

Policy on Dangerous Dams Earthquake-prone Dams and Flood-prone Dams (2024)

under Section 161 of the Building Act 2004

Adopted by Council on 27 August 2024

A policy to provide for the identification and management of dams of concern in the Wellington Region, and the measures Greater Wellington will take (along with the dam owner) to reduce or remove the danger.

Policy owner	Wellington Regional Council
Date policy comes into effect	Date adopted by Council – 27 August 2024
Related policies, legislation, and documents	Dangerous Dams, Earthquake-prone Dams, and Flood-prone Dams Policy 2011 Resource Management Charging Policy 2024-2027 Building Act 2004 Building (Dam Safety) Regulations 2022
Policy review date	By August 2029
Policy history	The first Dangerous Dams policy was adopted in 2006. It was updated in 2011 to become the Policy on Dangerous dams, Earthquake-prone Dams, and Flood-prone dams. The Building Act requires the policy to be reviewed every 5 years.

Date of the Council's adoption: 27 August 2024

Introduction

- This document sets out the policy on dangerous dams, earthquake-prone dams and flood-prone dams adopted by Wellington Regional Council ("the Council") in accordance with <u>sections 161</u> and <u>section 162</u> of the Building Act 2004.
- 2. The policy states the approach and priorities the Council will take in performing its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams in the Wellington region, and how the policy will apply to heritage dams.
- 3. The dangerous dam provisions of the Building Act will be used by the Council as a mechanism to remedy an unsatisfactory situation that has developed in relation to classifiable dams in the Wellington region, rather than a means of responding to "emergencies" that arise in the future.
- 4. The Council is committed to upholding Te Tiriti o Waitangi obligations when undertaking its functions in relation to dangerous dams, earthquake-prone dams and flood-prone dams.
- 5. This policy applies to dams defined in <u>section 7</u> of the Building Act 2004 ("the Act"). The dam safety provisions in <u>Subpart 7 of Part 2</u> of the Building Act, apply to:
 - A. **Classifiable dams** (defined in <u>regulation 5</u> of the Building (Dam Safety) Regulations 2022 ("the Regulations")¹
 - B. Referable dams as defined in the Regulations²
 - C. All dams but only for the purposes of <u>section 133B³</u> (height measurement of dams) and <u>sections157</u> and <u>section 158</u> (measures by a regional authority to avoid immediate danger).

Application of this policy

- 6. This policy applies to dams everywhere in the Wellington region, and irrespective of the age and intended life of the dam. Some parts of this policy may apply to all dams. Where required by the Act, this policy applies to all classifiable dams, which also includes "large dams" as defined in <u>Section 7</u> of the Act.
- 7. The terms 'dangerous dam', 'earthquake-prone dam' and 'flood-prone dam' have the same meaning as provided in <u>section 153</u>, <u>section 153A</u> and <u>section 153AA</u> of the Act.⁴ This policy must be read alongside the Building (Dam Safety) Regulations 2022 ("the Regulations") which defines terms used in the Act in relation to "dangerous dams", "earthquake- prone dams" and "flood-prone dams".⁵

¹ At the time of adopting this policy (August 2024), the Regulations define a classifiable dam as being "**4** or more metres high and storing **20,000** or more cubic metres volume of water or other fluid." Regulations are subject to change, which will impact the application of this policy. It is worth checking the regulations before following this policy to determine the definition at that point in time.

 $^{^2}$ $\,$ The Regulations currently do not define a referable dam (as of May 2024).

³ When measuring the height of the dam under this section, the crest of the dam includes any freeboard – refer to section 133B of the Act for the definition.

⁴ This includes buildings in areas designated under subpart 6B as set out in section 153AA of the Act.

⁵ Section 19 of the Regulations defines moderate earthquake, moderate flood, earthquake threshold event and flood threshold event.

- 8. The Regulations and the Act can be accessed at <u>www.legislation.govt.nz</u>⁶.
- 9. The Regulations come into force on 13 May 2024. This policy will commence as soon as it is adopted by Council after following the special consultative procedure in <u>section 83</u> of the Local Government Act 2002.
- 10. This policy will be reviewed every five years or earlier as required. The policy remains in effect even though it is due for review or being reviewed.

