



New Zealand
Historic Places Trust *Pouhere Taonga*

**SUSTAINABLE MANAGEMENT
OF
HISTORIC HERITAGE**

Guide No. 9

**HERITAGE PROVISIONS:
DANGEROUS, EARTHQUAKE PRONE,
INSANITARY BUILDINGS AND
DANGEROUS DAMS POLICIES**

BUILDING ACT 2004



3 August 2007

Contents

1. INTRODUCTION.....	4
1.1 THE GUIDE.....	4
1.2 BUILDING ACT 2004.....	5
2. KEY CONCEPTS AND PRINCIPLES.....	6
3. EXISTING GUIDANCE.....	7
4. HERITAGE BUILDINGS.....	8
5. HERITAGE-RELATED POLICIES ON DANGEROUS, EARTHQUAKE-PRONE AND INSANITARY BUILDINGS.....	11
5.1 OVERALL APPROACH.....	12
5.2 IDENTIFYING EARTHQUAKE-PRONE BUILDINGS.....	12
5.3 TAKING ACTION ON DANGEROUS, EARTHQUAKE-PRONE, OR INSANITARY BUILDINGS.....	13
5.4 INCENTIVES.....	14
5.5 EXAMPLES OF MODEL HERITAGE-RELATED POLICIES ON DANGEROUS, EARTHQUAKE-PRONE AND INSANITARY BUILDINGS.....	16
6. HERITAGE-RELATED POLICIES ON DANGEROUS DAMS.....	19
6.1 DANGEROUS DAMS AND HERITAGE DAMS.....	20
6.2 MANAGING HERITAGE DAMS.....	21
6.3 EXAMPLES OF MODEL HERITAGE-RELATED POLICIES ON DANGEROUS DAMS.....	23

Sustainable Management of Historic Heritage Guidelines

Guide No.9

Heritage provisions: Dangerous, Earthquake Prone, Insanitary Buildings and Dangerous Dams Policies Building Act 2004

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While the NZHPT acknowledges the contribution of other agencies and organisations, the opinions and views expressed in this guide are those of the NZHPT only.

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1. Introduction

Sustainable development of the built environment promotes the conservation of heritage buildings and heritage dams for future generations. Sustainable development encourages a long-term risk management approach to ensure buildings and dams are safeguarded from hazards such as earthquake and fires.

Heritage buildings and heritage dams are of importance to the nation. While they are places of public interest, heritage buildings and heritage dams are often privately owned. New Zealand's building regulations have ensured the survival of many heritage buildings and heritage dams over the years and appropriately designed earthquake strengthening work will ensure heritage buildings and heritage dams survive for future generations. Such earthquake strengthening works should be designed to involve minimal loss to heritage fabric.

Policies prepared under the Building Act 2004 should ensure that the special issues concerning heritage buildings and heritage dams are recognised and provided for, especially issues relating to the need to strengthen dangerous heritage buildings, the need to minimise any damage or loss of heritage fabric, provision of incentives, and the interests of owners and other stakeholders.

1.1 The Guide

This guide is for territorial authorities in respect to heritage provisions of policies for dangerous, earthquake-prone, and insanitary buildings.¹ It is also relevant for the development of policies for dangerous dams, in terms of recommended processes and procedures. It is acknowledged that many local authorities have already prepared draft policies or are in a consultative process.

The guide discusses some key heritage-related principles relating to dangerous building and dam issues and explains the concept of a heritage building and heritage dam. Examples of model policies are provided for local authorities to consider incorporating into their policy processes.

The New Zealand Historic Places Trust (NZHPT) acknowledges that the extent to which guidance regarding policy development and implementation of voluntary practice by territorial and regional authorities is applied will be subject to the resources allocated for such tasks by a community.

As a first step, local authorities should discuss the preparation of the policies with the relevant regional or area office of the NZHPT. Ideally, there should be an opportunity for NZHPT input before formal public notification of the proposed policy in view of promoting a 'partnership approach'.

¹ For the purposes of this guide, the term 'building' and 'dam' is as defined in the Building Act 2004

In addition to discussions with relevant organisations, a 'working party' approach to the preparation of the policies should be encouraged with the participation of NZHPT, community boards, heritage groups, and other stakeholders. Generally, the NZHPT will base its advice and advocacy to local authorities on this guide.

For further information, please contact the nearest regional or area office of NZHPT.

1.2 Building Act 2004

The Building Act 2004 regulates all building work in New Zealand and:

- sets performance standards (including the Building Code);
- establishes a licensing regime for building practitioners;
- requires local authorities (and private organisations) to become registered and accredited building consent authorities to carry out building control functions; and
- establishes a new regulatory regime for dam safety.

The functions of territorial authorities as building consent authorities are outlined in the Building Act 2004. These functions include:

- issuing of building consents;
- issuing of project information memoranda;
- issuing of notices to fix (section 164);
- keeping of building consent information and the provision of public access to building information;
- carrying out of building work on default (section 220); and
- inspections and enforcement.

