IPART Independent Pricing and Regulatory Tribunal | NSW

Dams Safety NSW levy review

Final Report

September 2024

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are:

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The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

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1 Executive Summary

Dams play an essential role in the NSW economy, and a key role in building flood resilience for the broader NSW community. Of NSW's tens of thousands of dams, 380 are currently 'declared dams', meaning that they represent significant potential danger to life, infrastructure or the environment downstream in the event of failure.[1] Dams Safety NSW (DSNSW) is an independent regulator charged with ensuring the safety of these declared dams, an increasingly important role as we continue to experience the impacts of climate change and more extreme weather events.

Currently, DSNSW operations are funded by the NSW Government. However, the *Dams Safety Act 2015* allows the Government to establish a levy to recover efficient costs of regulating the safety of declared dams in NSW from owners of declared dams.

The NSW Government has requested IPART under the *IPART Act 1992* to make recommendations on the design such a levy, which the Government may then decide to implement. Figure 1.1 below outlines the tasks involved in this review. IPART has not been asked to comment on whether a levy should be implemented.

Figure 1.1 IPART's Terms of Reference

We have analysed DSNSW's operations and have taken into account independent expert advice from FTI Consulting on DSNSW's expenditure. We consider that its current expenditure (roughly $4.6 million per annum) reflects a sufficient and reasonable level of resources to undertake its obligations under the *Dams Safety Act 2015*.

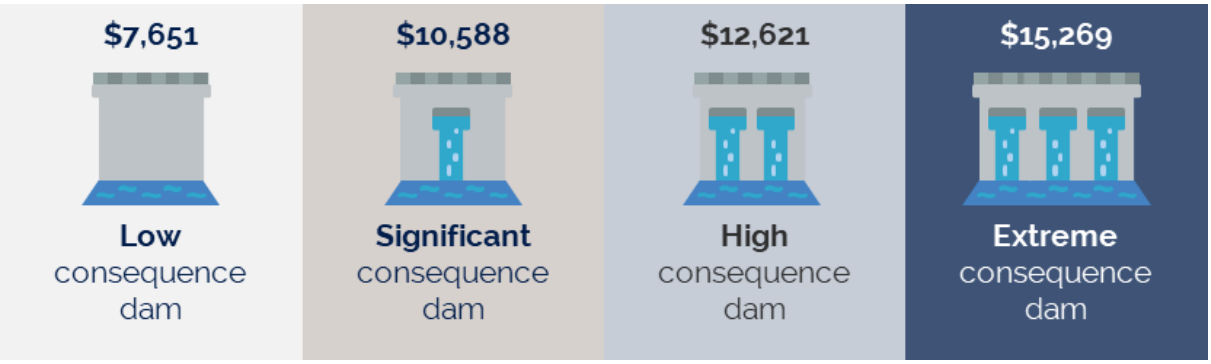
In designing a levy for dam owners, we allocated DSNSW's costs into 3 categories:

- Direct costs ($3.02 million) – directly attributable to dam owners and driven by dam characteristics (such as dam consequence category)
- Indirect costs ($1.32 million) – necessary for providing services to all dam owners, but not as variable between dams (e.g. corporate overheads)
- Non-levy costs ($0.25 million) – costs unrelated to declared dams.

We recommend that $4.34 million (95% of DSNSW's costs) are included in a levy, and the remaining $0.25 million (5% of DSNSW's costs) continue to be funded by Government.

We have calculated levies per declared dam that range from $7,651 to $15,269 per annum. The levy varies with the consequence rating of the dam to recognise that higher consequence dams require more regulatory effort from DSNSW and so drive more of its costs. The levy that would apply to each category of dam is presented in Figure 1.2.

Figure 1.2 Levy payable, by dam consequence category



Source: IPART analysis. All prices are in $2024-25 terms, with subsequent years to be adjusted for inflation.

We have also made a series of recommendations for the future, should the Government decide to implement the levy:

- The Government should consider providing funds to decommission unused Local Government and NSW Government owned dams that no longer serve a purpose but continue to pose safety risks.
- DSNSW's efficient costs and the levy should be independently reviewed in 3 years to ensure the levy is accurate and fit for purpose as the regulatory regime matures.
- DSNSW should improve data collection and record keeping to allow for more accurate cost allocation in the levy and to provide assurance that its costs are efficient.
- In the upcoming review of the *Dams Safety Act 2015*, DSNSW should consider adding the ability to charge 'fees for services' and possibly retaining some funding from penalty notices that it issues.
- The Government should consider auditing DSNSW's performance, regardless of whether it introduces a levy, in recognition of the critical work it does.