Principles

- 11. The Council will apply the following principles to the exercise of its dangerous dams, earthquake-prone dams and flood-prone dams functions under the Building Act:
 - A. Dam owners have the primary responsibility for identifying, monitoring and reporting on dangerous, earthquake-prone and flood-prone dams and for reducing or removing the risk of harm to people, property and the environment in a timely and effective manner.
 - B. A recognised engineer who is engaged (by the owner) to provide a certificate for the purposes of <u>sections 135(1)(b)</u>, <u>142(1)(b)</u>, or <u>150(2)(f)</u> will notify Council and the dam owner if they believe that the dam is dangerous.
 - C. The state of all dangerous dams, earthquake-prone dams 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 dam, earthquake-prone dam or flood-prone dam.

Council's approach to performing these functions

Information on dam status

- 12. The Council will keep a register of all dams as required by <u>section 151</u> of the Act, recording the dangerous, earthquake-prone and flood-prone status of each classifiable dam. The Council will develop a monitoring procedure to maintain the register.
- 13. The Council will notify potentially affected communities downstream of a dangerous dam, earthquake-prone dam or flood-prone dam. The Council will do this by publishing information about any dangerous, earthquake-prone or flood-prone dams in its region, and directly contacting potentially affected landowners. The Council will notify operators of critical infrastructure or lifeline utilities downstream, the Wellington Region Emergency Management Office (WREMO), the relevant territorial authority and mana whenua entities.

⁶ The Regulations: <u>https://www.legislation.govt.nz/regulation/public/2022/0133/latest/whole.html</u> and The Act: <u>https://www.legislation.govt.nz/act/public/2004/0072/latest/whole.html</u>

Working with dam owners

- 14. The Regulations require owners of all classifiable dams to know whether their dam is dangerous, earthquake-prone or flood-prone. They also require these owners to take the necessary steps, in a timely manner, to comply with the Act and the Regulations. The Act requires dam owners to immediately notify the Council if they have reasonable grounds for believing their dam is dangerous. This applies to dams that are either a high potential impact dam or a medium potential impact dam and are likely to fail in the ordinary course of events, or a "moderate earthquake" or "moderate flood" (as defined in the Regulations).
- 15. The Act also requires a recognised engineer (engaged by the owner) to provide documentation for the purposes of <u>section 135(1)(b)</u>, <u>section 142(1)(b)</u>, or <u>section 150(2)(f)</u>, and to notify Council and the owner of the dam if they believe that the dam is dangerous.
- 16. The Council will work with the owners of identified dangerous dams, and may work with the owners of identified earthquake-prone dams and flood-prone dams, to assist them to develop an action plan (with timeframes) with the goals of increasing the safety of the dam and eliminating or reducing the risks of the dam to people, property and the environment. It is not realistic to specify a timeframe in this policy for achieving this goal because timeframes will be dictated by the circumstances of each case. When setting a timeframe for action, the Council will consider the state of the dam, and the likelihood and consequences of dam failure.

Directing and taking action

- 17. The Council may intervene:
 - A. For dangerous dams, earthquake-prone dams and flood-prone dams
 - i. if the owner of any dam is not acting in accordance with an agreed action plan, or
 - ii. where there is no agreed action plan, or
 - iii. where it considers that the agreed action plan requires review or amendment, or
 - iv. where ownership is not known or is disputed; or
 - B. for all dams, where there is or is likely to be a risk of immediate danger.
- 18. Before exercising any of its powers under <u>sections 154 to 159</u> of the Building Act, unless the circumstances dictate otherwise (such as where there is immediate danger to the safety of persons, property, or the environment), the owner of a dangerous dam, earthquake-prone dam or flood-prone dam is expected to provide Council with an action plan which reduces or removes the danger(s). It is the dam owner's responsibility to prove that the actions taken are commensurate with the danger(s) to people, property or the environment. The action plan is to be discussed with Council, and Council is to be satisfied that the dam owner is taking responsibility for the dam. Council may have the action plan independently peer reviewed by a suitably qualified person, and any recommendations deemed appropriate by Council are to be adopted into the action plan.