Regional authorities also perform the function of a building consent authority in relation to dams.

In exercising functions under the Building Act 2004, building consent authorities need to ensure that buildings are safe, promote physical independence and wellbeing, have adequate fire escape provisions and are designed, constructed, and able to be used in ways that promote sustainable development. Also building consent authorities are required to take into account the principles of section 4(2)(f) of the Building Act 2004 which include the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value.

Further information about the Building Act 2004 is available from the Department of Building and Housing's website: www.dbh.govt.nz or www.building.govt.nz

Under section 131 of the Building Act 2004, territorial authorities must adopt a policy on dangerous, earthquake-prone, and insanitary buildings. The policy must state:

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

Complementary to the regional authority administered dam safety regime, under section 161 of the Building Act 2004, regional authorities must adopt policy on dangerous dams. Dangerous dam policies must state how the policy will apply to heritage dams.

Policies for dangerous, earthquake-prone, and insanitary buildings and dangerous dams must be adopted in accordance with the special consultative procedure outlined in section 83 of the Local Government Act 2002. This means the policies must be subject to public consultation processes with the opportunity for public submissions and an open hearing.

2. Key Concepts and Principles

The purpose of the Building Act is to provide for the regulation of building work, the establishment of a licensing regime for building practitioners, and the setting of performance standards for buildings, to ensure that –

- (a) people who use buildings can do so safely and without endangering their health; and
- (b) buildings have attributes that contribute appropriately to the health, physical independence, and well-being of the people who use them; and
- (c) people who use a building can escape from the building if it is on fire; and
- (d) buildings are designed, constructed, and able to be used in ways that promote sustainable development.

Sustainable development is a key Government objective as detailed in *Sustainable Development for New Zealand, Programme of Action*, January 2003. This report defines sustainable development as ‘development which meets the needs of the present without compromising the ability of future generations to meet their own needs.’² This requires processes that take account of the social, economic, environmental, and cultural effects of our decisions. In particular, the Programme of Action highlights the importance of culture and the achievement of sustainable cities that incorporate a holistic approach to historic heritage.³

It is an internationally accepted principle and practice that the identification, protection, preservation, and conservation of buildings of historical and cultural heritage importance are an essential element of sustainable development. In other words, to achieve sustainable development, buildings of historical and cultural importance must be identified, preserved, and conserved.⁴

In applying the purpose of the Building Act, a number of principles are outlined in section 4. In terms of historic heritage, the relevant principles include:

² Department of Prime Minister and Cabinet, *Sustainable Development for New Zealand, Programme of Action*, January 2003.

³ *ibid*, p 22

⁴ Christine Phillips, *Sustainable Place – A Place for Sustainable Development*, Wiley-Academy, West Sussex, 2003

- (d) the importance of recognising any special traditional and cultural aspects of the intended use of a building:
- (l) the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value.

The Minister responsible for the administration of the Building Act, Chief Executive of the Department of Building and Housing, and local authorities are required to 'take into account' these principles to the extent they are performing functions or duties, or exercising powers, in relation to the grant of waivers or modifications of the building code and the adoption or review of policy on dangerous, earthquake-prone, and insanitary buildings or, as the case may be, dangerous dams.

There can be tensions between the requirements of the Building Act 2004 and with the purpose and principles of the Historic Places Act 1993, and the Resource Management Act 1991. The tension stems from the focus of ensuring building safety, amenity, and access under the Building Act 2004, and the protection of historic heritage as a matter of national importance under the Resource Management Act 1991 and the purpose of the Historic Places Act 1993 to promote minimum change of heritage buildings in order to conserve and preserve historical and cultural heritage values.

It is critical that in meeting the requirements of the Building Act and the Building Code, positive heritage outcomes are also achieved. For example, the implementation of the Building Act should not result in the premature demolition of heritage buildings. In addition, buildings should not be abandoned due to excessive upgrade costs to meet the requirements of the Building Code. Any prolonged abandonment will eventually lead to demolition.

The new local authority policies for dangerous buildings and dams must have a strong heritage component and heritage issues require special consideration.

The policies need to meet the purpose of the Building Act 2004, including the concept of sustainable development, and take into account any special traditional and cultural aspects of the intended use of a building and the need to facilitate the preservation of buildings of significant cultural, historical or heritage value. In addition, they must state how the policy will apply to heritage buildings and dams.

3. Existing Guidance

There is some guidance available in relation to heritage building issues in the context of the former Building Act 1991. For example, in 2000 the NZHPT published 10 heritage guidelines. These guidelines included earthquake strengthening, fire safety, and making heritage buildings accessible.⁵ While these guidelines contain useful information, they do require updating in light of the new Building Act. A copy of these guidelines can be obtained from NZHPT.

