farm plans; and
- providing ORC with GPS locations of the dams and maps that detail location and size.
- Consider alternatives for stock water dams.

The irrigation company has a number of small holding dams on the scheme which we self-report on annually, perhaps this is a better option for dams deemed to be low risk that are captured in this proposed policy.

Conclusion

ORC's policy currently states that "this policy applies to dams everywhere in Otago, and irrespective of the age and intended life of the dam". It is disappointing to see no apparent attempt by ORC to target the policy at dams that are actually high risk so that resources can be appropriately allocated. Getting buy in from landowners will be difficult if they can't see obvious benefits in the new regulations.

If the reader has any questions in relation to this submission, please free to contact me.

Katelin Hazlett

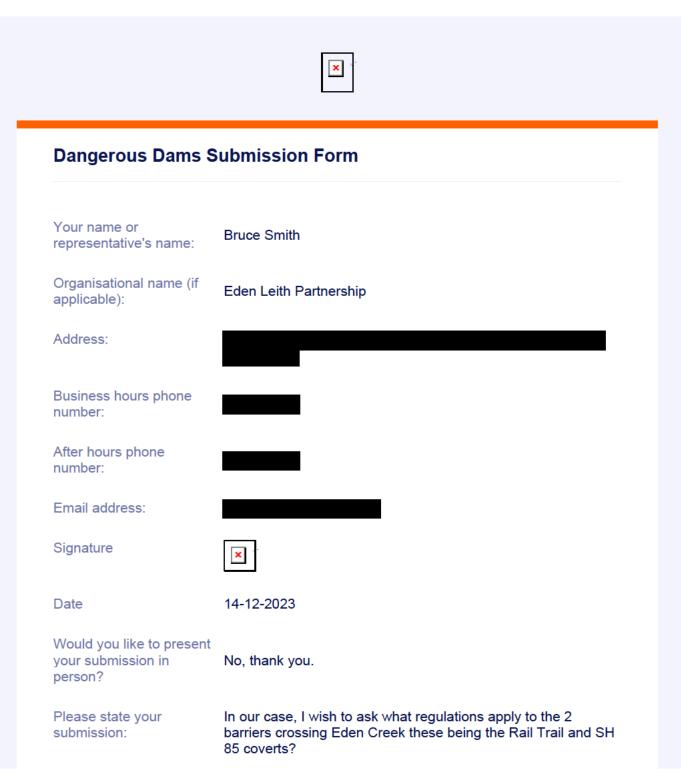
From: Jotform <noreply@jotform.com>
Sent: Thursday, 14 December 2023 9:32 p.m.

To: Henry Jian; Dam Safety

Subject: NEW Dangerous Dams Submission Formsubmission

Categories: Rebecca

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Both of these structures would hold large qualities of water if the pipes were ever to be blocked in a mayor rainfall event and should they fail would be quite problematic.

I feel the regional council should have a presentative visit the farms to view the dams that are in place and then inform the land owners whether or not they feel the dams trigger a level of risk which requires further investigation.

I believe that it should be noted that irrigation dams must be one of the most monitored areas of someone's farm, this being no more so than in times of drought.

You can edit this submission and view all your submissions easily.



13 December 2023

Otago Regional Council 70 Stafford Street Private Bag 1954 Dunedin 9054

Email: damsafety@orc.govt.nz

Tēnā koe Sir/Madam,

SUBMISSION OF HERITAGE NEW ZEALAND POUHERE TAONGA ON PROPOSED POLICY ON DANGEROUS DAMS, EARTHQUAKE-PRONE DAMS AND FLOOD-PRONE DAMS 2023

To: Otago Regional Council (the Council)

Name of submitter: Heritage New Zealand Pouhere Taonga (HNZPT)

1. Heritage New Zealand Pouhere Taonga is an autonomous Crown Entity with statutory responsibility under the Heritage New Zealand Pouhere Taonga Act 2014 (HNZPTA) for the identification, protection, preservation and conservation of New Zealand's historic heritage.