- 19. Acceptable actions by the dam owner may include, but are not limited to, one or more of the following:
 - A. Operational changes such as reducing the volume of impounded fluid or completely emptying the reservoir.
 - B. Reconfiguring an existing spillway or creating a new or supplementary spillway to limit the maximum impounded volume and/or to safely route flood flows.
 - C. Increased surveillance and monitoring.
 - D. Development of emergency preparedness and response plans.
 - E. Review of the dam safety assurance programme.
 - F. Engage a dam specialist to investigate and make recommendations, with any report provided to the Council.
 - G. Implementing measures to enable controlled, rapid emptying of the impounded fluid.
 - H. Undertaking measures downstream to mitigate the impact of dam failure.
 - I. Physical works including reconstruction or partial demolition of the dam.
 - J. Decommissioning and/or removal of the dam.
- 20. The whole or part of an action plan submitted by the dam owner may be formalised in a Notice to Fix issued under <u>section 164</u> of the Act. If agreement cannot be reached between the Council and the dam owner, the Council may exercise any of its statutory powers in sections <u>154 to section 159</u> and <u>section 164</u> of the Act.
- 21. For the purposes of <u>section 164</u> of the Act, the term 'dam warrant of fitness' in section 164(1)(b) is taken to mean 'annual dam compliance certificate' as set out in the <u>section 26</u> of the Regulations.
- 22. The Council may at any time require the dam owner to review the dam safety assurance programme if the dam is an earthquake-prone dam or flood-prone dam.
- 23. In a situation where a dam is a dangerous dam, or immediate danger is present, the Council may (amongst other actions):
 - A. Erect a hoarding or fence to prevent people from approaching the dam nearer than is safe.
 - B. Attach a notice on or near the dam (or affected downstream areas) that warns people not to approach.
 - C. Give written notice to the owner requiring work to be carried out on the dam, and within the time stated in the notice to remove or reduce the danger.
- 24. In a situation where the Chief Executive of the Council considers that, because of the state of the dam, immediate danger to the safety of persons, property, or the environment is likely, then the Chief Executive of the Council may:
 - A. Cause any action to be taken to that is necessary to remove that danger, and
 - B. Recover the costs of taking any action from the dam owner.

Council's priorities in performing these functions

- 26. The Council's approach to dangerous dams is tailored toward achieving a reduction in the pre-existing risk whilst still being able to deal with emerging risks.
- 27. In performing its functions under the Building Act and Regulations, Council will prioritise removing or reducing danger informed by risk understanding (likelihood and consequence), to first ensure public safety, and then have regard to damage or loss of property, environment and economic welfare, followed by any heritage matters that might be present. Generally, Council will prioritise the following actions with consideration given commensurate to the nature of the risk(s):
 - A. responding to a situation where immediate danger is present
 - B. reducing the risks posed by dangerous dams
 - C. reducing the risks posed by earthquake-prone and flood-prone dams
 - D. working with dam owners, or intervening where necessary, where a dam does not have a compliant dam safety assurance programme.

Application to heritage dams

- 28. Heritage dams as defined in <u>section 7</u> of the Act means a dam that is included on:
 - A. the New Zealand Heritage List/Rārangi Kōrero maintained under <u>section 65</u> of the Heritage New Zealand Pouhere Taonga Act 2014; or
 - B. the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ona Korero Tuturu list maintained under <u>section 81</u> of the Heritage New Zealand Pouhere Taonga Act 2014.
- 29. <u>Section 4(2)(l)</u> of the Building Act recognises "the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value".
- 30. The Council recognises the need to retain heritage values of the dam itself, but also the need to reduce or remove any risk posed by a heritage dam which has been classified as dangerous, flood-prone or earthquake-prone. When considering heritage dams under this policy, account will be taken of the need to facilitate the preservation of parts of the dams with significant heritage value.
- 31. When dealing with heritage dangerous dams, the Council will seek advice from the Heritage New Zealand/Pouhere Taonga before any actions are undertaken by the Council under <u>sections 153 to section 160</u> of the Act.
- 32. The Council may also engage suitably qualified professionals with engineering expertise and heritage expertise to advise and recommend actions. When considering any recommendations, the Council will have regard to the priorities set out in clause 27 of this policy. Copies of all served notices for heritage dangerous dams, earthquake-prone dams and flood-prone dams will be provided to Heritage New Zealand/Pouhere Taonga.
- 33. The Council will record the heritage listing of all dangerous, earthquake-prone and flood-prone dams it is made aware of in its register of dams and a record of that will also be made available on the relevant property file for inclusion on any relevant Land Information Memorandum.