

Hawke's Bay Regional Council **S161 Building Act 2004**

Proposed policy on dangerous dams, earthquake-prone dams and flood-prone dams 2024



1. Introduction

This document sets out the policy on dangerous dams, earthquake-prone dams and flood-prone dams adopted by the Hawke's Bay Regional Council ("the Council") in accordance with <u>sections 161</u> and <u>162</u> of the Building Act 2004.

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 Hawke's Bay region, and how the policy will apply to heritage dams¹.

The Council will comply with any relevant requirements under Treaty settlement legislation when undertaking its functions in relation to dangerous, earthquake-prone dams and flood-prone dams.

2. Where the policy applies

This policy applies to:

Structures that meet the definition of a dam as defined in <u>section 7</u> of the Building Act 2004 ("the Act"); and dams that meet the definition of a classifiable dam defined in <u>regulation 5</u> of the Building (Dam Safety) Regulations 2022 ("the Regulations"²)

The dam safety provisions in subpart 7 of Part 2 of the Act, including this policy, apply to:

- 1. Classifiable dams, defined in regulation 5 as a dam that:
 - has a height of 4 or more metres and stores 20,000 or more cubic metres volume of water or other fluid.
- 2. Referable dams as defined in the Regulations³

Only $\underline{\text{section 133B}}^4$ (height measurement of dams) and $\underline{\text{sections 157-159}}$ (measures by a regional authority to avoid immediate danger) apply to all other dams.

3. Application of this policy

This policy applies to dams everywhere in the Hawke's Bay region, and irrespective of the age and intended life of the dam. The terms "dangerous dam", "earthquake-prone dam" and "flood-prone dam" have the same meaning as provided in <u>sections 153</u> and <u>153A</u> of the Act.

This policy must be read alongside the Regulations which define terms used in the Act in relation to "dangerous dams", "earthquake-prone dams" and "flood-prone dams"⁵.

¹ Refer to the section "Application to heritage dams" for a definition of heritage dams.

² The Regulations were made on 9 May 2022 but do not come into force until 13 May 2024. Terms defined in the Regulations are relevant to the meaning and application of this policy.

³ The current Regulations do not define a referable dam.

⁴ When measuring the height of the dam under this section, the crest of the dam includes any freeboard – refer to section 133B of the Building Act 2004 for the definition.

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



The Regulations and the Act can be accessed at legislation.govt.nz⁶.

This policy does not cover consents required under the Resource Management Act 1991 or the Building Act 2004. Under <u>section 153AA</u>, if a dangerous dam is located in an area that has been affected by an emergency (<u>subpart 6B</u> of the Act), this policy and other provisions of the Act continue to apply but only in relation to:

- a. action or notices issued under section 154;
- b. work carried out under section 156; or
- c. if a warrant is issued under section 157.

4. Commencement and review

This policy commences 13 May 2024

The Council is required to follow special consultative procedure set out in <u>section 83</u> of the Local Government Act 2002 when developing and adopting this policy and will have regard to any relevant principles in the Act. This policy will be reviewed every five years or earlier as required. The policy remains in effect even if it is due for review or being reviewed.

5. Principles

The Council will apply the following principles to the exercise of its dangerous dams, earthquake-prone dams and flood-prone dams functions under the Act.

- 1. Dam owners have the primary responsibility for identifying, monitoring, reviewing 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.
- 2. A recognised engineer⁷ engaged (by the dam owner) to provide a certificate for the purposes of sections <u>135(1)(b)</u>, <u>142(1)(b)</u>, or <u>150(2)(f)</u> must notify the Council and the owner of the dam, in writing and within five working days, if they believe that the dam is dangerous.
- 3. 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.
- 4. The Council will endeavour to communicate to dam owners about the responsibilities of dam owners under the policy.

⁶ Building (Dam Safety) Regulations 2022 and Building Act 2004.

⁷ A recognised engineer is defined in section 149 of the Act.



6. Council's approach to performing its functions

Information on dam status

The Council will keep a register of 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.

Should the Council receive information about a dangerous, earthquake-prone or flood-prone dam in the region, the Council will notify the chief executive of the Ministry of Business, Innovation and Employment, the relevant territorial authority, the Hawke's Bay Civil Defence and Emergency Management Group, and relevant mana whenua. Equally, the Council will notify operators of critical infrastructure or lifeline utilities downstream of a dangerous, earthquake-prone or flood-prone dam. Heritage New Zealand Pouhere Taonga will be notified by Council if it becomes aware of a dangerous dam that is also a heritage dam.

