

Classification Screening Tools for Dams and Canals

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Ministry of Business, Innovation and Employment (MBIE)
Hīkina Whakatutuki – Lifting to make successful

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Information, examples, and answers to your questions about the topics covered here can be found on our website: www.mbie.govt.nz or by calling us free on 0800 24 22 43.

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Regulations

About the Regulations

The [Building \(Dam Safety\) Regulations 2022](#) set out a consistent, nationwide approach to dam safety. These rules are designed to help protect people, property, and the environment in the rare event of a dam failure.

Purpose of this resource

If you own a dam that meets the size thresholds (called a classifiable dam), you are required to assess and classify your dam based on the potential impact if it were to fail. This is known as the potential impact classification (PIC).

Your dam must be classified as one of the following:



To help with this process, the Ministry of Business, Innovation and Employment (MBIE) has developed this **screening tools** resource. These tools are intended to support owners, and technical practitioners determine whether a dam is likely to be 'low potential impact'. This resource is intended for dams and canals with a storage volume under 200,000 m³.

How the screening tools work

The screening tools are made up of easy-to-follow flow charts that can help dam owners and technical practitioners determine if their dam or canal is likely to be low impact.

They include:

- ✓ **Initial checks** (Flow chart 1 – dam or canal):
These ask simple questions about the dam’s height, storage volume, construction type, what it holds, and the surrounding land.
- ✓ **Follow-up checklists** (Flow charts 2 and 3 – dam or canal):
These go into more detail using the official rules to help decide the dam’s PIC – low, medium or high.





You can find:

- ✓ **flow charts for dams** in **Appendix A**
- ✓ **flow charts for canals** in **Appendix B**
- ✓ **a glossary of terms** in **Appendix C**.

Explanatory notes are also provided to accompany the flow charts appended to this resource. These notes provide a brief explanation of the background to the test applied by each question. When used, MBIE recommends that users keep a marked-up copy of the relevant flow charts showing the outcome of the screening process.

Information to support a dam classification

To determine a dam’s PIC you will need to collect the following initial information:

			
where the dam is located	the height of the dam	the volume of stored fluid it holds	brief notes about anything downstream , like homes, roads, or infrastructure.

MBIE has published the [Guide to Measuring and calculating the height and volume of agricultural dams](#). Sections 7.1 and 7.2 can assist users to determine the dam height and stored volume respectively.

MBIE’s [Checklist for Dam Owners: To support the development of a Potential Impact Classification assessment](#) provides a useful guide for the range of information needed for determining the PIC of a dam.

What to do next if your dam is likely to be classified as 'low potential impact'

If you believe your dam meets the criteria for a low PIC, you can classify it yourself under the Regulations. After doing so, you must:



have the classification audited and certified by a recognised engineer, and



obtain a dam safety certificate from that engineer.

Only the dam safety certificate needs to be submitted to your regional council (the regulator).

A recognised engineer may ask for more information to support a dam classification.

What if the screening tool doesn't confirm a low PIC?

If the screening tools in this Resource do not clearly indicate a low PIC, further steps may be needed:

- You may need to engage a technical practitioner or engineer to carry out a more detailed assessment.
- The technical practitioner or engineer might:
 - request more supporting information
 - apply judgement based on experience
 - complete more detailed assessment and/or modelling
 - conduct a site inspection to better understand the specifics of the dam.

In practice, many low PIC dams will be flagged as 'requiring further assessment' based on one or more of the screening tool's criteria. Indicators, such as the distance to nearby houses are intentionally conservative and should not be treated as absolute thresholds. It is important that experienced professionals use their judgement alongside the tool.

Register of recognised engineers (PIC)

Engineering New Zealand maintains a register of recognised engineers (PIC) who are qualified to undertake dam classification audits.

[Find a registered engineer](#)

Limitations

The screening tools in this resource are made for earth dams up to 15 metres high and canal sections that are up to 10 metres high and store less than 200,000 cubic metres of water.

These tools help assess whether a dam or canal section is likely to have a low potential impact. They are designed to work across many types of landscapes, but they might not cover every unique situation. In those cases, help from a technical practitioner may be needed.

While the tools give a good starting point, there may still be some uncertainty—for example, due to special features of the dam, what it holds, or the surrounding area. A recognised engineer, who audits and certifies the classification, should be able to identify and deal with these uncertainties.

Acknowledgements

These screening tools have been developed with the expertise and input of industry professionals.

We gratefully acknowledge and thank all those who contributed to their design and development.

Please send any comments or suggestions regarding these tools to: building@mbie.govt.nz

Useful references

[Building \(Dam Safety\) Regulations 2022](#)