This is a submission on the Proposed Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams 2023 (the Policy)

2. The specific parts of the application that HNZPT's submission relates to are the application of the Policy to historic heritage, including archaeology.

Executive Summary

3. HNZPT recognises the requirement under the Building Act 2004 for Otago Regional Council to prepare a policy on how they will deal with dangerous dams, earthquake prone dams and flood prone dams in their region, and how the policy will apply to heritage dams.

- 4. HNZPT has reviewed the Policy and is generally supportive of the recognition of heritage values and the commitment that "account will be taken of the need to facilitate the preservation of parts of the dams with significant heritage values" where the dam is a heritage dam, as defined in the Building Act 2004 and Policy.
- 5. Notwithstanding this support, HNZPT recommends inclusion of an advice note to remind the reader that there may be additional obligations to comply with in respect of a dam, if it is also an

¹ Draft Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams 2023, section 6 at p7.

archaeological site, and thus attract requirements under the HNZPTA prior to any works commencing. Note, this may apply to any dam, not just those that are entered on the New Zealand Heritage List/Rārangi Kōrero (the List) and considered a heritage dam.

Importance of Historic Heritage Dams in the Otago Region

6. Historic dams may have architectural, technological and social significance and contribute to a wider industrial archaeological landscape. Significant investment in infrastructure, such as dams, can indicate social and economic development of particular areas over time. Extant historic dams have potential to educate the public about the growth and development of Otago's water supply and pioneering engineering feats. Investigation of these structures could provide information relating to its method of construction and the use of early technology.

Archaeological Provisions and Obligations in the HNZPTA

- 7. HNZPT reminds Council of the archaeological provisions of the HNZPTA and the regulatory framework that governs any activity that may modify or destroy an archaeological site.
- 8. Under the HNZPTA an Archaeological Authority must be obtained from HNZPT prior to any works that may modify or destroy any archaeological site, whether the site is unrecorded or has been previously recorded. An archaeological site is defined in section 6 of the HNZPTA as:
 - (a) any place in New Zealand, including any building or structure (or part of a building or structure), that:
 - i. is associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
 - ii. provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
 - (b) includes a site for which a declaration is made under section 43(1).
- There is also potential to encounter subsurface archaeological features associated with the historic occupation, regardless of whether any part of these structures remain above ground. The potential for encountering archaeology increases where there has been human occupation pre 1900 nearby.
- 10. It is an offence to modify or destroy an archaeological site without an authority from HNZPT under the HNZPTA. Therefore, it is important to make owners aware of this obligation.

Examples of Archaeological Sites that are Dams in Otago

- 11. The following are examples of dams that are not captured under the definition of heritage dams in the Building Act 2004 and HNZPT would recommend an archaeological assessment is considered ahead of works being carried out.
 - (a) Phoenix Dam is a historic water supply dam located 3km north-east of and above Lawrence, Otago. The dam was originally constructed in c.1863 for goldmine sluicing, therefore, meets the definition of an archaeological site under the HNZPTA.
 - (b) West Eweburn Dam in the Maniototo was under constructed at the turn of the century and, therefore, has both pre and post 1900 fabric. Should any works to the dam be

proposed, HNZPT would recommend an archaeological assessment be undertaken to determine whether an archaeological authority is required.

Comments on the Policy

6. Application to Heritage Dams

- 12. HNZPT is generally supportive of this section, particularly the statements by the Council that it "recognises the need to retain heritage values of the dam itself" and "account will be taken of the need to facilitate the preservation of parts of the dams with significant heritage value".³
- 13. HNZPT does appreciate the balance and consideration that the Council must undertake when there is risk arising from dangerous, flood-prone or earthquake-prone dams, and is encouraged by the recognition that it has given to historic heritage in this process.
- 14. However, HNZPT does consider this could be reworded in order to make its intention clearer. This is set out in the relief sought below.