Working with dam owners

The Regulations require owners of all classifiable dams to know whether their dam is dangerous, earthquake-prone or flood-prone and 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).

The Act also requires a recognised engineer who provides a certificate for the purposes of sections $\underline{135(1)(b)}$, $\underline{142(1)(b)}$, or $\underline{150(2)(f)}$, to notify the Council and the owner of the dam if they believe that the dam is dangerous. The notice must be provided in writing and be given within five working days after the engineer forms their belief.

The Council will work with the owners of identified dangerous dams and may work with owners of identified earthquake-prone and flood-prone dams, 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, infrastructure 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

The Council may exercise the powers outlined below:

- For dangerous dams
- if the owner of any dam is not acting in accordance with an agreed action plan; or
- where there is no agreed action plan; or
- where it considers that the agreed action plan requires review or amendment; or
- where ownership is not known or is disputed; or
- For all dams, where there is or is likely to be a risk of immediate danger.

Before exercising any of its powers under sections <u>154</u> to <u>159</u> of the Act, the Council will, unless the circumstances dictate otherwise (such as where there is immediate danger to the safety of persons, property, or the environment), seek to discuss options for action with the owner of the dam, with a view to obtaining from the owner a mutually acceptable proposal for reducing or removing the danger. Acceptable actions by the owner may include, but are not limited to, one or more of the following:

- operational changes such as reducing the volume of impounded fluid or completely emptying the reservoir;
- reconfiguring an existing spillway or creating a new or supplementary spillway so as to limit the maximum impounded volume and/or to safely route flood flows;
- increasing surveillance and monitoring;
- development of emergency preparedness and response plans;
- review of the dam safety assurance programme;
- requiring the owner to engage a dam specialist to investigate and make recommendations with any report provided to the Council;
- implementing measures to enable controlled, rapid emptying of the impounded fluid;
- measures downstream of the dam to mitigate the impact of dam failure;
- physical works including reconstruction or partial demolition of the dam;
- decommissioning and/or removal of the dam.

The whole or part of any proposal by the dam owner may be incorporated as a requirement in a Notice to Fix issued by the Council under <u>section 164</u> of the Act. If no action is taken by the owner to address the danger, the Council may exercise any of its statutory powers in <u>sections 154-159</u> and 164 of the Act.

The Council will notify potentially affected communities downstream of dangerous, earthquake-prone or flood-prone dams. The Council will do this by publishing information about any dangerous, earthquake-prone or flood-prone dams in the region. The Council will also work with the Hawke's Bay Civil Defence Emergency Management Group and where relevant, lifeline utilities⁸.

The Council may at any time require the dam owner to review a dam safety assurance programme if the dam is an earthquake-prone or flood-prone dam.

 $^{^{8}}$ Lifeline utilities is defined in section 4 of the Civil Defence Emergency Management Act 2002.



In a situation where a dam is dangerous, the Council may (amongst other actions):

- erect a hoarding or fence to prevent people from approaching the dam nearer than is safe.
- attach a notice on or near the dam (or affected downstream areas) that warns people not to approach.
- 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.

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:

- cause any action to be taken that is necessary to remove that danger.
- recover the costs of taking any action from the dam owner.

7. Council's priorities in performing these functions

The Council's approach to dangerous, earthquake-prone or flood-prone dams is tailored towards achieving a reduction in the pre-existing risk whilst still being able to deal with risks that emerge in the future.

The priorities will be as follows:

- 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.
- 4. to have regard to cultural and heritage values.

8. Application to heritage dams

For the purposes of this policy, a heritage dam means a dam that is included on:

- 1. the New Zealand Heritage List/Rārangi Kōrero maintained under <u>section 65</u> of the Heritage New Zealand Pouhere Taonga Act 2014; or
- 2. the National Historic Landmarks/Ngā Manawhenua o Aotearoa me ōna Kōrero Tūturu list maintained under <u>section 81</u> of the Heritage New Zealand Pouhere Taonga Act 2014.

<u>Section 4(2)(I)</u> of the Building Act recognises the "need to facilitate the preservation of buildings of significant cultural, historical, or heritage value".



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 significant heritage values.

When dealing with heritage dangerous dams, the Council will seek advice from Heritage New Zealand Pouhere Taonga and the relevant territorial authority (if appropriate) before any actions are undertaken by the regional authority under sections 153 - 160 of the Act.

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 the previous section 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.

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 supply this information to the relevant territorial authority for inclusion on any relevant land information memorandum.