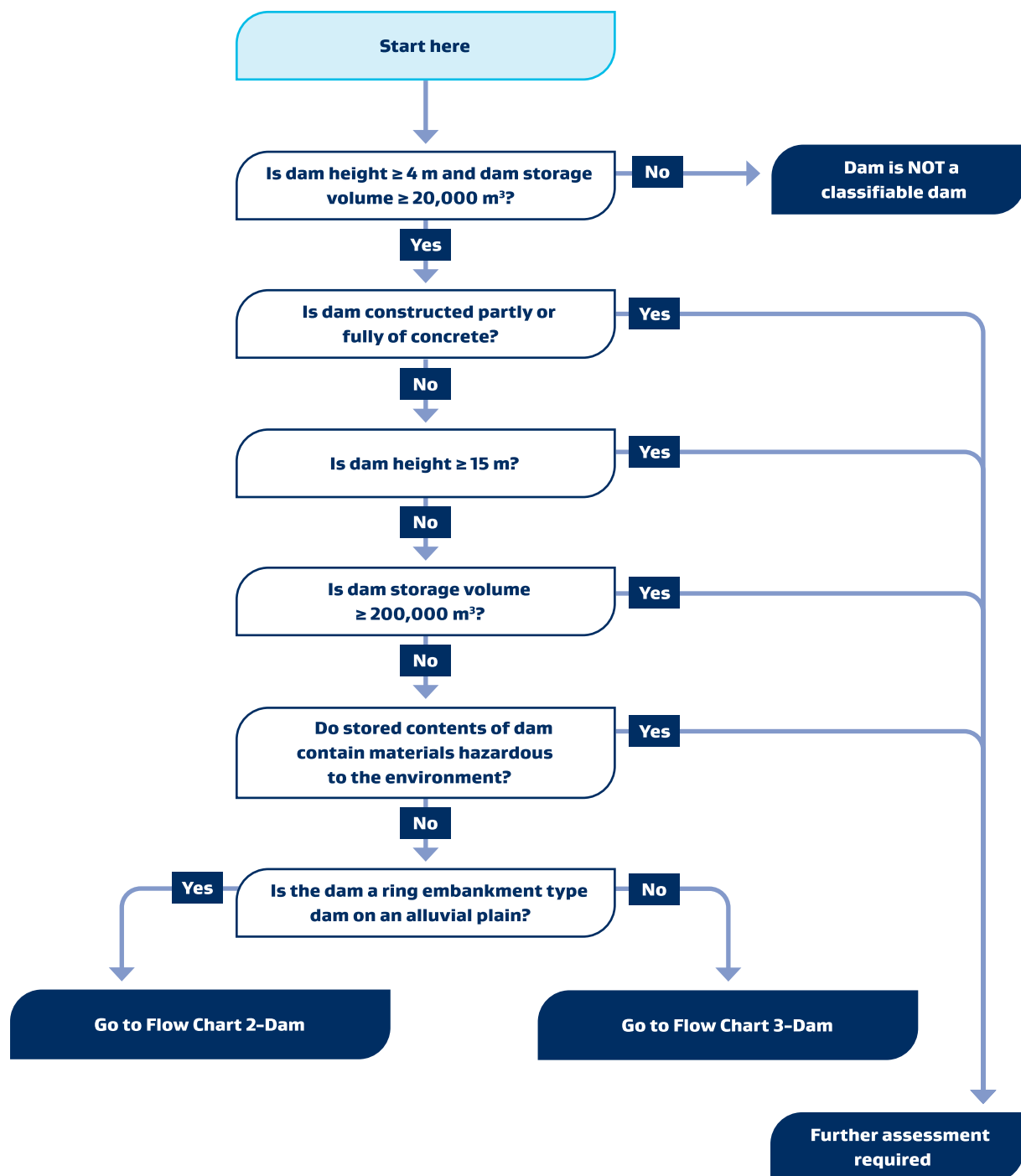
[Guide to complying with the Dam Safety Regulations](#)

[Measuring and calculating the height and volume of agricultural dams](#)

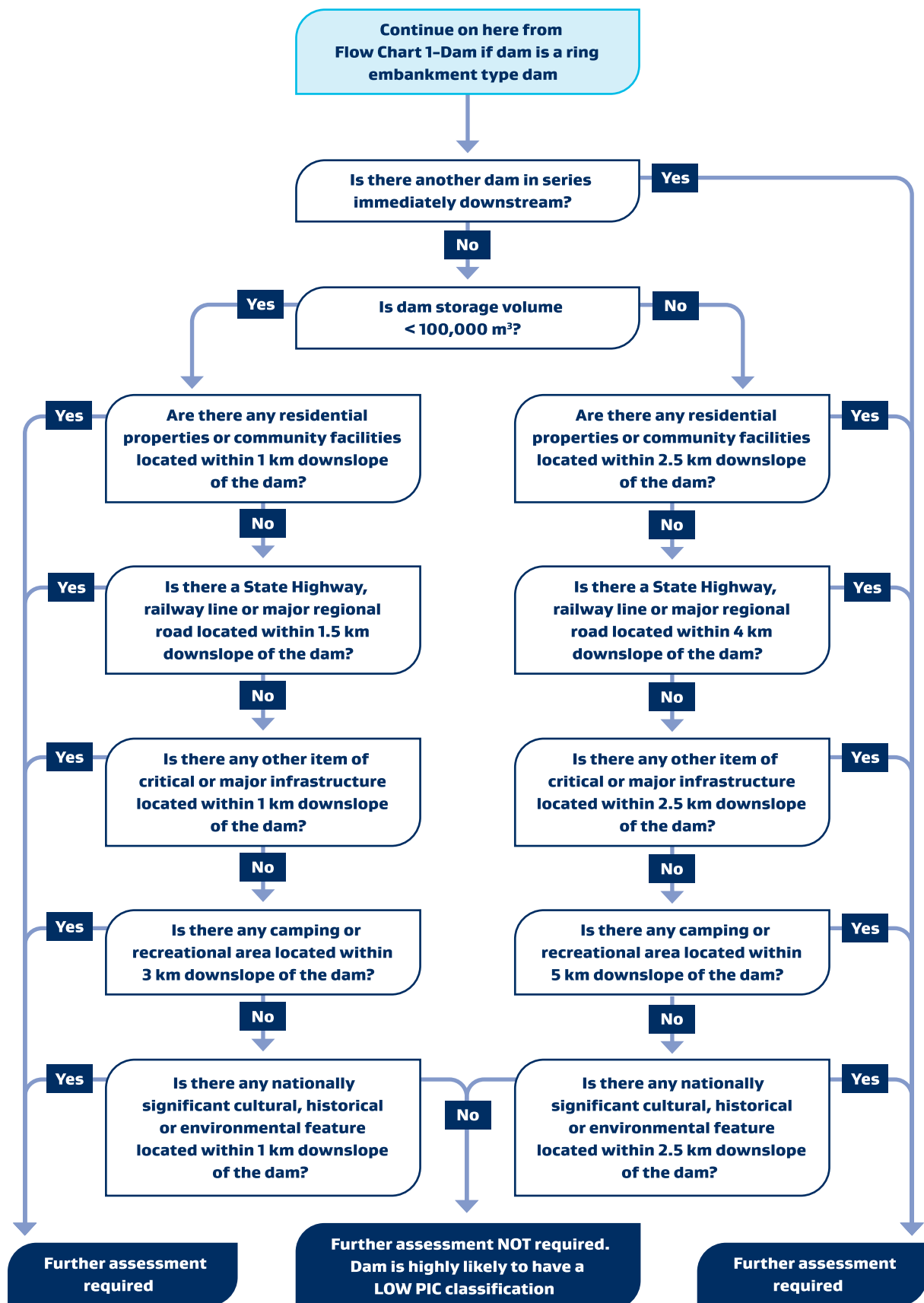
[Checklist for Dam Owners: To support the development of a Potential Impact Classification assessment](#)

