

Dangerous, Earthquake Prone, and Flood Prone Dams Policy 2018



Photo : Haldon Dam, source MDC

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Policy 2017

1. Introduction and Policy Context

This document sets out the Marlborough District Council dangerous dams, earthquake prone dams, and flood prone dams policy prepared for the purposes of observing the requirements of Section 161 of the Building Act 2004.

Council is a unitary authority and has regional as well as district functions. The Building Act 2004 ('the Act') requires Council, in discharging its Regional Council functions, to adopt a policy in respect of dangerous, earthquake prone, and flood prone Dams.

The policy (*Draft Dangerous Dams Policy 2006*) was adopted by Council to meet the requirements of the Building Act. That Policy was updated in 2010 and adopted under minute C.09/10.597.

This policy updates the 2010 Policy and outlines the approach Marlborough District Council ('the Council') will take to require an owner of a dangerous, earthquake prone, or flood prone dam to reduce or remove the danger posed by the dam. It is to be particularly noted that there is no statutory regulations in respect of dangerous, earthquake prone, or flood prone dams; having been revoked 31 July 2015.

1.1. Requirement for a Policy

It is a mandatory requirement of the Act at Section 161 that Council implements specific policy and **Section 162** sets out the procedures for the formation and introduction of the policy.

The policy must state:

- a) the approach that the regional authority will take in performing its functions under this Part; and
- b) the regional authority's priorities in performing those functions; and
- c) how the policy will apply to heritage dams.

Meaning of Dangerous Dam, Earthquake Prone Dam, and Flood Prone Dam

A dangerous dam

A dam is **dangerous** for the purposes of this Act if the dam—

- a) is a high potential impact dam or a medium potential impact dam; and
- b) is likely to fail—
 - i) in the ordinary course of events; or
 - ii) in a moderate earthquake (as defined in the regulations); or
 - iii) in a moderate flood (as defined in the regulations).

An Earthquake Prone Dam or a Flood Prone Dam

- (1) A dam is an earthquake prone dam ***for the purposes of this Act if the dam—***
 - (a) is a high potential impact dam or a medium potential impact dam; and
 - (b) is likely to fail in an earthquake threshold event (as defined in the regulations).
- (2) A dam is a flood prone dam for the purposes of this Act if the dam—
 - (a) is a high potential impact dam or a medium potential impact dam; and
 - (b) is likely to fail in a flood threshold event (as defined in the regulations).

1.2. Policy Development Process

In developing and adopting this policy, the Council will follow the special consultative procedure set out in Section 83 of the Local Government Act 2002, and will have regard to the principles in section 4 of the Building Act 2004 and any relevant changes arising from the Building Amendment Act 2008. This policy will have to be reviewed every five years and may be reviewed if changes to the Act or Regulations have relevance for the Policy. It is to be noted that this document, as adopted, overtakes the 2006 Policy.

2. Dangerous Dams, Earthquake Prone Dams, and Flood Prone Dams Policy

2.1. Policy principles

Council notes that provisions of the Building Act, in regard to dangerous, earthquake prone and flood prone dams reflect the Government's broader concern with the health and safety of the public.

2.2. Background and overall policy approach

In the Marlborough region, for the most part, dams are minor structures posing little risk due to the location, small volumes and style of construction (that is with a large proportion embedded below the surrounding ground level). A small number of dams fall to the medium and high impact category as described in Section 134B of the Building Act 2004. No dams are on the principal waterways (Te Hoiere/Pelorus, Wairau, Awatere rivers) and five dams occur on secondary waterways, one operates through a side channel off take to harvest overflow. One dam functions as a flood control structure, the remaining dams are water supply storage dams and allow surplus water to overflow.

Marlborough lies within the zone of highest earthquake risk in New Zealand. This is because the district overlies the southern portion of the subducting Pacific Tectonic Plate and transected by a series of fault lines associated with the relative movements of the Pacific and Australian tectonic plates that New Zealand sits across. Ground shaking in the region has increased following a lengthy period of infrequent activity evidencing significant damage to some earth dam structures.

