

# Submission template

From Horizons Regional Council (Manawatu-Wanganui Region)

## Proposed regulations for dam safety

The Ministry of Business, Innovation and Employment (MBIE) would like your feedback on a proposed regulatory framework for dam safety. Please provide your feedback by 5pm, 6 August 2019.

We appreciate your time and effort taken to respond to this consultation.

We may contact submitters directly if we require clarification of any matters in submissions.

### Instructions

To make a submission you will need to:

1. Fill out your name, email address, phone number and organisation.
2. Fill out your responses to the discussion document questions. You can answer any or all of the questions in the discussion paper. Where possible, please provide us with evidence to support your views. Examples can include references to independent research or facts and figures.
3. If your submission has any confidential information:
  - i. Please state this in the e-mail accompanying your submission, and set out clearly which parts you consider should be withheld and the grounds under the Official Information Act 1982 that you believe apply. MBIE will take such objections into account and will consult with submitters when responding to requests under the Official Information Act.
  - ii. Indicate this on the front of your submission (e.g. the first page header may state "In Confidence"). Any confidential information should be clearly marked within the text of your submission (preferably as Microsoft Word comments).

Note that submissions are subject to the Official Information Act and may, therefore, be released in part or full. The Privacy Act 1993 also applies.

4. Submit your feedback:
  - i. As a Microsoft Word document by email to [damsafety@mbie.govt.nz](mailto:damsafety@mbie.govt.nz)
  - ii. By post to:

Dam Safety Consultation 2019  
Building System Performance  
Ministry of Business, Innovation and Employment  
15 Stout Street PO Box 1473  
Wellington 6140
  - iii. If you would prefer, you can fill in the [online survey](#)

5. Note: MBIE may contact you directly if we require clarification of any matters in your submission.

# Submission on the *Proposed Regulatory Framework for Dam Safety* discussion paper

## Your name, Email address, phone number and organisation

<b>Name</b>	Sarah Carswell
<b>Email address</b>	Sarah.Carswell@horizons.govt.nz
<b>Phone number</b>	06 9522 908
<b>Organisation</b>	Horizons Regional Council (Manawatu-Whanganui)

The Privacy Act 1993 applies to submissions. Please tick the box if you do not wish your name or other personal information to be included in any information about submissions that MBIE may publish.

MBIE may upload submissions or a summary of submissions received to MBIE's website at [www.mbie.govt.nz](http://www.mbie.govt.nz). If you do not want your submission or a summary of your submission to be placed on our website, please tick the box and type an explanation below.

I do not want my submission placed on MBIE's website because... [Insert text]

## Please check if your submission contains confidential information:

I would like my submission (or identified parts of my submission) to be kept confidential, and **have stated** my reasons and grounds under the Official Information Act that I believe apply, for consideration by MBIE.

## Responses to discussion paper questions

### Proposed definitions of key dam safety terms

1	Do you think the proposed definitions of key dam safety terms are appropriate?  <i>Yes Horizons supports the definition of Classifiable Dam as the evidence prepared by MBIE demonstrates that this achieves the right balance between risk and cost.</i>  <i>Horizons recommends there be a lower limit stipulated and/or guidance on how to interpret low risk dams under say, 1 metre. For example would coastal sand country ponds/lakes controlled by outlet weirs become 'classifiable dams' and would wastewater/effluent ponds with low walls become 'classifiable dams'.</i>
2	If you do not think any of the proposed definitions are appropriate, can you make suggestions on how any of them can be improved?  <i>Refer to Q1 answer above.</i>
3	Do you have any comments on how these proposed terms will work in practice?  <i>Refer to Q1 answer above. Resolving complex ownership situations could potentially be a challenge in implementing the proposed regulations. Thus, the recommendation above to include "dam owner" as a key definition.</i>