⁵ Lou Robinson and Ian Bowman, *Earthquake Strengthening Heritage Guidelines*, NZHPT, 2000
Carol Caldwell and Hamish MacLennan, *Fire Safety Heritage Guidelines*, NZHPT, 2000
Julia Gatley, *Making Heritage Buildings Accessible*, NZHPT, 2000

In 2004, some further guidance brochures were developed by the NZ Fire Service and NZHPT with regard to fire safety.⁶

As part of this guidance series, the NZHPT has developed an overview guide on the Building Act 2004 and historic heritage (see Guide No.6 of this series).

The Department of Building and Housing has produced a range of guidance material on the new Building Act and its procedures. The information is available on the Department's website and the specific 'Building Act' website.

The Department of Building and Housing has prepared a guide in respect to the preparation of a policy for earthquake-prone buildings. Please contact the Department to obtain a copy of *Earthquake-Prone Building Provisions of the Building Act 2004 Policy Guidance for Territorial Authorities*, June 2005 or download the guide from: <http://www.building.govt.nz/publish/publications.php>

4. Heritage Buildings

In the preparation of earthquake-prone, dangerous and insanitary buildings policies, the term 'heritage buildings' is adopted in section 131 of the Building Act. This term is also used in sections 125 with regard to provision for copies of requirement notices to be provided to the NZHPT.

There is an important distinction between earthquake-prone policies and dangerous and insanitary buildings policies under section 131 of the Building Act.

Earthquake-prone buildings can include any buildings with the exception of buildings that are wholly or mainly for residential purposes unless the building comprises 2 or more storeys and contains 3 or more household units.⁷

Earthquake-prone building policies under section 131 of the Building Act do not cover residential heritage buildings unless that residential building comprises 2 or more storeys and contains 3 or more household units. This provision should be made clear within local authority policies.

Dangerous and insanitary building policies under section 131 apply to all types of buildings as there is no exclusion for residential buildings within the meaning of dangerous and insanitary buildings. Consequently, all types of heritage buildings may be covered by dangerous and insanitary buildings policies.

Within the meaning of building under section 8 and 9 of the Building Act, it is appropriate that a local authority indicates in policies the community's understanding of heritage buildings within its district or region.

⁶ NZ Fire Service, NZHPT, *Protecting and Preserving what we Value*.

⁷ Section 122, Building Act 2004

To capture the wide-ranging nature of the terms heritage buildings, it is suggested that they may include, but not be limited to:

- Any building within any proposal to register or any registered historic place, historic area, wahi tapu, or wahi tapu area under the Historic Places Act 1993.
- Any building listed as a historic heritage item in any district or regional plan prepared under the Resource Management Act 1991.
- Any heritage building or Actively Managed Historic Place listed in a Historic Resources Strategy or Conservation Management Strategy and Conservation Management Plan prepared under the Conservation Act 1987.
- Any heritage building listed in a reserve management plan prepared under the Reserves Act 1977.
- Any building established by the Maori Land Court under the Te Turi Whenua Maori Land Act 1993 for historic and cultural purposes and buildings of importance to tangata whenua.
- Any building associated with a historic cemetery or memorial.
- Any building managed for heritage purposes by agencies such as NZHPT, Ministry of Culture and Heritage, the Department of Conservation, and local authorities.
- Any building that is subject to a heritage order, heritage covenant or other protective covenant.
- Any other heritage building deemed to have heritage value using best practice criteria and research, including buildings identified within national or district heritage inventories or heritage policy.

It is important to note, that a heritage building that has been constructed before 1900 may also be an archaeological site under the Historic Places Act 1993. Under section 2 of the Historic Places Act 1993, an archaeological site is defined as any place in New Zealand that either – was associated with human activity that occurred before 1900; or is the site of the wreck of any vessel where that wreck occurred before 1900; and – is or may be able through investigation by archaeological methods to provide evidence relating to the history of New Zealand. Under section 9(2) of the Historic Places Act 1993, the NZHPT may declare any post-1900 site to be covered by the archaeological site definition in section 2 by notice in the *Gazette*.⁸

⁸ In 2004, the NZHPT declared the Napier Prison Wall an archaeological site under section 9(2) of the Historic Places Act 1993.

Section 10 of the Historic Places Act 1993 directs that an authority is required from the New Zealand Historic Places Trust if there is “reasonable cause” to suspect an archaeological site (recorded or unrecorded), may be modified, damaged or destroyed in the course of any activity. An authority is required for such work whether or not the land on which an archaeological site may be present is designated, or a resource or building consent has been granted.

Policies for dangerous buildings should also provide for any building of special traditional or cultural usage and buildings of significant cultural historical, or heritage value in terms of section 4(c) of the Building Act 2004. These buildings may include churches, marae, and papakainga.