The on-land active faults that have planning and development significance for Marlborough have been recorded in a Council database.

The policy approach provides a basis for Council to act in the interests of public safety in the event that a dam has been found to have a significant risk for life safety or property loss.

2.3. Identification process

Historically, there have been very few dams in the district having a potential for serious consequence upon failure; these have been either in the control of Council or a power generating company. Quite a number of private dams have been constructed recently in response to the demand for irrigation capability for vineyards and these have been through resource consent processes requiring appropriately qualified engineering inputs.

Owners are statutorily bound to address the continuing state of structures under their control where Resource Consent conditions apply otherwise there is a common duty to save other parties from harm. Council will have to react when it becomes known, for whatever reason, that a structure poses a threat to the safety of persons or infrastructure.

2.4. Response to complaints

In the event it is required to address a potentially dangerous situation, Council officers, assisted by appropriately qualified technical specialists will carry out investigation to establish the state of the subject dam.

2.5. Assessment criteria

The definition of dangerous, earthquake prone or flood prone dams is given in Sections 153 – 153B of the Building Act 2004.

In the event a situation arises, Council will utilise the best technical expertise available and require the best technical practices to be followed in every instance.

A key guide to best technical practice, to be used when making assessments of dams, is the *NZSOLD New Zealand Dam Safety Guidelines*.

2.6. Guiding principles for dealing with dam owners

Before exercising its powers under Sections 154 to 160, the Council will seek to discuss options for action with owners, the objective being to obtain a mutually acceptable approach for dealing with the danger. If time permits Council will consider a formal proposal from owners for strengthening or replacement or removal of the subject dam. Council will at all times place considerable weight on the potential impacts for the public in its dealings with owners.

In the event that discussions do not yield a mutually acceptable approach and proposal, Council will serve a formal notice as outlined above under the section “Taking Action on Dangerous Dams”.

Upon notice being served, Council will adopt an approach that encourages a dam owner to pursue voluntary compliance with any notice that has been served. It will pursue legal outcomes if so required as it has statutory obligations to take all practical measures to ensure public safety and well-being.

2.7. Taking action on dangerous dams

Council, on being satisfied that a dam is dangerous, will:

Provide information

Provide to the owner all information or reports obtained as a result of inspections or investigations.

Advise and liaise with owner

Advise and liaise with owners of dams identified as dangerous to discuss action to be taken, unless upon technical advice danger is clear, present and necessitating immediate response. Notwithstanding, every endeavour will be made to liaise with the owner.

Erect a hoarding or a fence and warning notice

If necessary and practical, Council will put up a hoarding or a fence to prevent people approaching the dam; and / or attach a notice to the dam that warns people not to approach the vicinity of the structure.

Issue Notice requiring work to be carried out

Where the Council is satisfied that a dam is dangerous and the owner has not taken steps to secure or make good then a Notice may be issued pursuant to Section 155 of the Act.

Notices served on dam owners will:

- specify the work that needs to be carried out;
- the time in which it is to be completed; and
- whether the owner of the dam is required to obtain building consent in order to carry out the specified work.

When setting a timeframe for action, Council will consider the nature of the issue and the classification of the dam under the priorities established in this policy. The timeframe will, generally, not be less than 10 days after the notice is given under section 155. Clearly, there could be instances requiring a much more urgent response and common sense dictates that in those instances much shortened periods may be required. That situation is seen to be one arising in quite exceptional circumstances.

Council will ensure any notices will be fixed to the dam or at an appropriate location near the dam, and that copies will be sent to the owner of the dam, any occupier and any party with an interest (being a financial or legal interest as recorded on the certificate/s of title) in the land on which the dam sits.

Copies of notices will also be sent to interested parties such as Civil Defence, Department of Conservation, and the New Zealand Historic Places Trust when appropriate.

At the end of the time in which the remedial work is to be completed, Council will inspect the property.