Appendix A – PIC screening tool for dams

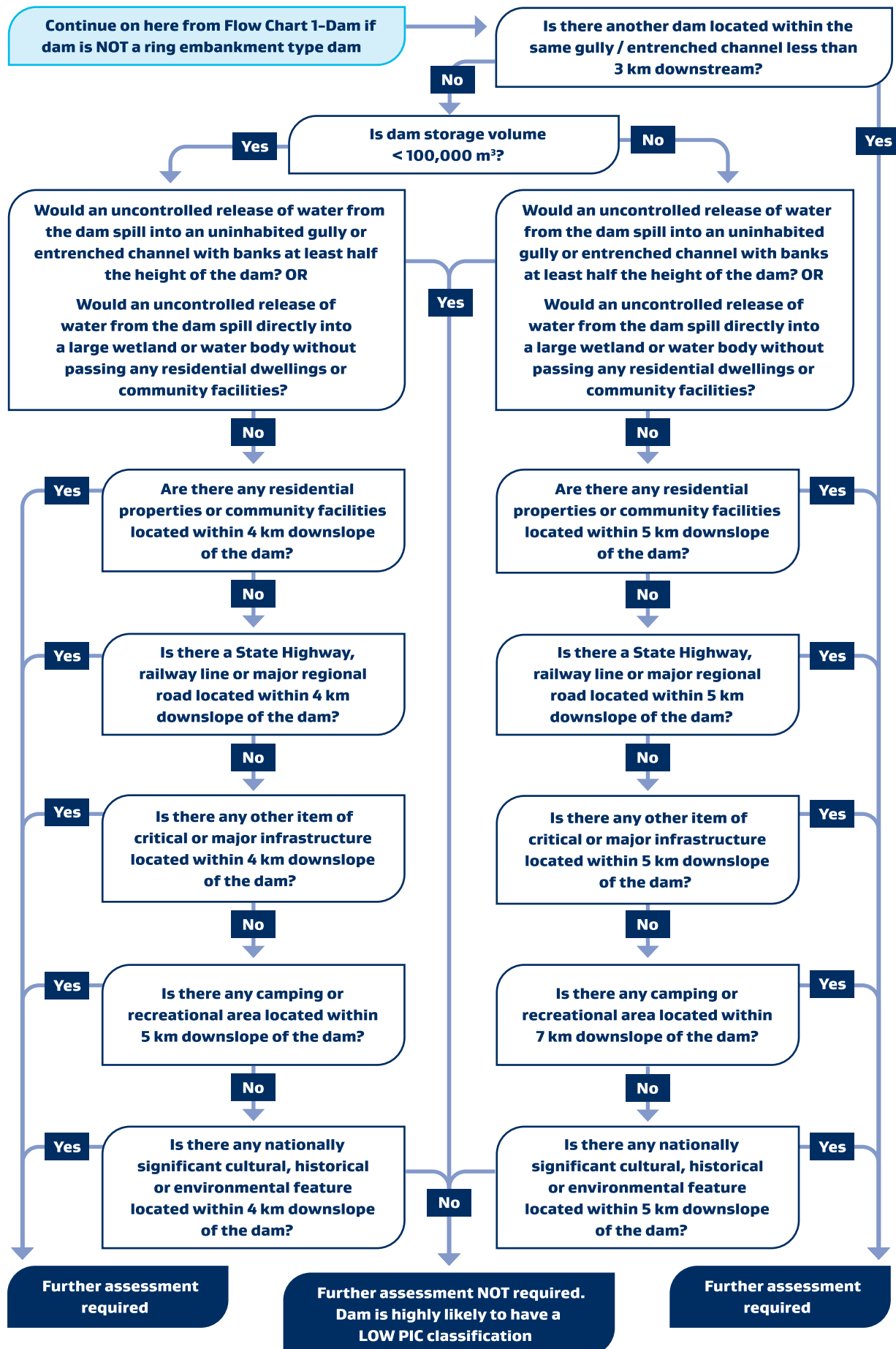
FLOW CHART 1-Dam



FLOW CHART 2-Dam



FLOW CHART 3-Dam



Explanatory notes on PIC screening tool for dams

Table A1 – Flow chart 1–Dam

Questions	Explanatory Comments
Is dam height ≥ 4 m and dam storage volume $\geq 20,000$ m ³ ?	This is the test from the Regulations as to whether a dam is classifiable or not. MBIE's Guide – Measuring and calculating the height and volume of agricultural dams provides a simplified method for measuring the height and storage volume of dams.
Is the dam constructed partly or fully of concrete?	If a concrete dam fails, it fails much more rapidly than an earth-fill dam of the same size and storage volume. A concrete dam therefore poses a much greater potential hazard than an earth-fill dam.
Is the dam height ≥ 15 m?	Taller dams usually pose a greater potential impact. Based on the data used to develop this tool, dams 15 metres or higher are less likely to be classified as low potential impact.
Is the dam storage volume $\geq 200,000$ m ³ ?	Larger storage volumes usually increase the potential impacts. Dams storing less than 200,000 m ³ are more likely to be classified as low impact.
Do stored contents of the dam contain materials hazardous to the environment?	If a dam contains materials that could seriously harm the environment, it is more likely to be classified as at least medium impact. Additional judgment is needed to confirm this.
Is the dam a ring embankment type dam on an alluvial plain?	Dam-break floods from ring embankment dams on alluvial plains tend to spread out and lose intensity quickly, reducing hazards downstream. In contrast, floods from dams across gullies stay more confined, causing the hazard to persist over a longer distance.

Table A2 – Flow chart 2-Dam (if dam is a ring embankment type dam)

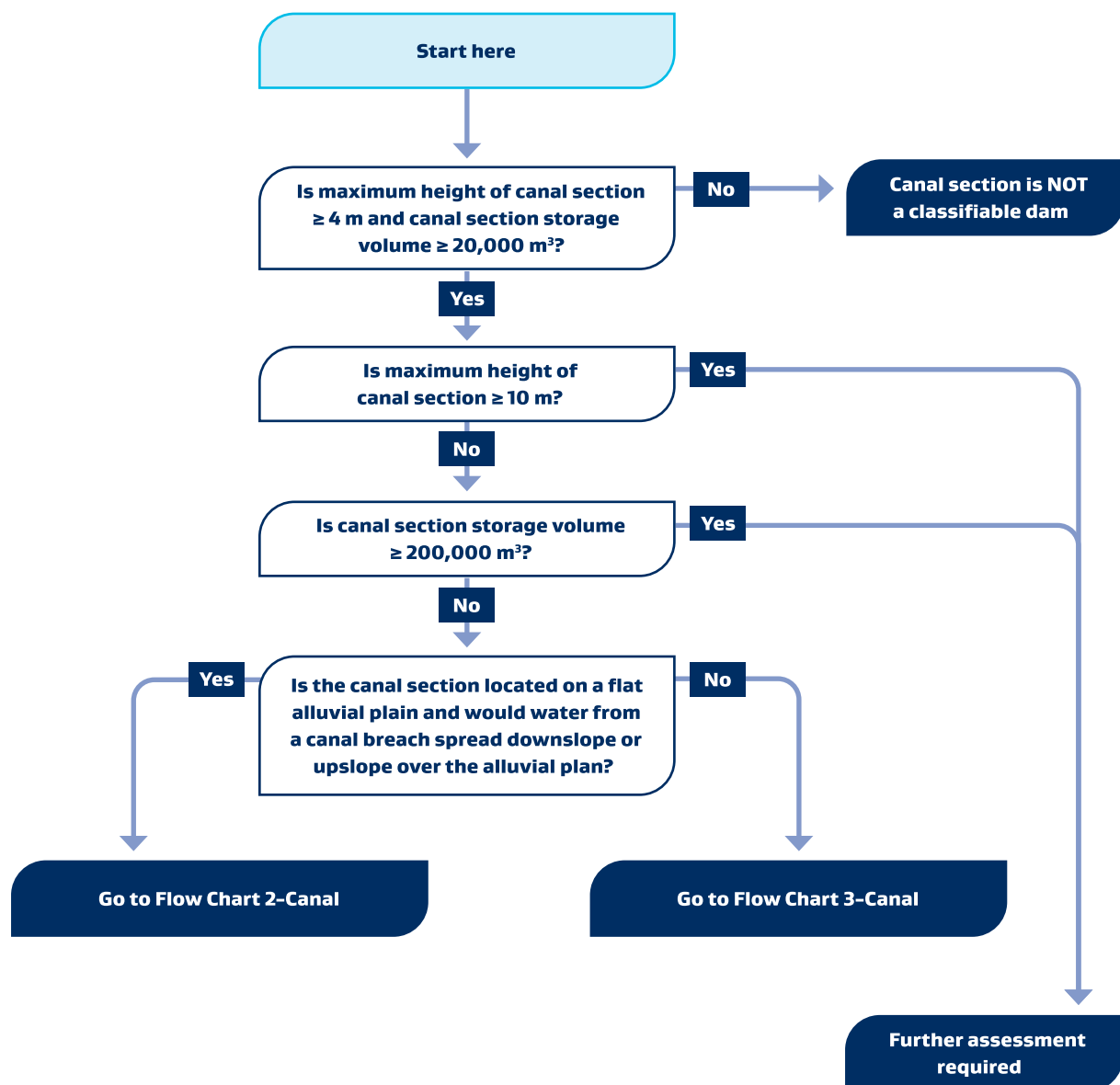
Questions		Explanatory Comments
Is there another dam directly downstream?		If multiple dams are in a row, a failure could trigger others, increasing the hazard. Further judgement and assessment may be needed in such cases.
Is dam storage volume <100,000 m ³ ?		Dams under 100,000 m ³ usually cause less flooding than larger dams because the water attenuates more rapidly. That's why the flow chart treats smaller and larger dams differently.