Our levy design and recommendations have been prepared following consultation with stakeholders through:

- Submissions to our Issues Paper in March 2024
- A series of online consultation workshops in April 2024
- Submissions to our Draft Report in July 2024
- Our Public Hearing in August 2024

Throughout this report, we have considered and responded to feedback from stakeholders on our draft levy design and recommendations. We have revised some of our draft positions based on our consideration of stakeholder feedback and analysis. In particular, we have included more analysis around potential implementation issues such as the concerns around levy affordability and the need for an enforcement mechanism to collect the levy. We thank all stakeholders who engaged in and provided input throughout this review.

Recommendations

1. DSNSW's efficient costs should be set at $4.59 million per annum (in $2023-24 terms), of which: 18
   a. $0.25 million should be excluded from the costs to be recovered by a levy on declared dams 18
   b. $4.34 million should be included in the costs to be recovered by a levy on declared dams, should the Government decide to implement a levy. 18

2. DSNSW should continually seek to identify and implement opportunities to improve its effectiveness and efficiency, and any cost savings that are made should be retained in its Special Deposits Account. Any future review of the dams safety regulation levy should consider these surplus funds to offset the levy in subsequent years. 18

3. If the Government decides to implement a dams safety regulation levy, we have calculated a schedule of levies that varies by dam consequence category. These levies would recover DSNSW's efficient costs of regulating declared dams. 25
   a. Table 4.1 presents the schedule of dams safety levies that would apply to each dam consequence category. The levies are presented in $2024-25 terms, and would be subject to CPI adjustment on 1 July each year. 25
   b. The levy should be applied at the beginning of each financial year. 25
   c. In any financial year, the levy should apply only to dams that are declared as at 1 July that year, and the amount payable should be based on their consequence category as at 1 July that year. 25
   d. Once implemented, the levy should be adjusted for inflation on 1 July each year, using changes in the March-March quarter CPI. Specifically, to adjust the levy from $2024-25 to $2025-26 (which would apply from 1 July 2025 to 30 June 2026), DSNSW should adjust the levy by the percentage change in the CPI from March 2024 to March 2025. 25

4. Should the Government decide to implement a levy, it should apply from 1 July as an annual levy. In this event, current Government funding for DSNSW should cease by 30 June of the prior financial year for all costs other than non-levy costs. 25

5. Local Councils and the NSW Government could give further consideration to the issue of cost sharing for dams which provide benefits across LGA lines. 31

6. The Government should consider making funds available to decommission unused Local Government and NSW Government dams that no longer serve a purpose. 31

7. The levy should be independently reviewed in 3 years. We recommend any future review of the levy reassess cost allocation between dam owners, and consider the feasibility of applying a performance adjustment. 38

8. DSNSW should improve data collection and record keeping, specifically around activity-based costing and dam consequence ratings. 38

2 Context and background

Dams play an important role in NSW's water landscape, and provide numerous benefits to communities, industry and the environment. They also play a key role in building greater flood resilience for dam owners and the broader NSW community. NSW is home to tens of thousands of dams, of which 380 are 'declared' – i.e. those which can potentially endanger life downstream, cause major damage or loss to infrastructure, the environment, or have major health and social impacts.[2] These dams are also exposed to the growing pressures of climate change and the increasing frequency of severe weather events and natural disasters. Ensuring the safety of declared dams is in everyone's interest – now and into the future.

Prior to 2015, dam safety in NSW was administered by a Dams Safety Committee under the *Dams Safety Act 1978*. There were limited prescriptive regulations guiding dam safety standards, and the Dams Safety Committee fulfilled its regulatory functions primarily by publishing guidance sheets for dam owners to follow. In 2015, the NSW Parliament passed legislation establishing DSNSW as an independent regulator responsible for ensuring that dam owners manage the safety of 'declared dams' in NSW.