Marae

Marae are special buildings of cultural heritage value and are unique to New Zealand/Aotearoa. Marae may be both historic and contemporary. They can include a number of buildings, including the whare nui, whare kai, and associated facilities. Often marae are associated with a whare karakia, urupa and papa kainga.⁹

The traditional structure of marae may present many Building Act-related challenges. For example, fire is a particular hazard for many marae and protecting marae from fire is of primary importance.¹⁰ It is unknown how many marae in the country would be considered to be dangerous or earthquake-prone. Local authorities should ensure marae communities are supported to undertake engineering assessments to identify buildings at risk and to carry out required strengthening work in a culturally appropriate manner.

For further information about the conservation of marae buildings. Contact: Dean Whiting, Maori Heritage Manager (Central/Southern), NZHPT, phone 04 494 8043

⁹ Whare nui: meeting house; whare kai: dining hall; whare karakia: church; urupa: burial ground; Papa kainga: residential village

¹⁰ NZ Fire Service, NZHPT, Ministry of Consumer Affairs, *Protecting Marae from Fire Nga whakatupato ahi mo te marae*, 2005

5. Heritage-Related Policies on Dangerous, Earthquake-Prone and Insanitary Buildings.

The Building Act 2004 provides special provisions for certain categories of buildings which are considered to be either dangerous, earthquake-prone or insanitary.¹¹ With regard to earthquake-prone buildings, these buildings are those which will have their 'ultimate capacity exceeded in a moderate earthquake.'¹² A moderate earthquake means, in relation to a building:

an earthquake that would generate shaking at the site of the building that is of the same duration as, but that is one-third as strong as, the earthquake shaking (determined by normal measures of acceleration, velocity, and displacement) that would be used to design a new building at that site.¹³

In simple terms, a building may be considered earthquake-prone if it is assessed to be less than one-third of the current standard for new buildings. As stated above, this provision relates to all types of buildings with the exception of residential houses unless the residential building comprises 2 or more storeys and contains 3 or more household units.¹⁴

If a territorial authority considers that a building is dangerous, earthquake-prone or insanitary, the territorial authority can take action to safeguard both life and property. These actions include putting up a hoarding or fence to prevent people approaching the building, attaching a public warning notice, or issuing a written notice to the owners requiring them to reduce or remove the danger or prevent the building from remaining insanitary.¹⁵ A copy of any such notice must be provided to the NZHPT if the building is a heritage building.¹⁶

In implementing the dangerous, earthquake-prone, or insanitary building provisions of the Building Act, territorial authorities should work with owners and other agencies to ensure positive heritage outcomes.

¹¹ See definitions of dangerous, earthquake-prone, and insanitary buildings: sections 121-123 Building Act 2004

¹² Section 122(1)(a) Building Act 2004

¹³ Building (Specified Systems, Change the Use, and Earthquake-Prone Buildings) Regulations 2005

¹⁴ Section 122, Building Act 2004

¹⁵ Section 124 Building Act 2004

¹⁶ Section 125(2)(f) Building Act 2004

5.1 Overall Approach

Territorial authorities have the policy option of taking a more active approach in terms of carrying out evaluations of all buildings within their districts and the identification of high-risk buildings. A more passive or reactive approach involves assessments triggered by applications made under the Building Act.

The NZHPT considers the overall approach for heritage buildings could vary between the active and passive approaches depending upon the nature of the heritage building resource in the district, the level of earthquake risk, and the resources of the community.

In many districts, an active approach may be favourable to ensure heritage buildings at risk are identified. As noted in the introduction of this guide, sustainable development favours a long-term risk management approach to ensure buildings are safeguarded from earthquakes for future generations.

The identification process should ensure owners are contacted at an early stage. Requirements for engineering assessments and strengthening of heritage buildings at risk should be accompanied by strong funding incentives to provide appropriate support.

It should also be recognised that many heritage buildings may enjoy protection under other legislation such as the Resource Management Act 1991 (RMA), Conservation Act 1987, or the Historic Places Act 1993. In addition, any survey of buildings can be integrated into State of the Environment reporting procedures under the RMA.

The overall approach may also be passive in that any action involving a heritage building involving an initial assessment, detailed assessment and any improvement of structural performance is restricted to a trigger by an application under the Building Act 2004. These applications may involve building alterations, change of use, and extension of life or subdivision.

Whatever approach is chosen by Council, this approach should be discussed fully with building owners, community organisations and stakeholders including the NZHPT.

5.2 Identifying earthquake-prone buildings

The process of identifying earthquake-prone buildings includes preliminary investigations, initial evaluation processes (IEP), detailed assessment of earthquake performance, and developing priority listings.

In terms of developing the IEP and actual detailed assessment of earthquake performance, a grading system has been developed by the NZ Society of Earthquake Engineering (NZSEE) as outlined in Appendix 2 of the *Earthquake-Prone Building Provisions of the Building Act 2004 Policy Guidance for Territorial Authorities*, June 2005.