Dams with storage volume <100,000 m³	Dams with storage volume ≥100,000 m³	
Are there any residential properties or community facilities located within 1 km downslope of the dam?	Are there any residential properties or community facilities located within 2.5 km downslope of the dam?	<p>This test reflects the 'community' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger dams can cause floods that are more likely to affect buildings further downstream.</p>
Is there a State Highway, railway line or major regional road located within 1.5 km downslope of the dam?	Is there a State Highway, railway line or major regional road located within 4 km downslope of the dam?	<p>This test reflects the potential hazard posed by a dam-break flood to vehicles and their occupants, and railway lines.</p> <p>The different distance limits are used because larger dams can cause floods that are more likely to affect transport links further downstream.</p>
Is there any other item of critical or major infrastructure located within 1 km downslope of the dam?	Is there any other item of critical or major infrastructure located within 2.5 km downslope of the dam?	<p>This test reflects the 'critical and major infrastructure' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger dams can cause floods that are more likely to affect infrastructure further downstream.</p>
Is there any camping or recreational area located within 3 km downslope of the dam?	Is there any camping or recreational area located within 5 km downslope of the dam?	<p>This test reflects the potential hazard posed by a dam-break flood to people temporarily occupying camping and recreational areas, particularly at night.</p> <p>The different distance limits are used because larger dams can cause floods that are more likely to affect recreational areas further downstream.</p>
Is there any nationally significant cultural, historical or environmental feature located within 1 km downslope of the dam?	Is there any nationally significant cultural, historical or environmental feature located within 2.5 km downslope of the dam?	<p>This test reflects the 'cultural' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger dams can cause floods that are more likely to affect features further downstream.</p>

