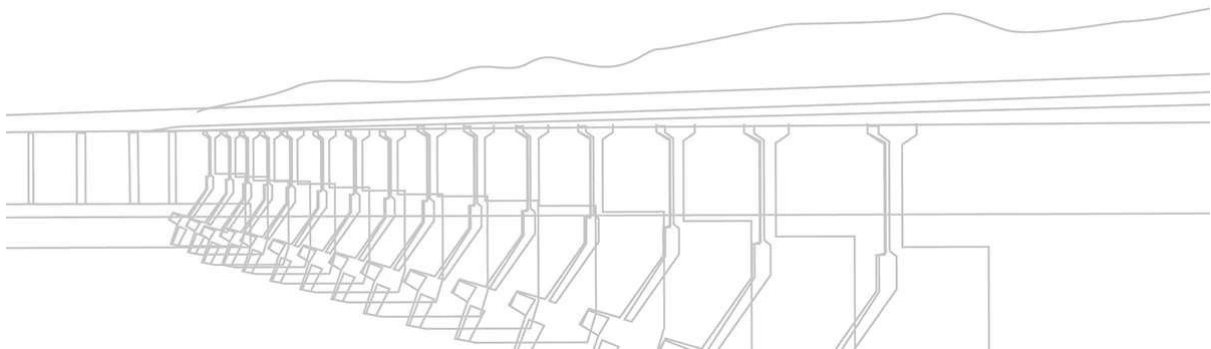


[View in browser](#)**Dams Safety**

Dams Safety Focus

**31 October 2022**

Message from the CEO

The first batch of [risk reports](#) for declared dams is due to be completed by the 31 December 2022. These reports are a legal requirement, and will be an important resource, prepared by a professional engineer, to identify improvements that need to be made to your dam to ensure its ongoing safety. Please inform Dams Safety NSW as soon as possible if your dam is presenting a risk above the Safety Threshold.

Congratulations to everyone who has completed our online training course 'Surveillance of embankment dams – routine inspections'. Completing the course is an excellent way to begin your journey to becoming a competent dam inspector, particularly when combined with a formal field competency assessment. For a

limited time, Dams Safety NSW is offering 50% off the cost of competency assessments. Read more about the offer below.

Finally, I am pleased to announce the appointment of Paul O'Connor and Ian Landon-Jones to the Dams Safety NSW Board, starting 1 November 2022. You can read all about their expertise in this edition. I would also like to take this opportunity to thank both outgoing Board members, Ross Carter and Alex Fisher for their valued direction and guidance as inaugural members in establishing Dams Safety NSW.

Chris Salkovic
CEO, Dams Safety NSW



Above: Paul O'Connor, incoming DSNSW Chair from 1 November 2022.



Above: Ian Landon-Jones, new DSNSW board member from 1 November 2022.

Dams Safety NSW welcomes a new Chair and board member

Dams Safety NSW is pleased to welcome Paul O'Connor as the new Chair of Dams Safety NSW, and Ian Landon-Jones as a new board member. Paul is an experienced governance leader and former federal safety regulator, passionate about the prevention of harm. He cares deeply about communities being safe and confident, well prepared for risk and uncertainty. Paul has an outstanding record of achievement in delivering public value as a CEO and non-executive director. He is a Fellow of the Australian Institute of Company Directors, a Fellow of the Governance Institute of Australia and, a national Fellow of the Institute of Public Administration Australia.

Ian Landon-Jones is a civil engineer, project director, senior executive and director with over 40 years' experience in the water industry, and more than 20 years in the implementation of regulation. He has expertise in dam safety management, asset management, design and delivery of major infrastructure, mining impacts on assets, emergency management, financial management and policy development. His senior executive and board roles have included General Manager Dam Safety and Technical Director for WaterNSW, Chair of the Interim Dam Safety Advisory Committee, Chair and Board member of the Australian National Committee on Large Dams. He currently serves as a member of the hydro-mechanical and earthquake committees of the International Commission on Large Dams. He was a member of the former NSW Dams Safety Committee for 15 years.