Box 2.1 'Declared' dams

A 'declared dam' is a dam which DSNSW has determined could cause serious impacts in the event of a failure. DSNSW will declare a dam if:

- It has a wall that is more than 15 metres high
- DSNSW is reasonably satisfied that a failure would endanger the life of a person, or result in a major or catastrophic level of severity of damage or loss; or
- It was 'prescribed' under the old *Dams Safety Act 1978*.

Declared dams are assigned a consequence rating, between very low and extreme, based on likely impact in the event of a failure and the likelihood of said failure. An explanation of how dams are categorised is in Appendix A. Owners of declared dams must comply with the Dams Safety Regulation 2019.

At present, NSW has 380 declared dams.

Source: Dams Safety NSW website

The *Dams Safety Act 2015* strengthened the scope of dams safety regulation and replaced the Dams Safety Committee with DSNSW. The provisions of the 2015 Act are supported by the *Dams Safety Regulation 2019,* which details the operational and safety standards with which declared dam owners must comply.

Alongside this new regulatory environment, the 2015 Act also authorised the NSW Government to establish a levy to recover the costs of regulating the safety of declared dams in NSW. This levy, payable by owners of declared dams, would provide for the recovery of DSNSW's efficient costs of administering its regulatory functions.

2.1 IPART's role

The NSW Government has requested IPART under the *IPART Act 1992* to design a levy to recover DSNSW's efficient costs, which the Government may then decide to implement. IPART's tasks under our Terms of Reference are to:

- Investigate and report on the **efficient costs** of DSNSW carrying out its functions
- Recommend a **methodology for recovering** the efficient cost from individual dam owners
- Recommend a methodology for **determining a levy**, and the quantum of the levy, to be assigned to individual dams
- Recommend **information** that DSNSW should collect to inform future assessments of efficient costs and determination of the levy.

Our full Terms of Reference is in Appendix D.

This Report outlines our findings on DSNSW's efficient costs, and our recommendations on recovering these costs and calculating a levy. In preparing this report, we have considered all submissions made by stakeholders to our Issues Paper and Draft Report and through our online workshops and Public Hearing, as well as submissions made in response to an earlier review of the levy conducted by DSNSW and KPMG in 2020.

2.2 DSNSW's role

DSNSW is an independent regulator responsible for ensuring that dam owners manage the safety of their declared dams in NSW. DSNSW fulfils its regulatory functions by determining how the *Dams Safety Regulations 2019* and associated standards are administered. DSNSW also plays a role in preparing and publishing educational resources on dam safety, and in reviewing mining development applications that affect, or have the potential to affect, the safety of declared dams.

DSNSW has a 6-member Board (including its CEO), and is supported by 25 staff members (employed by the Department of Climate Change, Energy, the Environment and Water). As of January 2024, it regulates 380 declared dams and has a budget of $4.6 million.[3]

2.3 Background to the levy

In 2012 the NSW Commission of Audit and IPART raised concerns about the level of expenditure on dam safety, and whether it was in accordance with good public management practice. Following this, the NSW Government engaged KPMG to review the dams safety regulatory framework,[a] and in 2015 the new *Dams Safety Act 2015* was introduced.

One of the recommendations in the KPMG report is that regulators should be funded by 'relevant risk creators'[4] (that is, owners of declared dams), because it would be more efficient. In response, the *Dams Safety Act 2015* includes a provision for DSNSW to collect a levy from dam owners to recover the costs of conducting its work in relation to declared dams.

In 2023, the NSW Government has asked IPART to recommend a methodology for recovering DSNSW's costs from dam owners, and to design a dams safety regulation levy. IPART's recommendations will be made to the Government, who will ultimately decide whether to implement the levy. Within this role, our aim is to design a levy that reflects efficient costs so that dam owners pay no more than necessary to fund safety regulation for their declared dams.

2.4 Funding for regulators

It is not uncommon for regulators to be funded through levies or user charges. For instance, the State Insurance Regulatory Authority and Safe Work NSW are partly funded through the Workers Compensation Operational Fund, made up of contributions by insurers and self-insurers.[5] In essence, work health & safety and workers compensation regulation is paid for by those being regulated. Similarly, the Australian Maritime Safety Authority funds coastal marine aids through a user pays charge – commercial ships pay a levy based on net tonnage of each vessel.[6] In NSW, the Natural Resources Access Regulator is funded through water management charges paid by water access licence holders.