Advice Note regarding Archaeological Sites

- 15. As the Policy covers *all* dams that may be dangerous, earthquake prone and flood prone in the region, then some of these dams have the potential to be archaeological, as per the definition set out above from the HNZPTA.
- 16. Works to pre-1900 structures, such as dams, or earthworks near pre-1900s structures may trigger requirements under the archaeological provisions of the HNZPTA and may require an archaeological authority to be obtained.
- 17. Owners of these structures may be unaware of their obligations under the HNZPTA when undertaking works on or near the dams.
- 18. As such, HNZPT recommends an advice note is included, advising of the potential requirements under the HNZPTA. This will ensure that owners and developers are fully aware of the legislative requirements under the HNZPTA and factor it into planning for any repair and upgrade works.

Relief sought:

19. Reword Application to heritage dams, paragraph 3 to state:

When dealing with heritage dams <u>that are classed as</u> dangerous dams, earthquake-prone dams-and/or flood-prone dams, the Council will seek advice from the Heritage New Zealand/Pouhere Taonga and the relevant territorial authority (if appropriate) before any actions are undertaken by the regional authority under the <u>Building</u> Act

20. Include the following advice note:

Note – Under the Heritage New Zealand Pouhere Taonga Act 2014 (the Act), the permission of Heritage New Zealand Pouhere Taonga must be sought prior to the modification or destruction of any archaeological site, whether the site is unrecorded or has been previously recorded. An archaeological site is described in the Act as a place

 $^{^{2}}$ Draft Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams 2023, section 6 at p7.

³ Ibid.

associated with pre-1900 human activity, which may provide evidence relating to the history of New Zealand. Works to pre-1900 structures, such as dams, or earthworks near pre-1900s structures may require an archaeological authority to be obtained prior to works commencing. Please contact Heritage New Zealand Pouhere Taonga for further information.

21. Heritage New Zealand Pouhere Taonga does not wish to be heard in support of this submission but is available to be contacted directly should any matter require clarification.

Kā mihi,

Christine Whybrew Director, Southern Region

Address for Service:



14 December 2023

Otago Regional Council Private Bag 1954 Dunedin 9054

Via email: damsafety@orc.govt.nz

Dear Sir/Madam,

RE: Falls Dam Company - Submission on Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams

Falls Dam is operated by the Falls Dam Company Limited (FDC) to generate hydroelectricity and as a storage reservoir to maintain irrigation reliability for the four main irrigation scheme takes along the Manuherekia River. The four main irrigation schemes are (in order of downstream abstraction) Blackstone Irrigation Company (BIC), Omakau Area Irrigation Company (OAIC), Manuherekia Irrigation Cooperative Society (MISC) and Galloway Irrigation Company (GIC). The irrigation schemes are also the shareholders of FDC.

Falls Dam is authorised under a suite of consents to dam the Manuherekia River for the purposes of irrigation and hydrogeneration. The dam also operates under corresponding discharge permits for flow augmentation purposes.

The Falls Dam structure is a concrete faced rockfill dam 33 m high and 155 m wide that is capable of impounding approximately 10 million cubic metres of water. The volume and area of the dam reservoir can fluctuate considerably over the course of a year due to natural changes in Manuherekia River inputs, electricity generation needs and irrigation requirements in the Manuherekia Valley. Falls Dam was designed and constructed over 80 years ago, and forms part of the iconic landscapes of the upper valley.

FDC wishes to provide feedback in relation to the draft Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams, as set out below. FDC strongly encourages the Otago Regional Council (ORC) to consider the matters raised below and wishes to be heard in support of its submission.

General

FDC understands that the ORC is required to have a policy for Dangerous, Flood and Earthquake Prone Dams under the Building Act 2004 and Dam Safety Regulations 2022.