The NZSEE grading system establishes categories of high, moderate and low risk according to structural performance scores. Effectively many buildings built prior to 1976 may fall within the high risk category. Any grading system should be applied to all

types of buildings and the process of identification should not be less rigorous for heritage buildings.

Many pre-1976 buildings are likely to have heritage values that require consideration when deciding on appropriate action to be undertaken to strengthen these buildings. Systems to identify earthquake-prone buildings should acknowledge previous earthquake strengthening works on the building.

5.3 Taking action on dangerous, earthquake-prone, or insanitary buildings

Under sections 124-129 of the Building Act, territorial authorities have various options in dealing with dangerous, earthquake-prone or insanitary buildings. The options include preventing access to a dangerous site, erecting public warning notices or issuing a written notice to the owners requiring that the danger is reduced or removed or preventing the building from remaining insanitary. A territorial authority can also apply to the District Court for an order authorising the carrying out of building works (including demolition) and recovering the costs of these works from the owner.

In order to avoid the demolition or loss of heritage buildings, a territorial authority should, in the first instance, consult owners and the NZHPT about any proposed action to be considered under sections 124-129 of the Building Act. A territorial authority should also examine the option of preventing access to a dangerous site and putting up warning notices before considering issuing a notice to the owners to reduce or remove the danger. If a notice is issued under section 124 of the Act, the local authority should provide information about how the danger can be reduced without requiring demolition.

In some circumstances, territorial authorities may consider carrying out strengthening work on buildings under section 126 of the Building Act and, if necessary and appropriate, waive costs of this work with regard to a heritage building.

Also in the implementation of sections 124-129, territorial authorities should consider the effect of other legislation. For example, if a building is listed within the district plan, it is likely that resource consent will be required to demolish, remove, or alter under the RMA. In addition, if the building was built before 1900, an archaeological authority may be required from the NZHPT to carry out significant earthworks (including demolition and relocation) on the property.

It is important that the actual level of upgrading required must have regard to individual circumstances of the building including heritage considerations. For strengthening or stabilisation the general objective 'should be to minimise the adverse effects on the building fabric and the spaces within the building.'¹⁷ In order to achieve this goal, assessments should consider alternative standards of earthquake strengthening work and the resulting effects on the heritage fabric and character of the building.

Generally, the level of earthquake strengthening works relating to heritage buildings should be at least 33% of current Design Standards to comply with the Building Act 2004. However, each building must be assessed on an individual and 'case by case' basis. As indicated by NZHPT, 'consideration should be given to higher threshold and

¹⁷ Lou Robinson and Ian Bowman, *Guidelines for Earthquake Strengthening*, NZHPT, 2000, p 4

strengthening levels for buildings containing people in crowds, or of prime importance to the community in terms of heritage value of the building or contents.’¹⁸

It is important that territorial authorities and owners should engage an appropriate heritage professional for the assessment of appropriate strengthening works affecting any heritage building.

5.4 Incentives

Council can target non-regulatory financial incentives and advice to support the owners of heritage buildings in order to meet the requirements of the Building Act 2004. A grant fund should be made available to ensure heritage buildings are upgraded and strengthened in an appropriate manner and with minimal intervention. Grant funds can also assist in the preparation of conservation and management plans, professional conservation advice, and assessments for heritage buildings at risk.

The NZHPT is currently exploring the development of more effective incentive programmes targeted towards heritage buildings at risk.

The National Heritage Preservation Incentive Fund

In 2003 the Government established the National Heritage Preservation Incentive Fund of \$0.5m annually, to be administered and allocated by the NZHPT, to encourage the conservation of nationally significant heritage in private ownership.

Any property in private ownership that is either registered as a registered Category I historic place under the Historic Places Act, or could satisfy the requirements for Category I registration, is eligible to apply to the fund. Sites of significance to Maori, such as wahi tapu, are also eligible.

Conservation projects that involve stabilisation work, including earthquake strengthening or fire protection, are eligible for application to the Fund.

For further information, contact your nearest NZHPT office (see appendix) or the NZHPT’s website: http://www.historic.org.nz/heritage/funding_nhpif.html

¹⁸ ibid, p 5

Checklist: Implementation of Dangerous, Earthquake-Prone and Insanitary Heritage Buildings under the Building Act 2004

- Has the Council's draft policy on dangerous, earthquake-prone or insanitary buildings provided for heritage buildings?
- Is the building a dangerous, earthquake-prone or insanitary building? Note that a residential heritage building cannot be regarded as earthquake-prone unless it comprises of 2 or more storeys and contains 3 or more household units.
- Is the building a heritage building? Check Council Policy or seek advice from NZHPT or heritage professional.
- Is the building listed within a Regional or District Plan under the RMA? If yes, it is likely resource consent will be required to alter, remove or demolish the building.
- Is the building an archaeological site under the Historic Places Act 1993? If yes, an archaeological authority may be required from NZHPT to remove or demolish the building.
- Has expert heritage professional advice been obtained?
- Are there funds available to assist owners prepare a heritage assessment, structural assessment or conservation plan?
- Has NZHPT or other heritage stakeholders been consulted?
- What level of structural strengthening work is required?
- Would structural strengthening work result in damage to heritage fabric or the site?
- Have a range of alternative strengthening options and levels been investigated?
- Are there alternatives to demolition, including restricting public access and erecting warning notices?
- Ensure NZHPT receives notice as required under section 125 of the Building Act 2004.

