HAMILTON CITY COUNCIL – STAFF FEEDBACK

Proposed Policy on Dangerous Dams, Earthquake-Prone and Flood-Prone Dams

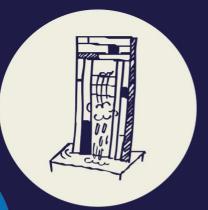
Waikato Regional Council











9 February 2024



Improving the Wellbeing of Hamiltonians

Hamilton City Council is focused on improving the wellbeing of Hamiltonians through delivering to our five priorities of shaping:

- A city that's easy to live in
- A city where our people thrive
- A central city where our people love to be
- A fun city with lots to do
- A green city

The topic of this feedback is primarily aligned to the priorities of **A city where our people thrive** and **A green city**.

Council Approval and Reference

This staff feedback was approved by Hamilton City Council's Chief Executive on 9 February 2024.

Feedback # 754.

It should be noted that the following feedback is from staff at Hamilton City Council and does not therefore necessarily represent the views of the Council itself.

Key Messages

- 1. Staff from Hamilton City Council welcome the opportunity to provide feedback to the Waikato Regional Council's **Proposed Policy on Dangerous Dams**, **Earthquake-Prone Dams and Flood-Prone Dams**.
- 2. We are mindful of the potential impacts of dam failure and support a legislation, regulation, guidance, and policy framework to manage risk. Hamilton City has a small number of large dams and has been impacted by an 'out of district dam' failure.
- **3.** In June 2023, Hamilton City Council responded to significant flooding in Exeter Street (Glenview Hamilton) after the Alderton Dam failure to manage the impacts on residents, property, and infrastructure. This event was a demonstration of how appropriate controls and risk management are critical for public health and safety. Hamilton residents should not have to bear the risk of dam failure outside of the city's boundary.
- **4.** Referable Dams are not addressed in the Policy. We would like to see more clarity provided for future dam owners for Referable Dams (until revised regulations can address the lack of a definition), and also what is not in scope e.g., blocked culverts.
- element that is missing from the Principles. Territorial Authorities have a significant role to play in flood management and protection of critical infrastructure. It is also important that Regional Council messaging on dam risk and Territorial Authority messaging is aligned. We recommend an added principle of collaboration with appropriate parties, which should include dam owners, territorial authorities, and mana whenua, as well as appropriate policy provision.
- **6.** The principle of working with other agencies (e.g., civil defence) is also important for understanding challenges, changes to the environment and preparedness. The use of a forum could be embedded into the Policy to discuss potential future risks to dam status.
- **7.** We strongly support policy provision for information on dam status and support notification of key stakeholders about a dangerous dam, especially territorial authorities who have a well-formed relationship and responsibilities towards their residents.
- 8. There is potential for downstream cultural sites to be considered as part of Policy provision for notification to Heritage New Zealand Pouhere Taonga of a heritage dam. This could be a simple expansion to the existing Policy provision.
- **9.** Dam safety risk needs to be avoided or mitigated; however, some options may not be feasible, and may be ineffective or impracticable. An additional best practicable option or action could be 'retreat'.
- **10.** It is important for a downstream Territorial Authority to be involved in any Action Plan associated with a dam that is classified as large, referable, dangerous, earthquake or flood-prone, that could impact on the area under a council's jurisdiction. Policy provision for this is recommended.
- **11.** Where works are required to manage risk, significant investment may be needed, alongside appropriate timeframes. Policy provision for appropriate timeframes for the mitigation measures and staged mitigations where necessary is recommended.
- **12.** We support the prioritisation of public safety and wellbeing of the environment and recommend an additional priority of critical infrastructure that is needed to meet legislation requirements for public health and safety, drinking and sanitation needs.

Introduction

- **13.** Staff from Hamilton City Council welcome the opportunity to provide feedback to the Waikato Regional Council's **Proposed Policy on Dangerous Dams, Earthquake-Prone Dams and Flood-Prone Dams**.
- **14.** We also thank Waikato Regional Council for providing us with an earlier draft in August 2023.
- **15.** We take a keen interest in how the policy is applied to all dangerous, earthquake and flood-prone dams that could impact Hamilton and its residents, either inside or outside of the City boundary.
- 16. Hamilton City has classified existing, and future 'large' dams located in the Northeast, Northwest and Mideast of the city. These are: Magellan Lake holding a volume of 31,000 m³ and potential for a dam toe differential greater than 4 metres under a 100 year ARI storm event; Te Wetini Dam in the Rotokauri area; and consents for a wetland and two new dams associated with the Ruakura Inland Port have recently been issued (where one of those dams has a toe to crest height of 4.4 metres, and a wetland volume to crest level of approximately 340,000 m³).
- **17.** Hamilton was also recently affected by the Alderton Dam in the Waipa District. This dam failure caused excessive flooding in Exeter Street (Glenview Hamilton), required a response, and caused property damage.
- **18.** This event was a demonstration of how appropriate controls and risk management are critical for public health and safety. Hamilton residents should not have to bear the risk of dam failure outside of the city's boundary.
- 19. Staff understand that classifiable dams are classified in accordance with Potential Impact Classification assessments. Risk, population, and property impacts are assessed, along with design parameters and exceedance of defined earthquake and flood thresholds. Definitions and Schedule 2 of the Building (Dam Safety) Regulations 2022 (in force May 2024) are used to categorise the degree of impact and risk, and if a dam would be described as dangerous, earthquake-prone, or flood-prone.
- **20.** Hamilton City Council supports measures taken to ensure the safety of the city through legislation and this Policy. Staff make recommendations that take into account how best to protect the public.