It is our understanding that for the policy to be effectively implemented requires the ORC to have an inventory of Classifiable Dams in Otago, Potential Impact Classification of these dams and an assessment of the state of these dams in relation to the dangerous, earthquake prone or flood prone thresholds.

In reference to the Dam Safety Regulations 2022 which come into force in May 2024, owners, if they own a classifiable dam are required to provide the ORC with a Potential Impact Classification within 3 months of the regulations being implemented. In addition, dependant on their Classification owners are required to provide the ORC a dam safety assurance program for High and Medium Potential Impact Classification Dams, 12 and 24 months respectively after the Classification has been submitted.

While some owners will have significant information regarding the state of their assets others are working towards meeting the requirements of the regulations and therefore the information required to effectively implement the policy will require some time to gather. We understand that the state of the dams in relation to the policy will be defined as part of assessments resulting from the implementation of a certified dam safety assurance program.

We are aware of previous policies namely the 2011 version. We note some changes from the 2011 version and consider there would be some value in including some commentary from the 2011 version in the current proposed policy.

Specific Comments:

FDC supports the Principles and Council Priorities in performing its function as outlined below:

Dam owners have primary responsibility for identifying, monitoring reviewing and reporting on dangerous, earthquake prone and flood prone dams and reducing or removing the risk of harm to people, property and the environment in a timely and effective manner.

The priorities will be as follows in which 1 is the highest priority and 3 is the lowest priority.

- 1. To minimise the risk to public safety at all times;
- 2. To minimise the risk to damage or loss of property.
- 3. To minimise the risk to the environment

However, in regard to the statement:

The state of all dangerous, earthquake-prone and flood-prone dams (as defined in the Act and the regulations) must be known (noting that other dam safety provisions in the act apply to all dams) and this information, if known to the Council will be made readily available by the Council to all persons potentially affected by the safety risks of a dangerous, earthquake-prone or flood-prone dam.

• FDC considers that the Council should recognise as noted earlier, that while some owners will have significant information regarding the state of their assets, others are working towards meeting the requirements of the regulations and therefore the information required to meet the requirements of the above policy statement will require some time to gather. We understand that the state of the dams in relation to the policy will be defined as part of assessments resulting from the implementation of a certified dam safety assurance program.

As stated earlier, FDC is aware of previous policies, namely the 2011 version. The 2011 policy included the following wording:

Without overriding the paramount aim of protecting community safety, when deciding what actions must be taken in respect of a dangerous dam, earthquake-prone dam or flood-prone dam, the ORC will take into account social, economic and environmental impacts that may arise from those actions.

The ORC will work with the owners of identified dangerous dams, earthquake-prone dams and flood-prone dams to develop an action plan (with timeframes) with the common goal of reducing the risks to the safety of the dam and the community associated with the dam in a way that recognises the social and economic needs of the community. It is not realistic to specify a timeframe within this policy for achieving this goal because practicability will be dictated by the circumstances surrounding each case (e.g. economic welfare, ability to manage the interim risk, etc). When setting a timeframe for action, the ORC will consider the circumstances giving rise to the need for action, the nature of the risk (including

the likelihood and immediacy of any threat), the degree of risk exposure, the potential impact classification (PIC) of the dam, whether satisfactory steps can be taken to manage the interim risk and the priorities established in this policy (community safety, economic welfare, heritage values).

While recognising the paramount aim of protecting community safety, FDC considers that many
classifiable dams provide for significant social and economic needs in the communities they
serve. Many of the irrigation dams in Central Otago are essential to the livelihood of the
community. To reflect this FDC considers that similar wording to the 2011 version as outlined
above should be included in the current policy.

Thank you for the opportunity for making this submission and if you have any queries please do not hesitate to contact me.