## Proposed 'Recognised Engineer' requirements

4	Do you agree with the proposed qualification requirements for a 'Recognised Engineer'?
	Yes.
5	Do you agree with the proposed competencies for a 'Recognised Engineer'?
	<i>Yes, with the proviso that the public need confidence that the scheme is working and has integrity. For that reason the work of 'Recognised Engineers' under the proposed scheme needs to be subject to an audit programme developed and undertaken by Engineering New Zealand and MBIE. Regional authorities should not be relied upon to undertake audits as the Act and proposed regulations do not allow them to do so. In our view, it is not a cost that should be transferred to ratepayers. Given the scheme is a form of self-regulation, then the responsibility for auditing best lies with Engineering New Zealand and MBIE.</i>
	<i>Horizons recommends a register is maintained by Engineering New Zealand that also states in which areas a 'Recognised Engineer' is proficient.</i>
6	If you do not agree with the proposed qualifications and competencies, please comment on what they should be.
	N/A
7	What evidence should be attached to the certificate provided by the engineer (for example a CPEng registration number) to show the engineer is a 'Recognised Engineer'?
	<i>Depending on how Engineering NZ run their competencies, which the discussion paper suggests it will be a Chartered Professional Engineer registration number. In our view that is best determined between Engineering NZ and MBIE.</i>

## Implementing the proposed dam safety regulations

8	The proposed timeframe for regulations to come into force is 12 months after they are gazetted. Do you think this timeframe is adequate?
	Yes.
9	If you do not think the timeframe is adequate, please tell us how much time you would prefer.
	N/A

## Core elements: step 1 of the dam safety regulations

10	Do you agree with the proposed classification threshold to determine if a dam is a classifiable dam?
	<i>Yes agree as long as there is a rational evidence based approach to determine the threshold. Please also refer to Q.1.</i>
11	If you do not agree, what other measure could be used?
	<i>See Q.10 above.</i>

12 Do you agree that it is unnecessary to have a separate category for referable dams (considering the proposed classification threshold and regional authorities' powers under section 157 of the Building Act)?

*Yes, for the reasons given in the discussion document. The document presents an accurate summary of the history associated with "referable dams". The "referable dams" concept was not practical as enforceable thresholds could not be defined. Horizons agrees with the view of MBIE that the classification threshold is sufficient to capture dams that present a potential risk.*

### Core elements: step 2 of the dam safety regulations

13 Do you agree with the proposed Potential Impact Classification system in step 2?

*Yes. It is a reliable and cost effective screening system that is consistent with the NZ Dam Safety Guidelines (2015). It ensures that only the dams that pose significant risk are subject to a high level of scrutiny.*

14 If you do not agree with the proposed Potential Impact Classification system, what alternative system, or changes, do you suggest for classifying the potential impact of a dam's failure?

*N/A*

### Core elements: steps 3 and 4 of the dam safety regulations

15 Do you agree with the proposed content of a Dam Safety Assurance Programme?

*Yes.*

*What is the regional authority approving or refusing? Horizons does not believe that we should be 'approving or refusing a DSAP' when a Recognised Engineer has 'approved' the DSAP. Regional authorities have limited grounds to refuse to approve a PIC or DSAP provided the certification is by a Recognised Engineer.*

*Additionally, if a regional authority approves a PIC or DSAP, who is liable if the dam fails?*

16 Do you think there are any elements in the Dam Safety Assurance Programme that are missing or are too onerous?

*It appears to be good practice and is consistent with the dam safety management principles provided in the NZ Dam Safety Guidelines (2015). In relation to the Emergency Action Plan (EAP) there needs to be a stronger connection to CDEM Groups. In particular, the owner should be required to provide the EAP directly to the Group, including revised EAPs. This is so that the Group is fully aware of the risks in its region and so that it has immediate access to EAPs during potential or actual dam safety incidents.*

17 Do you agree that there is no need for an accreditation regime at present?

*Yes. Horizons supports MBIE's approach to monitor and review the effectiveness of the Dam Safety regulations before considering accreditation options.*