General Comments

Scope

- 21. The Policy scope states that it applies to Classifiable Dams (either 4 metres or more in height and holding 20,000 m³ or more; or 1 metre or more in height and retaining 40,000 m³ or more), or a Referable Dam as defined in the Regulations (not yet defined in either the Act or the Regulations).
- **22.** The only useful reference to Referable Dams is found in the 'Guide to Complying with the Dam Safety Regulations (Building Performance, November 2023)'. This states that Referable Dams are seen as "smaller dams that may still present a potential risk to public safety". These provisions are currently dormant, as regulations are required to define what constitutes a 'Referable Dam'.
- **23.** The Building (Dam Safety) Regulations were only released in 2022. There is no certainty that a regulation review is imminent. It would be useful for those planning to build a dam to be provided with more clarity in the Policy on what is expected from the Waikato Regional Council in the interim.
- **24.** It would also be useful if there was clarity on what would not be included in the scope of this Policy as it relates to natural hazards. For example, it could be feasible that a culvert block could dam water to the extent that it could meet the criteria of a large dam.

Principles

25. The Policy has two principles relating to communications i.e., communicating responsibilities of dam owners, and making information about safety risks of dangerous, earthquake prone or flood-prone dams publicly available.

- **26.** We consider that a key element missing from the Principles is that of collaboration with Territorial Authorities who have a significant role to play in flood management and protection of critical infrastructure, whatever the source of flooding is. It is important that messaging is not in conflict with other messaging and is helpful to the public. We recommend an added principle of collaboration with appropriate parties, which should include territorial authorities and mana whenua.
- **27.** Other principles that could be considered are:
 - The principle of working with other agencies e.g., civil defence and responses to changed status of a dam, such as in the event of impending high or intense rainfall.
 - Principles 3 and 4 are a repeat of legislated responsibilities under the Act. These could be redefined into principles such as:
 - ➤ Council will hold dam owners accountable for identifying, monitoring, reviewing, and reporting on dangerous, earthquake-prone and flood-prone dams, and will monitor compliance with the Act and regulations.
 - > Council will ensure that actions taken to avoid and mitigation the risk of dangerous, earthquakeprone and flood-prone dams are best practice.
 - Alternatively, the Policy could make references to the Act or regulation from which Principle 3 is derived of dam owner's responsibilities.
 - Priorities could also sit under Principles.

Council's Approach to Performing its Functions

- 28. We support policy provision for information on dam status i.e., keeping a register of dams, recording their status, and monitoring them. We also support notification of key stakeholders of information about a dangerous dam, especially territorial authorities who have a well-formed relationship and responsibilities towards its residents. Territorial authorities need to understand who and what could potentially be impacted in the event of a dam failure, and what mitigation actions may be required. Information should include the downstream catchment areas.
- **29.** The Policy provision for notification of Heritage New Zealand Pouhere Taonga of a heritage dam could be expanded to include notification of a dangerous dam, where significant cultural or historic sites downstream of a dam could be affected in the event of failure.

Working with Dam Owners

- **30.** Staff support the provisions for working with dam owners. In reference to an earlier point made about the need for collaboration, especially on messaging, this needs to be brought through to a policy provision.
- **31.** A policy provision should also be added about the use of a forum to discuss potential future risks to dam status e.g., upstream and downstream changes to geography or development, and who that forum is made up of and a high-level agenda.

Directing and Taking Action

32. In general, we strongly support the provisions for ensuring that risk is avoided or mitigated, and the listed potential actions. However, sometimes physical works may not be feasible and operational changes impracticable to manage dam risk e.g., in circumstances of climate change. Similar to recent legislation on climate change, an additional best practicable option or action could be 'retreat'.

- **33.** Council staff take a strong interest in events that can affect Hamilton e.g., the recent event of a dam failure in the Waipa District. Acceptable actions list development of emergency preparedness and response plans; and downstream measures to mitigate impacts. It will be important for a downstream Territorial Authority to be involved in any Action Plan associated with a dam that is classified as large, referable, dangerous, earthquake or flood-prone, that could impact on the area under Council's jurisdiction.
- **34.** The draft Policy states that where a dam is dangerous, a council may erect hoardings, fences, and warning notices. The Policy needs to provide for collaboration on the measure and messaging to be undertaken.
- **35.** The draft Policy states that when a dam owner is required to undertake works, that they must carry out the works within the stated timeframe. The Policy should state that the agreed solution and appropriate timeframe for the mitigation measures should be taken into account, and that provision is made for staged mitigations where necessary.

Waikato Regional Council's Priorities in Performing Functions

36. We support the prioritisation of public safety and wellbeing of the environment. We recommend that consideration of critical infrastructure is added to the list of priorities. This includes three waters infrastructure necessary to meet legislation requirements for public health and safety, drinking and sanitation needs.

Other Comments

37. The Policy does not state a policy review period and what might trigger an early review of the policy. It would be useful to add this.

Further Information and Hearings

- **38.** Should the Waikato Regional Council require clarification of the feedback from Hamilton City Council staff, or additional information, please contact **Rae Simpson** (Senior Planner Three Waters) on **07 838 6427**, email raewyn.simpson@hcc.govt.nz in the first instance.
- **39.** Hamilton City Council representatives would welcome the opportunity to discuss the content of this feedback in more detail with the Waikato Regional Council.
- **40.** Staff from Hamilton Council **do not** wish to be heard at the hearings.

Yours faithfully

Lance Vervoort

CHIEF EXECUTIVE

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