Yours sincerely,



On behalf of



14 December 2023

Otago Regional Council Private Bag 1954 Dunedin 9054

Via email: damsafety@orc.govt.nz

Dear Sir/Madam,

RE: Last Chance Irrigation Company - Submission on Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams

The Last Chance Irrigation Company (LCI) own and operate a community irrigation scheme in the Roxburgh Rohe. The Scheme draws water from creeks along the Old Man Range and uses Butchers and Conroys Dam and associated reservoirs to store water and maintain irrigation reliability for pastoral farms, orchards and vineyards in the Shingle Creek, Gorge Creek, Fruitlands areas and properties south of Alexandra.

LCI is authorised under a suite of consents to take and dam watercourses in the area described above for the purposes of irrigation. The Scheme also operates under corresponding discharge permits for flow augmentation purposes. These consents have been recently renewed and expire in 2044.

LCI wishes to provide feedback in relation to the draft Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams, as set out below. LCI strongly encourages the Otago Regional Council (ORC) to consider the matters raised below and wishes to be heard in support of its submission.

General

LCI understands that the ORC is required to have a policy for Dangerous, Flood and Earthquake Prone Dams under the Building Act 2004 and Dam Safety Regulations 2022.

It is our understanding that for the policy to be effectively implemented requires the ORC to have an inventory of Classifiable Dams in Otago, Potential Impact Classification of these dams and an assessment of the state of these dams in relation to the dangerous, earthquake prone or flood prone thresholds.

In reference to the Dam Safety Regulations 2022 which come into force in May 2024, owners, if they own a classifiable dam are required to provide the ORC with a Potential Impact Classification within 3 months of the regulations being implemented. In addition, dependant on their Classification owners are required to provide the ORC a dam safety assurance program for High and Medium Potential Impact Classification Dams, 12 and 24 months respectively after the Classification has been submitted.

While some owners will have significant information regarding the state of their assets others are working towards meeting the requirements of the regulations and therefore the information required to effectively implement the policy will require some time to gather. We understand that the state of the dams in relation to the policy will be defined as part of assessments resulting from the implementation of a certified dam safety assurance program.

We are aware of previous policies namely the 2011 version. We note some changes from the 2011 version and consider there would be some value in including some commentary from the 2011 version in the current proposed policy.

Specific Comments:

LCI supports the Principles and Council Priorities in performing its function as outlined below:

Dam owners have primary responsibility for identifying, monitoring reviewing and reporting on dangerous, earthquake prone and flood prone dams and reducing or removing the risk of harm to people, property and the environment in a timely and effective manner.

The priorities will be as follows in which 1 is the highest priority and 3 is the lowest priority.

- 1. To minimise the risk to public safety at all times;
- 2. To minimise the risk to damage or loss of property.
- 3. To minimise the risk to the environment

However, in regard to the statement:

The state of all dangerous, earthquake-prone and flood-prone dams (as defined in the Act and the regulations) must be known (noting that other dam safety provisions in the act apply to all dams) and this information, if known to the Council will be made readily available by the Council to all persons potentially affected by the safety risks of a dangerous, earthquake-prone or flood-prone dam.

LCI considers that the Council should recognise as noted earlier, that while some owners will have significant information regarding the state of their assets, others are working towards meeting the requirements of the regulations and therefore the information required to meet the requirements of the above policy statement will require some time to gather. We understand that the state of the dams in relation to the policy will be defined as part of assessments resulting from the implementation of a certified dam safety assurance program.

As stated earlier, LCI is aware of previous policies, namely the 2011 version. The 2011 policy included the following wording:

Without overriding the paramount aim of protecting community safety, when deciding what actions must be taken in respect of a dangerous dam, earthquake-prone dam or flood-prone dam, the ORC will take into account social, economic and environmental impacts that may arise from those actions.

