

D. Comparison of jurisdictional approaches

This appendix provides the results of our analysis of the regulation of dam safety in Queensland (QLD), New South Wales (NSW), Victoria (VIC), and Tasmania.

The following jurisdictions were excluded:

- Western Australia, South Australia, and the Northern Territory, as they do not regulate their dams
- the Australian Capital Territory, which has a significantly smaller number of large dams and owners, and much less dam capacity than the jurisdictions included.

This comparison in Figure D1, is based on five key elements of dam safety regulation, adapted from the Productivity Commission's regulator audit framework.

Regulatory framework

The regulatory frameworks for dam safety consist of legislation, policies, and strategies that detail what and who is regulated—and how. Legislation outlines the legal responsibilities of the regulator and owner. The regulator develops policies and strategies to complement legislation.

Setting safety requirements for dams

Owners provide information on their dams so the regulators can assess whether they need to be regulated. Once assessed, the regulator sets the requirements for the owner to meet. Regulators consider the size and volume of water and the number of people who could be harmed if the dam fails.

Advising and guiding dam owners

Regulators provide advice and guidance to help owners adhere to regulatory requirements and the approved safety standards. They include published guidelines, educational activities (for example, workshops, training, and videos) and one-on-one conversations between the regulator and owner.

Monitoring owner compliance

Regulators are responsible for monitoring owners' compliance with safety requirements. To monitor an owner's compliance, the regulator conducts desktop reviews and, in some jurisdictions, fieldwork. Desktop reviews involve the collection and review of documents relating to a dam's safety management program. Fieldwork involves on-site visits to the dam.

Taking enforcement actions

A regulator can act against an owner who has not complied with safety requirements. A non-compliant owner can face financial penalties and prosecution. A regulator also has emergency powers when a dam is failing or at risk of failure.



Figure D1
Comparison of jurisdictional approaches to regulating dam safety

Regulatory approach	QLD	NSW	VIC	TAS
Framework				
The government is the regulator	Yes	Yes	Yes	Yes
The regulator regulates all dams	No	No	No	No
The water regulator regulates tailings dams	No*	Yes	No	Yes
Dam owners are responsible for the safety of their dams	Yes	Yes	Yes	Yes
The regulator has an information system to store dam information	Yes	Yes	Yes	Yes
Setting safety requirements for dams				
Owners must assess the impact of the failure of proposed new dams or dam upgrades	Yes	Yes	Yes	Yes
Legislation details or gives the regulator power to set ongoing dam safety requirements	Yes	Yes	Yes	Yes
Advising and guiding dam owners				
The regulator produces dam safety guidelines	Yes	Yes	Yes	Yes
The regulator produces advice specific to small dam owners	Yes	No	Yes	Yes
Monitoring dam owner compliance				
The regulator has a tiered process for addressing non-compliance	Yes	Yes	Yes	Yes
Dam owners provide an annual report to show they have met safety standards	Yes	Yes	Yes	Yes
The regulator conducts on-site compliance visits	Yes	Yes	No	Yes
Dam owners provide information to the regulator on upgrades	Yes	Yes	Yes	No
Taking enforcement actions				
The regulator can issue directions and compliance notices	Yes	Yes	Yes	Yes
The regulator has emergency powers	Yes	Yes	Yes	Yes
The regulator can issue financial penalties	Yes	Yes	Yes	Yes

Note: *In Queensland, the Department of Environment and Science regulates tailings dams. Tailings dams are structures built to contain materials from mining, most commonly fine-grained or finely ground materials left over from the extraction processes. Most of these processes are water-based, and consequently tailings are usually produced, transported and discharged into a dam as slurry.

Source: Queensland Audit Office analysis of legislation, guidelines, and frameworks from Queensland, New South Wales, Victoria and Tasmania.

There are many similarities in the approaches each regulator takes to regulating dam safety:

- Dams that do not pose a risk to the community, the environment or economy are not regulated.
- The safety standards refer to or are consistent with the Australian National Committee on Large Dams standards.
- Guidance materials are available for owners to manage their safety responsibilities.

The key differences are:

- Queensland and New South Wales each have a team of professional engineers who undertake planned site audits of dams, to give the regulator additional assurance over compliance with the dam safety standards. The other jurisdictions use reports commissioned by owners from consultants.
- Upgrades to spillways of some dams in Queensland and New South Wales were necessary to meet modern flood standards. Queensland gave owners a maximum of 30 years to upgrade the spillways. New South Wales gave owners a maximum of 20 years.