Table A3 – Flow chart 3-Dam (if dam is NOT a ring embankment type dam)

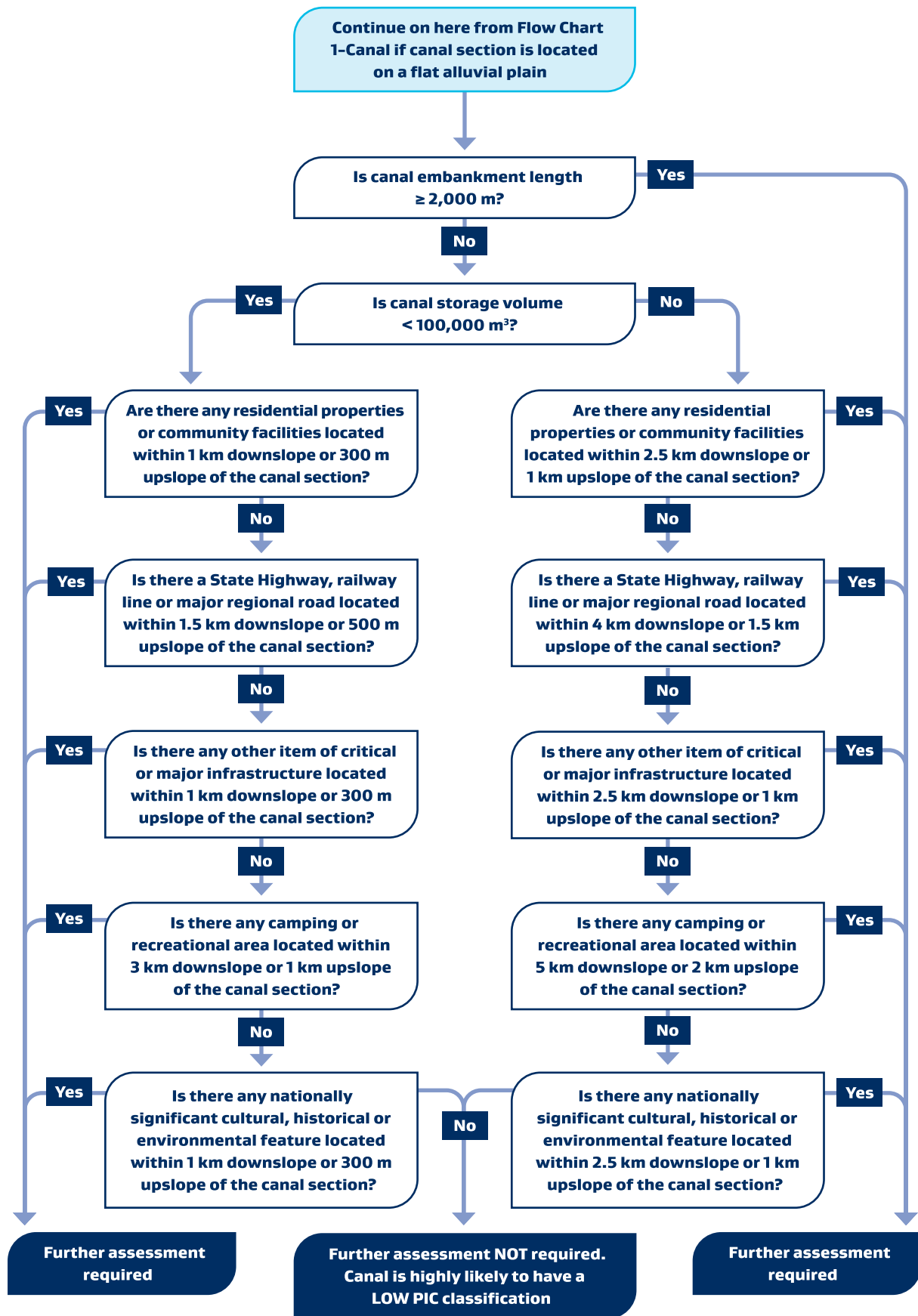
Questions		Explanatory Comments
Is there another dam located within the same gully / entrenched channel less than 3 km downstream?		If multiple dams are in a row, a failure could trigger others, increasing the hazard. Further judgement and assessment may be needed in such cases.
Is dam storage volume <100,000 m ³ ?		Dams under 100,000 m ³ usually cause less flooding than larger dams because the water attenuates more rapidly. That's why the flow chart treats smaller and larger dams differently.
Dams with storage volume <100,000 m³	Dams with storage volume ≥100,000 m³	
Would an uncontrolled release of water from the dam spill into an uninhabited gully with banks at least half the height of the dam, or into a large wetland or water body without passing any residential dwellings or community facilities?		If the flood is likely to release into an uninhabited deep channel or go straight into a large water body, it is less likely to pose a significant risk to people or property. In these cases, the potential impact is typically low, and a detailed assessment is often not needed.
Are there any residential properties or community facilities located within 4 km downslope of the dam?	Are there any residential properties or community facilities located within 5 km downslope of the dam?	This test reflects the 'community' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger dams can cause floods that are more likely to affect buildings further downstream.
Is there a State Highway, railway line or major regional road located within 4 km downslope of the dam?	Is there a State Highway, railway line or major regional road located within 5 km downslope of the dam?	This test reflects the potential hazard posed by a dam-break flood to vehicles and their occupants, and railway lines. The different distance limits are used because larger dams can cause floods that are more likely to affect transport links further downstream.
Is there any other item of critical or major infrastructure located within 4 km downslope of the dam?	Is there any other item of critical or major infrastructure located within 5 km downslope of the dam?	This test reflects the 'critical and major infrastructure' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger canals can cause floods that are more likely to affect infrastructure further downstream.
Is there any camping or recreational area located within 5 km downslope of the dam?	Is there any camping or recreational area located within 7 km downslope of the dam?	This test reflects the potential hazard posed by a dam-break flood to people temporarily occupying camping and recreational areas, particularly at night. The different distance limits are used because larger dams can cause floods that are more likely to affect recreational areas further downstream.
Is there any nationally significant cultural, historical or environmental feature located within 4 km downslope of the dam?	Is there any nationally significant cultural, historical or environmental feature located within 5 km downslope of the dam?	This test reflects the 'cultural' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger dams can cause floods that are more likely to affect features further downstream.