The ORC will work with the owners of identified dangerous dams, earthquake-prone dams and flood-prone dams to develop an action plan (with timeframes) with the common goal of reducing the risks to the safety of the dam and the community associated with the dam in a way that recognises the social and economic needs of the community. It is not realistic to specify a timeframe within this policy for achieving this goal because practicability will be dictated by the circumstances surrounding each case (e.g. economic welfare, ability to manage the interim risk, etc). When setting a timeframe for action, the ORC will consider the circumstances giving rise to the need for action, the nature of the risk (including the likelihood and immediacy of any threat), the degree of risk exposure, the potential impact classification (PIC) of the dam, whether satisfactory steps can be taken to manage the interim risk and the priorities established in this policy (community safety, economic welfare, heritage values).

While recognising the paramount aim of protecting community safety, LCI considers that many
classifiable dams provide for significant social and economic needs in the communities they
serve. Many of the irrigation dams in Central Otago are essential to the livelihood of the
community. To reflect this LCI considers that similar wording to the 2011 version as outlined
above should be included in the current policy.

Thank you for the opportunity for making this submission and if you have any queries please do not hesitate to contact me.

Yours sincerely,

pp James Russell







Federated Farmers of New Zealand

Feedback on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams 2023

15 December 2023



FEEDBACK TO OTAGO REGIONAL COUNCIL, POLICY ON DANGEROUS DAMS, EARTHQUAKE-PRONE DAMS AND FLOOD-PRONE DAMS.

Name of submitter:	Otago Province, Federated Farmers of New Zealand
	Luke Kane President Otago Province Federated Farmers of New Zealand
	Myfanwy Alexander President North Otago Province Federated Farmers of New Zealand
Contact person:	James Sutherland Policy Advisor
Address for service:	
Phone: Email:	

Otago Regional Council

ABOUT FEDERATED FARMERS

To:

Federated Farmers of New Zealand is a membership organisation, which is mandated by its members to advocate on their behalf and ensure representation of their views. Federated Farmers does not collect a compulsory levy under the commodities levy act and is funded from voluntary membership.

Federated Farmers represents rural and farming businesses throughout New Zealand. We have a long and proud history of representing the needs and interests of New Zealand's farmers

Federated Farmers aims to empower farmers to excel in farming. Our key strategic outcomes include provision for an economic and social environment within which:

- Our members may operate their business in a fair and flexible commercial environment;
- Our members' families and their staff have access to services essential to the needs of a vibrant rural community; and
- Our members adopt responsible management and sustainable food production practices.

1. INTRODUCTION

- 1.1 The Otago Federated Farmers Province (Federated Farmers) welcomes the opportunity to provide feedback to the Otago Regional Council on the review of the Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams policy. We acknowledge any feedback many individual members of Federated Farmers.
- 1.2 Federated Farmers is keen to meet with Council to provide continual feedback on any likely issues of significance to the rural community, and particularly any changes proposed to rural infrastructure including dams.

2. SUBMISSION

- 2.1 Federated Farmers acknowledges the changes to the Dangerous Dams policy is to align with the Government's updated policy on dam safety regulations, including the thresholds for classifiable dams.
- 2.2 While the document appears to be comprehensive and well-structured, Federated Farmers would like to provide some feedback to ensure that the safety measures are optimized, and the decision-making process is robust.
- 2.3 Federated Farmers supports the revised policies requirement for dam owners to make an initial assessment. Federated Farmers has previously expressed concern at a national level regarding the requirement that the initial owner assessments of dam which turn out to be low risk must be submitted to a recognised engineer for audit. We are concerned about the costs of submitting a low potential impact classification (PIC) dam to a recognised engineer for a certificate when the benefits of doing so are likely to be very low. If there are concerns about the risk of dams being inappropriately assessed as a low PIC dam, there could be a regime where a random sample of the PIC dam assessments are audited.
- 2.4 The lack of qualified and competent engineers is widely recognised. Federated Farmers has concerns about whether the profession will be able to cope with the demand for certificates for low PIC dams. Engineers focus should be on certifying assessments for medium and high PIC dams and then the ongoing compliance requirements for those dams under the Dam Safety Assurance Programme.
- 2.5 While the majority of agriculture and on-farm irrigation dams will be considered low risk, there will probably still be a number that will be classifiable. We expect that many of these will be in remote areas and should therefore face little or no regulatory requirement due to their low potential impact.
- 2.6 Regarding the policies outlined in the document in section 5 concerning that management of hazardous dams, where the condition of a dam poses a danger to the safety of the persons, property, or the environment, the Chief Executive of the Council is empowered to initiate necessary actions to remove the danger, with costs recoverable from the dam owner. The