**Dangerous, earthquake-prone and flood-prone dams**

18	Do you agree with the proposed definition of ‘moderate earthquake’?
	<i>It aligns with building regulations however consideration should be given to retention dams, see further details in Q.20.</i>
19	Do you agree with the proposed definition of ‘moderate flood’?
	Yes
20	If you do not agree with the proposed definitions of ‘moderate earthquake’ and ‘moderate flood’, what definitions do you consider more appropriate, and why?
	<i>Some flexibility should be enabled for flood detention dams in terms of the return period for a “moderate earthquake”. Many flood detention dams are dry most of the time, so the exposure time for an uncontrolled release of water due to an earthquake is much lower than for a dam with a permanent water depth. Even if a flood detention dam failed in a moderate earthquake, there may be minimal downstream consequences if the dam is dry at the time and if it is reasonable to expect the dam can be made safe before a subsequent flood occurs</i>
21	For owners of dams: What impacts (if any) would the proposed definitions of ‘moderate earthquake’ and ‘moderate flood’ have on the management of your dams?
	<i>That assessment would suggest that the definitions as proposed would have minimal to no impact on Horizons management of our dams. Horizons inspects and maintains a total of 54 flood control or detention dams mainly located in the Rangitikei and Whanganui Districts. These dams have been recently (2018) assessed by a Recognised Engineer applying the 2015 guidelines.</i>
22	For regional authorities: What (if any) potential issues do you see in applying the definitions of ‘moderate earthquake’ and ‘moderate flood’?
	<i>Horizons considers how ‘moderate flood and earthquake’ are calculated needs to be qualified, otherwise it will be applied differently by regional authorities. Whilst the annual exceedance probability is defined there is no guidance as to an appropriate methodology to calculate the magnitude of these events.</i>

23	<p>Do you agree with the proposed definition of ‘earthquake threshold event’?</p> <p><i>Yes but some consideration should be given to retention dams (see Q.25)</i></p>
24	<p>Do you agree with the proposed definition of ‘flood threshold event’?</p> <p><i>Yes. In regards to climate change effects, while we agree that the process will account for such effects as Comprehensive Dam Safety Reviews (CDSRs) are updated, there should also be specific reference around the need to account for climate change effects.</i></p>
25	<p>If you do not agree with the proposed definitions of ‘earthquake threshold event’ or ‘flood threshold event’, what definitions do you consider more appropriate and why?</p> <p><i>Some flexibility should be enabled for flood detention dams in terms of the return period for an “earthquake threshold event”. Refer also the response under Q.20 above.</i></p>
26	<p>For owners of dams:</p> <p>What impacts would the proposed definitions of ‘earthquake threshold event’ and ‘flood threshold event’ have on the management of your dams?</p> <p><i>The definitions proposed would have little impact on the management of Horizons dams. Horizons design standards are low, and we can’t see any implications as overtopping is 1 in 20 year standard. However, this will also depend on what dam safety policies Horizons develops for earthquake-prone dams and flood-prone dams.</i></p>
27	<p>For regional authorities:</p> <p>What (if any) potential issues do you see in applying the definitions of ‘earthquake threshold event’ and ‘flood threshold event’?</p> <p><i>If there isn’t enough information provided in the DSAP, the DSAP needs to include an assessment of these events. Regional authorities must receive sufficient information in the DSAPs so as to know whether regional authorities should exercise their powers.</i></p>

## Guidance and forms for compliance

28	<p>For regional authorities:</p> <p>What information would you need to ensure the regulations are implemented effectively?</p> <p><i>Refer to Q.27 answer above. Regional authorities need sufficient information to populate the register. They also require the owner’s assessment of whether the dam is flood prone or earthquake prone – it is not for regional authorities to make that assessment. Costs must be borne by the owner and not transferred to ratepayers.</i></p> <p><i>Horizons recommends MBIE develops a communication strategy so that information is consistent and there is clear guidance available for dam owners who are not familiar with engineering and regulatory requirements. Horizons recommend that this information is available on a national website e.g. MBIE. Including a general 0800 general enquiries phone number, national email address and social media platforms.</i></p> <p><i>Horizons also recommends that there is national training for regional authority staff so there is consistencies and efficiencies.</i></p>
----	--