5.5 Examples of Model Heritage-Related Policies on Dangerous, Earthquake-Prone and Insanitary Buildings.

Below are examples of the types of policies that territorial authorities may include in policy documents relating to dangerous, earthquake-prone and insanitary buildings:

General

The Council, in the implementation of procedures under the Building Act 2004 with regard to dangerous, earthquake-prone, or insanitary buildings, will take into account any special traditional and cultural aspects of the intended use of a building and the need to facilitate the preservation of buildings of significant cultural, historical, or heritage value. This will be achieved by:

- *Recognising the range of heritage buildings that may exist in the district, including the NZHPT Register, listed heritage places, buildings of significance to iwi, and other buildings of significance to the community.*
- *Ensuring early identification of heritage buildings at risk.*
- *Ensuring early consultation with owners of heritage buildings.*
- *Informing and involving relevant statutory organisations, including NZHPT with regard to any heritage buildings identified as at risk.*
- *Considering heritage values when managing any building identified as at risk.*
- *Considering heritage values when developing upgrading proposals.*
- *Providing targeted assistance to the owners of heritage buildings.*

Earthquake-Prone Buildings

The Council, in the implementation of procedures under the Building Act 2004 with regard to earthquake-prone buildings, will ensure that generally non-residential heritage buildings in the district will be considered in the development and implementation of the Policy.

Non-residential heritage buildings may include any structure on the NZHPT Register, listed heritage places, buildings of significance to iwi, and other buildings of significance to the community.

In relation to any detailed assessment of buildings at risk and in relation to any heritage building, the following matters will be considered:

- *The heritage significance, integrity and condition of the historic heritage including any significant components or fabric and features of heritage value.*

- *Any relevant economic matters.*¹⁹
- *Any statutory protection, including any listing in the District Plan, reserve management provision, covenant or heritage order, or as an archaeological site under the Historic Places Act 1993.*
- *Any advice from NZHPT, professional conservation organization or heritage professional, including Council's own heritage advisers (if relevant).*
- *The principles of the ICOMOS New Zealand Charter.*²⁰
- *Any relevant conservation report, conservation plan, condition report, management plan, heritage assessment or other document.*²¹

In implementing the provisions of section 124-129 of the Building Act, Council will consider alternative methods to avoid unnecessary demolition of heritage buildings including:

- *Restricting public access and erecting public warning notices (section 124(1)(a)(b)).*
- *Consulting owners and NZHPT in relating to any proposed written notice requiring work.*
- *Providing extended timeframes for heritage buildings in relating to any written notice requiring work.*
- *Ensuring that any written notice requiring work provides options to repair the building as appropriate.*
- *Examining options for Council to repair buildings under section 126 including considering waiving costs to owners if appropriate.*

In assessing the upgrading of heritage buildings to meet the Building Act requirements, the local authority will examine alternative levels of compliance with the Building Act and consider the varying effects on the heritage values of the building. In addition, any assessment for the upgrading of heritage buildings will consider the following matters:

- *The principles of the ICOMOS New Zealand Charter.*
- *Ensuring that all new work involves minimal possible intrusion to the site and the heritage fabric of the building.*
- *Any advice from NZHPT, professional conservation organization or heritage professional, including Council's own heritage advisers.*

¹⁹ Economic matters may include direct use values (i.e. commercial) indirect use values (i.e. recreational), option values, bequest values, and existence values. NZ Law Society Seminar Booklet, *Economics and the RMA*, August 2004

²⁰ See ICOMOS New Zealand: <http://www.icomos.org.nz/>

²¹ Local authorities should consider the potential need to formulate these documents and plans in some instances if they do not already exist prior to proposing a program of strengthening works.

Council will promote the use of non-regulatory financial incentives and advice to provide assistance to owners of heritage buildings at risk. This incentive will be operated in collaboration with other central government and private incentive and grant schemes. The total sum of monies available in the fund will be established in the Council's Long Term Council Community Plan.

6. Heritage-related Policies on Dangerous Dams.

The Building Act 2004 establishes a dam safety regime that requires dam owners to assess a dam according to the potential impact of a failure of the dam on persons, property and the environment.²² A dam owner must also register the dam and its classification with the relevant regional authority. The dam safety regime is administered by regional authorities. If a dam is assessed to be a 'medium potential impact dam' or a 'high potential impact dam', the owner of the dam must prepare, or arrange for the preparation of, a dam safety assurance programme which is audited by a recognised engineer.²³ Owners of dams where a dam safety assurance programme has been approved must also supply an annual dam compliance certificate to the relevant regional authority which has been audited by a recognised engineer.