policies provisions for swift action by the Chief Executive is pivotal in situations of imminent danger. Nonetheless, there is merit in establishing a review mechanism for such decisions. This entails having a qualified engineer conduct an initial assessment followed by an independent peer review before any actions are undertaken. This approach aims to evaluate the necessity and appropriateness of the proposed actions.

- 2.7 Of note, Federated Farmers suggests the inclusion of a requirement to seek a second opinion if an engineer recommends substantial measures to mitigate the hazard posed by a dam. This practice is prudent as it adds an additional layer of scrutiny to deter impulsive decisions that might yield far-reaching consequences. This approach promotes transparency and ensures a uniform application of the principle. By incorporating the suggestions mentioned above, the protocol can be further refined to guarantee a consistent, transparent, and expert-driven approach to decision-making.
- 2.8 Federated Farmers questions whether the frequency of annual reviews is appropriate for both medium PIC and high PIC dams given their different risk. We consider that medium PIC dams should have a longer period between reviews. The Policy acknowledges the differing levels associated with these dam categories therefore a more tailored approach to the review process is considered appropriate. Medium PIC dams have a lower risk therefore could have longer intervals between reviews without compromising safety.
- 2.9 Federated Farmers considers it important for there to be clear guidance within the regulations. It will also be important for straightforward and concise guidance material to be developed that is tailored to different audiences to interpret the regulations. The needs of farmers owning agricultural and irrigation dams will be very different to those of other dam owners and very different again to those of engineers and council staff.
- 3.0 In conducting initial assessments for determining a dam's PIC, the availability of resources to assist dam owners in identifying community structures, cultural sites, vital infrastructure, and natural environments is crucial. Equally important is the provision of relevant organisations and individuals from whom information can be sought.

3. Conclusion

3.1 Federated Farmers thanks Otago Regional Council for the opportunity to provide feedback on the review of the Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams. We look forward to continued engagement with the Council. If there is any further opportunity to be heard in support of our feedback, we would appreciate it.





14 December 2023 Otago Regional Council Private Bag 1954 Dunedin 9054

Via email: damsafety@orc.govt.nz

Dear Sir/Madam,

RE: Pioneer Energy Limited - Submission on Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams

Pioneer Energy Ltd (PEL) as a small hydro-electricity generator owns 7 dams and is involved in the management of 2 dams owned by others. Seven of these dams are likely to be classified as having medium or high potential impact under the new Regulations. In Otago we own and operate several hydroelectric schemes which include a range of hydraulic structures including 8 dams. We are also involved with the Falls Dam as an operator of the hydroelectric scheme attached to the dam.

We are involved in the management of dam structures that have an age range from 5 to 80 years. We are conscious that some of these structures were designed and constructed prior to current design load cases being formally considered, and it is possible that in some instances they may not meet current engineering standards. However these dams have performed satisfactorily throughout their life in a manner that would not be considered "dangerous" in the sense that they would be at risk of failure in the normal course of events. Therefore, given both the current and past performance of these structures, and the economic consequences of them being classed as "dangerous, earthquake-prone of flood-prone", we request that Regional Authorities (RA) when applying the dangerous dams provisions of the Building Act 2004, take a collaborative approach with owners should any safety issues arise.

PEL generally supports the aims and intent of the Building Act 2004 in relation to dam safety and the regulatory responsibilities of the dam safety system assigned to Regional Councils. We are committed to ensuring public safety through the implementation of an effective system of hazard management.