Appendix B – PIC screening tool for canals

Flow chart 1-Canal



Flow chart 2-Canal



Flow chart 3-Canal



Explanatory notes on PIC screening tool for canals

Table B1 – Flow chart 1–Canal

Questions	Explanatory Comments
Is maximum height of canal section ≥ 4 m and canal section storage volume $\geq 20,000$ m ³ ?	This is the test from the Regulations as to whether a canal is classifiable or not. MBIE's Guide – Measuring and calculating the height and volume of agricultural dams provides a simplified method for measuring the height and storage volume of dams.
Is maximum height of canal section ≥ 10 m?	Taller canals usually pose a greater potential impact. Based on the data used to develop this tool, canals 10 metres or higher are less likely to be classified as low potential impact.
Is canal section storage volume $\geq 200,000$ m ³ ?	Larger storage volumes usually increase the potential impacts. Canals storing less than 200,000 m ³ are more likely to be classified as low impact.
Is the canal section located on a flat alluvial plain and would water from a canal breach spread downslope or upslope over the alluvial plain?	<p>If a canal on a flat alluvial plain fails, the floodwater may spread either uphill or downhill depending on which side breaks.</p> <ul style="list-style-type: none"> • A break on the uphill side causes water to pool and spread along the canal. • A break on the downhill side causes water to spread out and flow downhill, like a ring embankment dam. <p>If the canal crosses a gully:</p> <ul style="list-style-type: none"> • A break on the upstream side is likely to result in water pooling in the gully and slowly drain through a culvert. • A break on the downstream side is likely to send water flowing down the gully.

Table B2 – Flow chart 2-Canal (if canal section is located on a flat alluvial plain)

Questions		Explanatory Comments
Is the canal embankment longer than 2,000 m?		Long canals can have varying heights, which may change the level of hazard along their length. Further judgement and assessment may be required to check for these changes.
Is canal storage volume <100,000 m ³ ?		Canals with less storage are likely to attenuate more quickly downstream than a larger canal. That's why the flow chart splits into two paths based on volume.
Canal sections with storage volume <100,000 m³	Canal sections with storage volume ≥100,000 m³	
Are there any residential properties or community facilities located within 1 km downslope or 300 m upslope of the canal section?	Are there any residential properties or community facilities located within 2.5 km downslope or 1 km upslope of the canal section?	<p>This test reflects the 'community' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger canals can cause floods that are more likely to affect buildings further downstream.</p>
Is there a State Highway, railway line or major regional road located within 1.5 km downslope or 500 m upslope of the canal section?	Is there a State Highway, railway line or major regional road located within 4 km downslope or 1.5 km upslope of the canal section?	<p>This test reflects the potential hazard posed by a dam-break flood to vehicles and their occupants, and railway lines.</p> <p>The different distance limits are used because larger canals can cause floods that are more likely to affect transport links further downstream.</p>
Is there any other item of critical or major infrastructure located within 1 km downslope or 300 m upslope of the canal section?	Is there any other item of critical or major infrastructure located within 2.5 km downslope or 1 km upslope of the canal section?	<p>This test reflects the 'critical and major infrastructure' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger canals can cause floods that are more likely to affect infrastructure further downstream.</p>
Is there any camping or recreational area located within 3 km downslope or 1 km upslope of the canal section?	Is there any camping or recreational area located within 5 km downslope or 2 km upslope of the canal section?	<p>This test reflects the potential hazard posed by a dam-break flood to people temporarily occupying camping and recreational areas, particularly at night.</p> <p>The different distance limits are used because larger canals can cause floods that are more likely to affect recreational facilities further downstream.</p>
Is there any nationally significant cultural, historical or environmental feature located within 1 km downslope or 300 m upslope of the canal section?	Is there any nationally significant cultural, historical or environmental feature located within 2.5 km downslope or 1 km upslope of the canal section?	<p>This test reflects the 'cultural' damage category in Table 1 of Schedule 2 of the Regulations.</p> <p>The different distance limits are used because larger canals can cause floods that are more likely to affect features further downstream.</p>