Do you, or your staff, need dam surveillance training?



Dams Safety NSW's online training course, '[Surveillance of embankment dams - routine inspections](#)', aims to help NSW dam owners understand the activities involved in conducting routine visual inspections of embankment dams.

DSNSW has collaborated with TAFE NSW to deliver the three-hour online course available now on [TAFE NSW's online learning platform](#).

This non-accredited course is aimed at anyone responsible for inspecting embankment dams in NSW, but is particularly for those who inspect embankment dams declared by Dams Safety NSW. Declared dams are those that pose a potential risk to life downstream, infrastructure, and/or the environment.

We recommend participants have at least six months' experience inspecting dams before attempting the course.

COURSE COST: \$210

[CLICK HERE TO ENROL](#)

Register NOW to be assessed for competency and receive 50% off the fee

After successfully completing the online dam surveillance course, and provided you work for an organisation with a declared dam in NSW, you can choose to be assessed for competency against the National Water Training Package unit of competency 'NWPCAD011 - inspect and report on embankment dam safety', for an additional fee.

The competency assessment fee is normally \$500 per person (including GST), but eligible declared dam owners and their employees who submit an expression of interest by **31 January 2023** will receive a reduced rate of **\$250 per person**.

Contact Dams Safety NSW for more information about eligibility requirements for competency assessments by emailing us at info@damsafety.nsw.gov.au.

What steps should dam owners take when high rainfall is predicted?

The Bureau of Meteorology is predicting high rainfall for the east coast of Australia in the coming months. There are some key steps that dam owners should take to prepare their dams and their downstream communities:

- Make sure you - and all of your staff - are familiar with your dam's emergency plan. Everyone should know what their responsibilities are in an emergency.
- Ensure that your dam emergency plan has the correct, up-to-date contact details.
- Ensure that your local community is aware of, and understands, your dam safety management practices. Sharing information about dam management practices helps to give the community more confidence about their safety.
- If you require emergency help, the **NSW SES can be contacted on 132 500**.
- If a serious incident occurs at, or is related to, a declared dam you must report it to **Dams Safety NSW as soon as possible by calling 0403 681 645** (24 hours/7 days a week). You must also complete and submit the [online Incident reporting form](#) no more than 72 hours after the incident, even if you have already called us to report it.

Go to [BOM Flood Watch](#) for up-to-date flood warning information.

Conduct a visual inspection of your dam



If you own a detention or retarding basin with a 'trash rack' (usually a metal structure that prevents debris such as branches and rubbish, from entering the intake of the dam), check and clear it regularly, particularly before a heavy rain event.

During and after flooding events you may need to conduct visual inspections of your dam. Walk around your dam when it is empty and when it is full. Look carefully and note any damage that could lead to failure. Two big causes of embankment dam failure are erosion and seepage.

Ensure spillways and outlets can operate correctly the next time it rains. If your spillway is too small or blocked and your dam overtops, this can lead to erosion and failure of the embankment. A well-maintained crest with well-maintained shallow-rooted vegetation (multi-species grass cover) or suitably sized rock is the best way to prevent erosion of an earth dam. Remove trees growing on embankments before they get too big so they don't fall over and take out large chunks of the embankment.

It's not impossible - even with all the rain we have been having - to check for unusual green patches. This can suggest the presence of seepage. All dams leak, but if the seepage is discoloured it may mean your embankment is being slowly removed. The lead-up to a sudden embankment failure can be slow and sneaky. What can you do? You can lower the water level and check where water is coming from. You can seal any holes and maybe prevent new ones occurring. You can

apply a filter layer to the downstream where the seepage is coming out to trap soil particles, slowing the water and removing its energy.

REMEMBER: Dam owners are legally responsible for the consequences of dam failure. It is wise to get professional advice in these matters. Inspections by experienced, competent engineers may also be required to ensure your dam is safe.

Experts gather at ANCOLD 2022 conference to discuss climate change impacts on dams



The [October 2022 Australian National Committee on Large Dams \(ANCOLD\) conference](#) in Darling Harbour, Sydney, provided a great opportunity for Dams Safety NSW (DSNSW) to engage with declared dam owners and dam safety engineering consultants.