PEL supports the adoption of a consistent policy for all Regional Authorities throughout New Zealand. We consider that this will benefit owners with dams in more than one region, and dam safety engineers who will be required to work across multiple regions.

PEL wishes to provide feedback in relation to the draft Policy on Dangerous Dams, Earthquake Prone Dams and Flood Prone Dams, as set out below. PEL strongly encourages the Otago Regional Council (ORC) to consider the matters raised below and wishes to be heard in support of its submission.





General

PEL understands that the ORC is required to have a policy for Dangerous, Flood and Earthquake Prone Dams under the Building Act 2004 and Dam Safety Regulations 2022.

It is our understanding that for the policy to be effectively implemented requires the ORC to have an inventory of Classifiable Dams in Otago, Potential Impact Classification of these dams and an assessment of the state of these dams in relation to the dangerous, earthquake prone or flood prone thresholds.

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While some owners will have significant information regarding the state of their assets others are working towards meeting the requirements of the regulations and therefore the information required to effectively implement the policy will require some time to gather. We understand that the state of the dams in relation to the policy will be defined as part of assessments resulting from the implementation of a certified dam safety assurance program.

We are aware of previous policies namely the 2011 version. We note some changes from the 2011 version and consider there would be some value in including some commentary from the 2011 version in the current proposed policy.

Specific Comments:

PEL supports the Principles and Council Priorities in performing its function as outlined below:

Dam owners have primary responsibility for identifying, monitoring reviewing and reporting on dangerous, earthquake prone and flood prone dams and reducing or removing the risk of harm to people, property, and the environment in a timely and effective manner.

The priorities will be as follows in which 1 is the highest priority and 3 is the lowest priority.

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- 3. To minimise the risk to the environment

However, in regard to the statement:

The state of all dangerous, earthquake-prone and flood-prone dams (as defined in the Act and the regulations) must be known (noting that other dam safety provisions in the act apply to all dams) and this information, if known to the Council will be made readily available by the Council to all persons potentially affected by the safety risks of a dangerous, earthquake-prone or flood-prone dam.

PEL considers that the Council should recognise as noted earlier, that while some owners
will have significant information regarding the state of their assets, others are working
towards meeting the requirements of the regulations and therefore the information
required to meet the requirements of the above policy statement will require some time
to gather. We understand that the state of the dams in relation to the policy will be
defined as part of assessments resulting from the implementation of a certified dam
safety assurance program.

As stated earlier, PEL is aware of previous policies, namely the 2011 version. The 2011 policy included the following wording:

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The ORC will work with the owners of identified dangerous dams, earthquake-prone dams, and flood-prone dams to develop an action plan (with timeframes) with the common goal of reducing the risks to the safety of the dam and the community associated with the dam in a way that recognises the social and economic needs of the community. It is not realistic to specify a timeframe within this policy for achieving this goal because practicability will be dictated by the circumstances surrounding each case (e.g. economic welfare, ability to manage the interim risk, etc). When setting a timeframe for action, the ORC will consider the circumstances giving rise to the need for action, the nature of the risk (including the likelihood and immediacy of any threat), the degree of risk exposure, the potential impact classification (PIC) of the dam, whether satisfactory steps can be taken to manage the interim risk and the priorities established in this policy (community safety, economic welfare, heritage values).

• While recognising the paramount aim of protecting community safety, PEL considers that many classifiable dams provide for significant social and economic needs in the communities they serve. Many of the irrigation and hydroelectric dams in Central Otago are essential to the livelihood of the community and supporting the generation of renewable energy. To reflect this PEL considers that similar wording to the 2011 version as outlined above should be included in the current policy.

Thank you for the opportunity for making this submission and if you have any queries, please do not hesitate to contact me.

Yours sincerely,

Tony Jack

Development Engineer