The New Zealand Dam Safety Guidelines 2000, developed by the New Zealand Society on Large Dams (NZSOLD), is the primary guidance information on safety assessment matters. See the NZSOLD website:

<http://www.ipenz.org.nz/nzsold/publications.htm>

Regulations under the Building Act 2004 will prescribe:

- The competency and qualifications of recognised engineers.
- Criteria and standards for the classification of dams (as having *low*, *medium* or *high* potential impact).
- Criteria and standards for dam safety assurance programmes.
- The format and content of dam compliance certificates.
- Definitions applying to dangerous dams (moderate flood, moderate earthquake).
- Criteria and standards for dam owner accreditation.
- Reporting.

For further information about the regulatory regime for dams, please refer to the Department of Building and Housing's website: www.dbh.govt.nz.

²² A dam, under the Building Act, means (a) an artificial barrier, and its appurtenant structures, that – (i) is constructed to hold back water or other fluid under constant pressure so as to form a reservoir; and (ii) is used for the storage, control, or diversion of water or other fluid; and (iii) retains 3 or more metres depth, and holds 20 000 or more cubic metres volume, of water or other fluid; and (b) includes – (i) a flood control dam; and (ii) a natural feature that has been significantly modified to function as a dam; and (iii) a canal; but (c) does not include a stopbank designed to control floodwaters.

²³ Section 140 Building Act 2004

6.1 Dangerous Dams and Heritage Dams

The Building Act 2004 contains special provision for dangerous dams. These are dams that are high potential impact dams or medium potential impact dams²⁴ and are likely to collapse in the ordinary course of events, in a moderate earthquake, or in a moderate flood, or are leaky.²⁵ Unlike a dangerous building, the collapse of a dam may have serious consequences for people and the environment in a large area.

If a regional authority is satisfied that a dam is dangerous, it may put up a hoarding or fence to prevent access to the dam, attach a warning notice, or give written notice requiring work to be carried out on the dam in order to reduce or remove the danger. A copy of any notice must be provided to the NZHPT if the dam is a heritage dam.

Dangerous dams are generally substantial structures that are likely to collapse or are leaky. Consequently, the dangerous dams would not include many small dams such as minor irrigation dams.

Regional authorities are required to prepare a policy on dangerous dams under section 161 of the Building Act. This policy must state how the policy will apply to heritage dams. Heritage dams would only come within the policy if they are considered to be dangerous within the meaning of section 153 of the Building Act. This would mean that many small historic dams would not be covered by the policy.

The NZHPT considers that regional authorities should undertake a survey of dams within the region to identify dangerous heritage dams. This would mean identifying any large dams that are registered by the NZHPT, listed in the regional or district plan, recorded as an archaeological site, within a reserve or regional park, or identified by best practice research and research by any other organisation such as the Institution of Professional Engineers New Zealand (IPENZ) or the New Zealand Society on Large Dams (NZSOLD).²⁶

Regional authorities should also note that the archaeological authority provisions of the Historic Places Act 1993 may apply to any dam dating from pre-1900.

If a heritage dam has been identified as dangerous or remedial work has been identified through a dam safety assurance programme, the NZHPT should be consulted before any actions are undertaken by the regional authority under sections 153-160 of the Act and similar policies should apply as per the above guidance for dangerous buildings outlined above.

²⁴ In the absence of regulations, guidance on 'medium and high potential impact dams' is provided by NZSOLD, *New Zealand Dam Safety Guidelines*, November 2000. This guideline states that a medium potential impact dam is likely to have a dam height in the 10-20 metre range, but not exceeding 15 metres if the stored volume exceeds 1,000,000 cubic metres. A high potential impact dam will have a height and storage capacity in excess of a medium potential impact dam.

²⁵ Section 153 Building Act 2004

²⁶ For a list of heritage dams identified by IPENZ Heritage Committee and entered into the Heritage Database, see: <http://www.ipenz.org.nz/heritage>

6.2 Managing Heritage Dams

Heritage dams can present many challenges for both consent authorities and owners. Many heritage dams were constructed for water supply or pumping purposes that have now long ceased and it may be difficult to identify when the dam was built. It is also often the case that dams are located within the riverbed and not owned by the adjoining landowner or the ownership status is generally unknown. These dams are known as orphan structures. Some heritage dams have continued to function with reduced water levels to reduce risk to the public.

Councils should develop strategies to manage all heritage dams, including orphan structures. As a first step, the ownership and history of the dam should be investigated. Many orphan structures may be the responsibility of the Crown if the Crown owns the riverbed beneath them.

