

## **Tasman District Council**

# S161 Building Act 2004

# Policy on dangerous dams, earthquake-prone dams and flood prone dams

#### Introduction

This document sets out the policy on dangerous dams, earthquake-prone dams and flood-prone dams adopted by Tasman District Council ("the Council") in accordance with sections 161 and 162 of the Building Act 2004 ("the Act").

This 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 Tasman, and how the policy will apply to heritage dams.<sup>1</sup>

This policy applies to dams defined in section 7 of the Act.

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 of the Building (Dam Safety) Regulations 2022<sup>2</sup> ("**the Regulations**") to be either:
  - a. 4m or more in height and holding 20,000m<sup>3</sup> in volume; or
  - b. 1m or more in height and retaining 40,000m<sup>3</sup> in volume.
- 2. Referable dams as defined in the Regulations.<sup>3</sup>

Only **section 133B** <sup>4</sup> (height measurement of dams) and sections 157-158 (measures by a regional authority to avoid immediate danger) apply to all other dams.

### **Application of this policy**

This policy applies to dams everywhere in the Tasman District, 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 sections 153 and 153A of the Act.<sup>5</sup>

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".

The Regulations and the Act can be accessed at legislation.govt.nz 7

This policy does not cover consents under the Resource Management Act 1991 and the Building Act 2004.

 $<sup>^{\</sup>rm 1}$  Refer to the section Application to heritage dams for a definition of heritage dams.

 $<sup>^{2}</sup>$  The Regulations were made on 9 May 2022 and come into force on 13 May 2024.

<sup>&</sup>lt;sup>3</sup> The Regulations do not define a referable dam.

<sup>&</sup>lt;sup>4</sup> When measuring the height of the dam under this section, the crest of the dam includes any freeboard.

<sup>&</sup>lt;sup>5</sup> This includes buildings in areas designated under subpart 6B as set out in section 153AA of the Building Act 2004.

<sup>&</sup>lt;sup>6</sup> Section 19 of the Regulations defines moderate earthquake, moderate flood, earthquake threshold event and flood threshold event.

<sup>&</sup>lt;sup>7</sup>The Building Act 2004 and the Building (Dam Safety) Regulations 2022



Under section 153AA, if a dangerous dam is located in an area that has been affected by an emergency (subpart 6B of the Act), this policy and other provisions of the Act continue to apply but only in relation to:

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

#### Commencement and review

This policy commences one week after the council resolution is made to adopt the policy.

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.

## **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. The Council will endeavour to communicate to dam owners about the responsibilities of dam owners under the policy. This could include a notice in the rates document, the development of information packs and guidelines, among other suitable tools.
- 2. The Council will make information about the safety risks of a dangerous dam, earthquake-prone dam or flood-prone dam publicly available (if this information is known to the Council).

The Council also notes that:

- 3. 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.
- 4. A recognised engineer<sup>8</sup> engaged (by the dam owner) to provide a certificate for the purposes of sections 135(1)(b), 142(1)(b), or 150(2)(f) 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.

# Council's approach to performing its functions

#### Information on dam status

The Council will keep a register of all dams as required by section 151 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 and flood-prone dam in its district boundary, the Council will notify the Nelson Tasman Civil Defence and Emergency Management ("NT-CDEM") Group.

<sup>&</sup>lt;sup>8</sup> A recognised engineer is defined in <u>section 149</u> of the Act.



## Working with dam owners9

The Regulations require owners of all classifiable dams to know whether their dam is dangerous, earthquakeprone or flood-prone and that they will 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 (engaged by the owner) who provides a certificate for the purposes of sections 135(1)(b), 142(1)(b), or 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, earthquake-prone dams 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 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.

#### **Direction 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 likely to be a risk of immediate danger.

Before exercising any of its powers under sections **154** to **159** 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 formal 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;
- Increased surveillance and monitoring;
- Development of emergency preparedness and response plans;
- Review of the dam safety assurance programme;
- Require 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;

<sup>&</sup>lt;sup>9</sup> For the purposes of the Act and the Regulations, a dam owner is the person who legally owns the physical dam itself.



Decommissioning and/or removal of the dam.

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

The Council will notify all potentially affected parties downstream of a 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 its region. The Council will also work with the NT-CDEM Group.

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.

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

## Council's priorities in performing these functions

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 risks that emerge in the future.

The priorities will be as follows:

- 1. to ensure public safety at all times, following a risk-based approach
- 2. to protect the health and wellbeing of the environment<sup>10</sup>
- 3. to have regard to cultural and heritage values.

# **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 section 65 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 section 81 of the Heritage New Zealand Pouhere Taonga Act 2014.

<sup>&</sup>lt;sup>10</sup> This priority will reflect issues addressed more specifically through the provisions of the Tasman Regional Management Plan, including the guiding concept of Te Mana o te Wai.



**Section 4(2)(I)** 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 parts of the dams with significant heritage value.

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 sections 153 to 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 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 include this information on any relevant Land Information Memorandum.