29	<p>For owners of dams:</p> <p>What information would you need to ensure the regulations are implemented effectively?</p> <hr/> <p><i>As discussed in question 28 above - a website with all relevant information and communication. Horizons recommends that MBIE continue to engage with technical interest groups around the country to ensure good practice. A guidance document needs to be produced for Recognised Engineers to ensure consistency.</i></p> <p><i>Guidance on resolving complex ownership situations would also be valuable for potential dam owners to help implement the regulations within the proposed timeframes.</i></p>
30	<p>Do you have any comments on the proposed content of the forms for a Dam Classification Certificate, Dam Safety Assurance Programme or Annual Dam Compliance Certificate?</p> <hr/> <p><i>The Dam Classification Certificate and DSAP must clearly list &amp; describe the appurtenant structures.</i></p> <p><i>The Annual Dam Compliance Certificate should include details of the exercising of the Emergency Action Plans (EAPs) (Element 6 of Table 5) and verification that this exercising has occurred. This is vital as EAPs are only of use if they are tested and shown to be effective.</i></p> <p><i>Can the forms fields be electronic so there is the capability to push information automatically into a data base etc.</i></p>

## Regulatory impacts

31	<p>Can you describe any other costs and benefits not discussed in Table 6?</p> <hr/> <p><i>Some additional costs will be incurred upgrading Horizons IRIS data management system and to manage information provided by dam owners. Initially there will be additional costs managing communications.</i></p> <p><i>Horizons note that the analysis and guidelines for the regulatory authorities to administer and regulate this framework have yet to be undertaken. Therefore we are unable to confirm additional costs for this aspect until these are provided. Once the regulatory impact analysis and cost benefit analyst are undertaken we will be interested in providing feedback on these. We would also like to provide feedback on any guidelines that are planned.</i></p>
32	<p>For regional authorities:</p> <p>In your experience what will be the likely cost of administering the proposed dam safety regulations e.g. additional resource requirements?</p> <hr/> <p><i>There will be additional resource requirements which will be incurred managing information supplied by dam owners including 'approving or refusing DSAPs', maintaining a dam register and for undertaking enforcement action on those dam owners that do not comply with the regulations.</i></p> <p><i>Difficult to say until the guidelines are provided and a regulatory impact analysis (RIA) and cost benefit analysis are undertaken. What does 'approving or refusing DSAPs' mean and will this have to be a skilled staff member? If a skilled person is required then the cost will be significant.</i></p>
33	<p>For owners of dams:</p> <p>Are you following the NZSOLD dam safety guidelines?</p> <hr/> <p>Yes.</p>

34

If you are following the NZSOLD dam safety guidelines, please tell us about any additional costs you may incur from implementing a Dam Safety Assurance Programme?

---

*Horizons has through the most recently update of our key long term plan made provision for increased costs association with implementing DSAPs.*

---

35

If you are not following the NZSOLD dam safety guidelines, please tell us about any additional costs you may incur from implementing a Dam Safety Assurance Programme?

---

*N/A as Horizons is following the guidelines.*

**Additional feedback from Horizons:**

*Has MBIE considered a national dam register? A database template/platform that is centralised so all information captured is consistent. This would allow MBIE to have real time data on dams, without having to request information from regional authorities. This would create efficiencies and cost saving for regional authorities as they wouldn't have to share the information with MBIE and savings to set up information systems to capture information. Also this would be helpful for National Emergency Management Coordination as this information would be more accessible. However, it would depend if the centralised platform could capture monitoring and reviewing processes plus compliance and enforcement activities.*