Table B3 – Flow chart 3-Canal (if canal section is NOT located on a flat alluvial plain)

Questions		Explanatory Comments
Is canal storage volume <100,000 m ³ ?		Canals with less storage are likely to attenuate more quickly downstream than a larger canal. That's why the flow chart splits into two paths based on volume.
Canal sections with storage volume <100,000 m³	Canal sections with storage volume ≥100,000 m³	
Would an uncontrolled release of water from the dam spill into an uninhabited gully with banks at least half the height of the dam, or into a large wetland or water body without passing any residential dwellings or community facilities?		If the flood is likely to release into an uninhabited deep channel or go straight into a large water body, it is less likely to pose a significant risk to people or property. In these cases, the potential impact is typically low, and a detailed assessment is often not needed.
Are there any residential properties or community facilities located within 4 km downslope or 1.5 km upslope of the canal section?	Are there any residential properties or community facilities located within 5 km downslope or 2 km upslope of the canal section?	This test reflects the 'community' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger canals can cause floods that are more likely to affect buildings further downstream.
Is there a State Highway, railway line or major regional road located within 4 km downslope or 1.5 km upslope of the canal section?	Is there a State Highway, railway line or major regional road located within 5 km downslope or 2 km upslope of the canal section?	This test reflects the potential hazard posed by a dam-break flood to vehicles and their occupants, and railway lines. The different distance limits are used because larger canals can cause floods that are more likely to affect transport links further downstream.
Is there any other item of critical or major infrastructure located within 4 km downslope or 1.5 km upslope of the canal section?	Is there any other item of critical or major infrastructure located within 5 km downslope or 2 km upslope of the canal section?	This test reflects the 'critical and major infrastructure' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger canals can cause floods that are more likely to affect infrastructure further downstream.
Is there any camping or recreational area located within 5 km downslope or 2 km upslope of the canal section?	Is there any camping or recreational area located within 7 km downslope or 2 km upslope of the canal section?	This test reflects the potential hazard posed by a dam-break flood to people temporarily occupying camping and recreational areas, particularly at night. The different distance limits are used because larger canals can cause floods that are more likely to affect recreational areas further downstream.
Is there any nationally significant cultural, historical or environmental feature located within 4 km downslope or 1.5 km upslope of the canal section?	Is there any nationally significant cultural, historical or environmental feature located within 5 km downslope or 2 km upslope of the canal section?	This test reflects the 'cultural' damage category in Table 1 of Schedule 2 of the Regulations. The different distance limits are used because larger canals can cause floods that are more likely to affect features further downstream.

Appendix C

Glossary

Note: References to 'Regulations' refer to the Building (Dam Safety) Regulations 2022

Term	Definition and Explanation
Alluvial plain	A flat land area formed by the deposit of sediment carried by a river.
Canal	A long, narrow waterway constructed to convey water from one location to another.
Canal invert	As defined in regulation 7, canal invert means the lowest point of the inside of the canal structure which holds water or fluid.
Canal section	A discrete section of a long canal between hydraulic control points (control weirs).
Cascade failure	The 'domino' effect of the failure of an upstream dam causing overtopping and the consequential failure of downstream dam (or dams).
Classifiable dam	In accordance with regulation 5, for the purposes of the Building Act, classifiable dam means a dam that – a) has a height of 4 or more metres and stores 20,000 or more cubic metres of water or other fluid.
Community facility	As defined in regulation 3, community facility means any of the following: a) an early childhood education and care centre or registered school within the meaning of section 10 of the Education and Training Act 2020; b) the premises of an institution within the meaning of section 10 of the Education and Training Act 2020; c) a rest home or a residential disability care institution (within the meaning of section 58(4) of the Health and Disability Services (Safety) Act 2001); d) a building that is used to provide health or disability services as defined in section 5 of the Health and Disability Services (Safety) Act 2001 (other than a hospital building referred to in paragraph (b) of the definition of critical or major infrastructure); e) a marae, a community hall, or an event centre.
Crest	Section 7 of the Building Act defines a crest, in relation to a dam, as the uppermost surface of a dam, not taking into account any camber allowed for settlement, or any curbs, parapets, guard rails, or other structures that are not part of the water-retaining structure; and for the avoidance of doubt, any freeboard is part of the water-retaining structure for the purposes of this definition.