The conference theme, 'Sustainable Dams in a Climate of Change', was timely given the significant changes to the operating landscape that is impacting the dams industry. Climate change is impacting on water availability and floods, and this is changing the way dams are operated, designed and managed. The nature of the evidence available to inform decisions and their associated uncertainties is also

changing, and this has implications for how dam owners assess risks and plan for the future.

About 400 industry experts attended the event, and there were more than 250 visits to the DSNSW booth. Many people came to help build the lego 'Neverfail' dam, after collecting a lego piece at the coffee cart, stopping to chat to our staff about NSW dam safety legislation and the role of the regulator in dam safety.

Imperial Lake Dam: what goes up, must come down



When Essential Water no longer required Imperial Lake Dam as a water supply source for Broken Hill, they called on NSW Government's Public Works to advise on, and manage, the de-commissioning process.

Located about 5 km north-east of the city centre, Imperial Lake Dam was designed and constructed by the NSW Public Works Department in 1888 as a water supply for Broken Hill. It is a curved zoned earth-fill embankment with a spillway cut through the rock on the left abutment. In 1967 North Broken Hill Mining Ltd reconstructed and enlarged the dam to supply water for its mining operations, and in 2000 Essential Water took ownership of the dam as an additional emergency water supply for the city.

[Read the full story here](#)

Dams Safety NSW answers consultants' questions at face-to-face forum



The DSNSW consultants' forum, held on 14 October 2022 at Parramatta, gave engineering consultants the chance to ask Dams Safety NSW questions about new legislative requirements, particularly those related to [risk reports](#).

Under the Dams Safety Regulation 2019, a risk report is a written report that dam owners must produce on all foreseeable risks to their declared dam. The first batch of risk reports for declared dams is due to be completed by the end of this year.

Peter Boyd, Dams Safety NSW's Governance and Assurance Manager, outlined the July regulation changes, and emphasised that the main aim of the changes was to reinforce the responsibilities of the people involved in keeping dams safe.

Principal Dams Safety Engineer, Jason Porter, spoke about Dams Safety NSW's expectations on how declared dam risk reports should be structured so that the reports comply with the regulation.

"Consultants, as competent persons, often carry out this important work for declared dam owners.

"Using the risk framework can be complex for some dams, and addressing all the steps in the risk framework, and providing enough detail in the declared dam risk report, are essential for compliance," said Jason.

The participants raised many questions and issues that prompted discussion throughout the forum, including how:

- dam augmentations are not the same as other major changes to a dam
- quantitative analysis is difficult for dams that don't have very much dam information
- cost-benefit analyses should be carried out and whether a guideline on 'So Far As Is Reasonably Practicable' is needed

Dams Safety NSW will be surveying the forum participants to obtain feedback on the forum and to help with the planning for future forums.

Did you miss our online Dam Safety Management System Q&A Forum?

If you didn't get the chance to join our 'Dams Safety Management System (DSMS) Q&A Forum' on 8 June 2022, you can find the link to the recorded session [here](#).

Dams Safety NSW's senior auditor and three declared dam owners provided insights into the approaches used to develop their DSMS, and the common issues encountered by Dams Safety NSW auditors.



Serious incidents or injuries that occur at, or in relation to, a declared dam must be reported to Dams Safety NSW as soon as possible after the incident by calling **0403 681 645 (24 hours/7 days a week)**.

A written report of an incident in a form approved by Dams Safety NSW must be given to Dams Safety NSW no later than 72 hours after the incident, even if an oral report of the incident has already been given. [Click here to complete the online incident report form.](#)

Contact us

Dams Safety Focus is our newsletter on dam safety in NSW. If you have any questions or feedback contact us at:

Dams Safety NSW

Phone: (02) 9842 8073

Email: communications@damsafety.nsw.gov.au

Visit our website - Dams Safety NSW

Dams Safety NSW, Locked Bag 5022, Parramatta, NSW 2124

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