Liaise with Civil Defence

The Council will liaise with Civil Defence directly if necessary.

Council to carry out work

Council may carry out the work required in a notice issued under Section 154 itself or via contractors if any work required under the notice is not completed within the time frame given in the notice. Any such works will be at the cost of the owner of the dam.

Council may grant extension to time frames specified in Notices upon receipt of a request from the dam owner where this request is supported by an opinion by a Recognised Engineer acceptable to Council.

Situations when Notices will not be given

Where it is considered measures are necessary to avoid immediate danger Section 157 gives power to Council to take swift action to remove immediate danger without first serving notice on owners.

Without limiting this section, Council will undertake reasonable effort to contact the dam owner prior to taking action.

Dispute by owner of classification

The Policy does not provide for an appeals process in the event of the classification of a dam as dangerous, earthquake-prone or flood-prone.

Should an owner dispute the classification, however, an application for a "Determination" pursuant to Section 176 of the Act may be made to the Chief Executive of the Department of Building and Housing as set out in the Building Act 2004. The determination of the Chief Executive is binding on the Council.

Danger Removed

Where Council has advised people of a dam having a potential to be dangerous and it is satisfied, subsequently, that the danger has been removed then those persons are to be advised accordingly.

2.8. Recording a dam's status

Council will record all documentation of its dealings with a dangerous, earthquake-prone or flood-prone dam on the relevant property file, noting the status of requirements for improvement or the results of improvement, as applicable. In addition, the following information will be placed on the LIM or PIM for each dangerous dam:

- the address and legal description of the dam and the land which supports it;
- a statement that the dam is considered to be dangerous;
- the date by which strengthening or demolition is required (if known); and
- a statement that further details are available from the Council property file.

This information will be kept on the property file until the matter is resolved.

2.9. Availability of information

Information concerning the status of a dam will be contained in the property file and Council's electronic mapping system. If a notice under section 154 is issued in respect of any dangerous dam then a record of that will also be available on the relevant property file and be included in all LIMs that might be applied for.

In granting access to information concerning these dams, the Council will conform to the requirements of the relevant legislation.

2.10. Economic impact of this policy

No economic impact analysis has been carried out to assess the effect of this policy nor is any proposed. The opinion is that, in the context, if a dam is deemed dangerous the priority in most if not all instances will be public safety. It is considered that it is improbable that an economic argument could be sustained if life safety is in question. Further, it is considered that only in the light of particular cases can decisions be made to balance off economic issues.

2.11. Approach for dams and associated buildings having heritage status

A heritage dam (including associated structures) includes all dams listed as a heritage resource in the Marlborough District Plan and/or those registered by the New Zealand Historic Places Trust.

Section 4(2)(l) of the Building Act recognises the "need to facilitate the preservation of buildings of significant cultural, historical, or heritage value". The Marlborough District Plan also requires resource consent to alter or demolish a heritage building. Dams, presently, are not specifically identified but it should be noted that a dam is a building for the purposes of the Act as specified in the "Interpretation".

The resource management plans also require resource consent to alter or demolish a heritage building. (Note that the resource management plans are currently being reviewed and the appropriateness of this requirement will be considered as part of the review process). The Building Act does not override the resource management plans on the need for a planning application to be made by a building owner, even if the building is to be demolished for public safety reasons. Any actions will, however, always be mindful of public safety.

2.12. Abandoned dams

An abandoned dam will at all times be the responsibility of the landowner.

2.13. Dams on public land

In the first instance dams on public land will be considered the responsibility of the Crown in terms of Section 6 of the Act.

2.14. Priorities

In the event of there being a dangerous dam, earthquake-prone dam or flood-prone dam Council will prioritise the requirement to remove or reduce the danger by, first, ensuring public safety at all times then have regard for economic welfare followed by any heritage matters that might be present.

2.15. Availability of information

Any information acquired in the course of investigation or inspection will be publicly available upon request and will be provided in Land Information Memoranda or Project Information Memoranda.