Term	Definition and Explanation
Critical or major infrastructure	<p>In accordance with regulation 3, a critical or major infrastructure means any of the following:</p> <ul style="list-style-type: none"> a) a building or other infrastructure operated or used by a lifeline utility within the meaning of section 4 of the Civil Defence Emergency Management Act 2002. Examples include electricity, water, sewage, gas, telecommunications and rail infrastructure. Private utility connections (e.g. electrical, water or gas) are not intended to be included as critical or major infrastructure. b) a hospital building that is likely to be needed in an emergency (within the meaning of section 4 of the Civil Defence Emergency Management Act 2002) to provide— <ul style="list-style-type: none"> i. emergency medical services; or ii. ancillary services that are essential for the provision of emergency medical services; c) a building that is used to provide emergency response services (for example, policing, fire, ambulance, or rescue services); d) buildings or infrastructure that are essential to the containment of a hazardous substance (as defined by section 2 of the Hazardous Substances and New Organisms Act 1996); e) the dam, another dam, or flood protection works if the service the dam, other dam, or flood protection works provide is critical to the community (for example, energy supply, drinking water storage, wastewater treatment, flood detention dams) and that service cannot be reasonably provided by alternative means.
Dam	A barrier that is constructed or modified to divert, store or hold back water or another fluid.
Damage	The potential adverse effects of a dam failure on people, property and the environment.
Dam classification certificate	<p>The certificate which records the potential impact classification of a dam. This certificate must be audited and certified by a recognised engineer (PIC) before being submitted to the Regulator.</p> <p>The certificate contains:</p> <ul style="list-style-type: none"> • information about the dam • the hazard (PIC) classification of the dam • information about the dam owner • the certificate of the recognised engineer (to be appended) <p>A template for the dam classification certificate is available from https://www.building.govt.nz/assets/Uploads/managing-buildings/building-safety/dam-classification-certificate.pdf</p>
Dam failure	The uncontrolled release of the contents of a reservoir through a structural failure of the dam or an associated structure.

Term	Definition and Explanation
Dam owner	<p>For the purposes of the Building Act and Regulations, the 'owner of the dam' is the person who legally owns the dam. The Building Act states that it is the 'owner of a dam' who must classify the dam, provide the regional authority with the classification and certificate, the dam safety assurance programme, and the annual dam compliance certificate. This is in contrast to other provisions of the Building Act that apply to 'an owner'.</p> <p>There are a variety of different scenarios when it comes to dam ownership. Often the landowner will also be the dam owner, however this will not always be the case. In the majority of cases, it should be apparent who the owner(s) of a dam is. If the owner of the dam is not the same person as the owner of the land the dam is located on, there will likely be a record of this. Generally, where multiple people own the dam, they will collectively be the 'dam owner'.</p> <p>The definition of an 'owner' in section 7 of the Building Act does not stretch to include the 'owner of the dam'. The 'owner of the dam' for the purpose of the Building Act and Regulations is the person who legally owns the physical dam itself.</p>
Dam-break flood	The flood resulting from the uncontrolled release of the contents of a reservoir impounded by a dam due to a breach failure of that dam.
Hazard	A source of potential harm or a situation with the potential to cause loss or damage.
Height of dam	A dam's height must be measured for the purposes of regulation 5 in accordance with section 133B of the Building Act. Refer to section 7.2 of the MBIE document 'Guide to complying with the Dam Safety Regulations'.
Potential impact classification (PIC)	A system of classifying dams according to the incremental consequences of dam failure, so that requirements for a dam safety assurance programme may be prioritised based on risk. Note: The Building (Dam Safety) Regulations 2022 outline prescribed criteria and examples as a minimum standard for the determination of a dam's potential impact classification.
Recognised engineer (PIC)	A recognised engineer (PIC) is a Chartered Professional Engineer and experienced dam safety technical practitioner who has been assessed by the Engineering Registration Authority for Chartered Professional Engineers as having the requisite knowledge and skills to audit and certify Potential Impact Classifications of dams.
Regulator	Under section 133C of the Building Act, the Regulator is the regional authority in whose region a dam is located.

Term	Definition and Explanation
Sites of historical or cultural significance	<p>Sites of historical or cultural significance means:</p> <ul style="list-style-type: none"> a) any of the following that forms a part of the historic or cultural heritage of Aotearoa New Zealand, which is listed on the New Zealand Heritage List/Rārangī Kōrero and that lies within the territorial limits of Aotearoa New Zealand: <ul style="list-style-type: none"> i. land, including an archaeological site, a cemetery, or urupā (or part of an archaeological site, cemetery, or urupā) ii. a building or structure (or part of a building or structure) iii. any combination of land, buildings, structures, or associated buildings or structures (or parts of buildings, structures, or associated buildings or structures); and b) includes anything that is in or fixed to land described in the bullet points above. <p>This definition aligns with the Heritage New Zealand Pouhere Taonga Act 2014.</p> <p>The intent is that only historical or cultural sites that have already been identified or designated as heritage sites are considered, rather than seeking out or introducing ones.</p> <p>Some examples of historical places or sites include: locations of important events, whaling station sites, battlefields, historic roads, wāhi tapu, wāhi tupuna, goldmining sites, boundary markers, coastal defences, archaeological sites, and historic sites of scientific value (eg palaeontological sites).</p> <p>Historical areas are areas of land which contain an inter-related group of historic sites, buildings, structures and/or sites that contribute towards an understanding and appreciation of Aotearoa/New Zealand's history and cultures. Examples include historic streets, historic towns, and rural historic environments.</p> <p>Heritage New Zealand has a list of Aotearoa/New Zealand's significant heritage places, including National Historic Landmarks. The list can be accessed from their website, Aotearoa New Zealand's significant heritage places.</p> <p>The Department of Conservation manages a range of historic sites around Aotearoa/New Zealand. A register of these sites can be found on their website, National Register of heritage sites managed by DOC.</p>
Stored volume	<p>Stored water or other fluid that is retained by a dam. Only water or other fluid which is held above ground level is considered to be stored water.</p>
Technical Practitioner (dam safety)	<p>An individual who has the knowledge and skills necessary to prepare PICs and DSAPs. They may not be a recognised engineer and therefore are not able to audit or certify PICs or DSAPs.</p>



Te Kāwanatanga o Aotearoa
New Zealand Government