Heritage dams and orphan structures may present other issues in addition to safety concerns. For example, in Taranaki, dams have posed a major barrier to fish passage. In this region, the regional authority has undertaken an inventory of dams with a program of altering the dams to provide suitable fish passage. As shown in the Taranaki experience, there can be tensions between the safety standards of the Building Act 2004, the heritage principles of the Historic Places Act 1993 and the sustainable management purpose of the RMA.

Karori Wildlife Sanctuary Dams

The Karori Wildlife Sanctuary in Wellington includes two large dams. The lower dam is one of New Zealand's best examples of a puddled core earth dam and dates from 1874. It was the first water supply dam in Wellington. Both dams are managed as part of the wildlife sanctuary and provide a habitat for indigenous flora and fauna and have reduced water levels to reduce the risk to the public. The dams are also the site of historic gold workings.

In 1997, Bob Offer wrote a detailed account of New Zealand's historic dams in his book entitled *Walls of Water, A History of Pioneer Dam Building in New Zealand*. This book was published by the Dunmore Press. Copies of the book can be ordered from the NZSOLD website: <http://www.ipenz.org.nz/nzsold/wallsforwater/>

The NZHPT considers that dams should be managed in an integrated manner to achieve both safety, historic, and environmental objectives. Policies prepared under section 161 of the Building Act are limited to managing dangerous dams and cannot address some of wider management issues relating to all types of dams.

The NZHPT suggests regional authorities prepare a non-statutory dams strategy. This strategy would cover issues relating to:

- Principles for managing dams.
- Regulatory requirements of the Building Act 2004, Historic Places Act 1993, RMA, and other relevant legislation.
- The preparation of a dam inventory for the region.
- Heritage issues, including a program of identification of 'heritage dams'.

- Environment issues, including river flow and fish passage.
- Ownership and responsibility issues, including issues relating to orphan dams.
- Other issues associated with dams such as access.

The Strategy should be prepared in consultation with all key stakeholders and the public, including NZHPT and NZSOLD.



Ross Creek (No.1) Earth Dam in Dunedin (registered Category I historic place) was built in 1865 and is one of the earliest water supply dams in New Zealand.

Photo: Dunedin City Council

6.3 Examples of Model Heritage-Related Policies on Dangerous Dams.

The Council, in the implementation of procedures under the Building Act 2004 with regard to dangerous dams, will take into account any special traditional and cultural aspects of the intended use of a dam and the need to facilitate the preservation of dams of significant cultural, historical, or heritage value. This will be achieved by:

- *Developing strategies to identify heritage dams in the region.*
- *Ensuring consultation with key statutory agencies, including NZHPT, on the development of heritage grading and assessment processes.*
- *Ensuring early identification of heritage dams at risk.*
- *Ensuring early consultation with owners of heritage dams.*
- *Informing and involving relevant statutory organisations, including NZHPT with regard to any heritage dam identified as at risk.*
- *Considering heritage values when managing any dam identified as at risk.*
- *Considering heritage values when developing upgrading proposals.*
- *Providing targeted assistance to the owners of heritage dams.*

In relation to any detailed assessment of dams at risk and in relation to any heritage dams, the following matters will be considered:

- *The heritage significance, integrity and condition of the heritage dam including any significant components or fabric and features of heritage value.*
- *Any relevant economic matters.²⁷*
- *Any statutory protection, including any listing in the District Plan, reserve management provision, covenant or heritage order, or as an archaeological site under the Historic Places Act 1993.*
- *Any advice from NZHPT, or professional conservation organization or heritage professional, including Council's own heritage advisers.*
- *The principles of the ICOMOS New Zealand Charter.²⁸*
- *Any relevant conservation report, conservation plan, condition report, management plan, heritage assessment or other document.²⁹*

²⁷ Economic matters may include direct use values (i.e. commercial) indirect use values (i.e. recreational), option values, bequest values, and existence values. NZ Law Society Seminar Booklet, *Economics and the RMA*, August 2004

²⁸ See ICOMOS New Zealand: <http://www.icomos.org.nz/>

In implementing the provisions of section 153-160 of the Building Act, Council will consider alternative methods to avoid unnecessary demolition of heritage dams including:

- *Reducing water levels.*
- *Restricting public access and erecting public warning notices (section 154(1)(a)(b)).*
- *Consulting owners and NZHPT in relating to any proposed written notice requiring work.*
- *Providing extended timeframes for heritage dams in relating to any written notice requiring work.*
- *Ensuring that any written notice requiring work provides options to repair the heritage dam as appropriate.*
- *Examine options for Council to repair heritage dams under section 126 including considering waiving costs from owners if appropriate.*

Council will promote the use of non-regulatory financial incentives and advice to provide assistance to owners of heritage dams at risk. This incentive will be operated in collaboration with other central government and private incentive and grant schemes. The total sum of monies available in the fund will be established in the Council's Long Term Council Community Plan.

²⁹ Local authorities should consider the potential need to formulate these documents and plans in some instances if they do not already exist prior to proposing a program of strengthening works.