There are also examples of dams safety regulation being funded this way. The dams safety regulator in California USA has charged annual fees to dam owners since the 1960s. The regulator is now fully funded by these fees, along with application fees that are charged for modifying or building new dams. Annual fees are made up an administration charge (paid by all dam owners) and a dam charge (based on height of the dam wall and number of critical appurtenant structures in the dam).[7]

In Sweden, dams safety regulation is funded through annual fees paid by dam owners, with fees varying by potential consequence in the event of dam failure. In addition, the regulator charges an hourly rate to provide relevant supervision for dam owners that request assistance in complying with safety regulations.[8]

[a] See the KPMG 2013 report: *Review of the Dams Safety Act 1978 and Dams Safety Committee*.

3 DSNSW's efficient costs

Establishing the efficient costs of DSNSW's operations is an important first step in determining a levy. It ensures that the cost base underlying the levy is reasonable, and that dam owners do not pay more than is needed to fund DSNSW's regulatory functions.

To inform our review of these efficient costs, we engaged FTI Consulting (FTI) to undertake an analysis of DSNSW's current and forecast expenditure, and to make recommendations as to which costs should reasonably be recovered via the levy. The Tribunal then considered FTI's recommendations and made some changes to the categorisation of costs.

This chapter outlines our consideration of DSNSW's costs, including FTI's analysis and recommendations. In the following sections, we set out our:

- findings on DSNSW's efficient costs, and
- recommendations on how best to allocate these efficient costs between declared dams.

FTI's report on DSNSW's costs is available on IPART's website.

Box 3.1 Summary of what stakeholders said about DSNSW's efficient costs

Some water utilities felt that DSNSW should be encouraged to seek cost efficiencies through a continuing efficiency adjustment, and other stakeholders reflected on the limitations of existing activity-based costing data in assessing efficient costs. Many stakeholders felt that DSNSW should transparently report on its cost efficiencies going forward to called for ongoing reporting on its performance and cost efficiencies.

We have considered all stakeholder views in preparing this report. The following sections detail our final recommendations, including our responses and actions to stakeholder feedback.

3.1 Approach to estimating efficient costs

To estimate DSNSW's forecast efficient costs, FTI first considered the breakup of costs incurred in the current 2023-24 financial year. These costs amounted to roughly $4.6 million.[b] While this was found to be driven mainly by labour costs, there was insufficient activity-based cost data to accurately establish the proportions of these costs spent on different regulatory activities.

[b] Using 10 months of actual cost data, and 2 months of forecasts.

FTI held a series of interviews and workshops with key DSNSW staff to obtain a breakdown of its annual costs on a per-activity basis. Based on this information, FTI found that DSNSW's costs could be categorised into 16 distinct activities. Table 3.1 shows the breakdown of costs incurred for each of these activities in 2023-24.

Table 3.1 Breakdown of DSNSW's costs by activity

Activity	Total cost ($)
1. Advice to Minister/Government	17,800
2. Annual dams safety standards report	67,370
3. Audit compliance - decommissioning	27,900
4. Audit compliance - design and construction	111,250
5. Audit compliance - operations and maintenance	586,900
6. Audit compliance - reviewing reports	257,650
7. Corporate support/overheads	1,249,380
8. Dam declaration and revocation	78,200
9. Declaring a dam mining notification area	66,590
10. Develop regulatory framework and guidelines	159,370
11. Educate and inform dam owners	966,350
12. IT system build (DIMS) & maintenance	144,750
13. Monitor dams above the safety threshold	78,450
14. Respond to incident reports	79,210
15. Respond to non-compliance	618,380
16. Review mining consent applications	80,450
Total	4,590,000

Note: All costs are in $2023-24 terms.
Source: IPART and FTI analysis.

In their responses to our Draft Report, many stakeholders agreed on the importance of DSNSW collecting detailed activity-based costing data going forward. Some stakeholders, like Goulburn Mulwaree Council suggested that DSNSW should undertake a more detailed activity-by-activity cost review before on-charging costs to dam owners, while other stakeholders, like Central Coast Council, agreed with the categories of costs identified by our consultants.[9]

Our view is that the cost breakdowns derived by our consultants in workshops are an appropriate starting point for designing a levy, should the Government decide to implement it. The cost categories have been assessed considering DSNSW's legislative objectives, and total costs have been compared to current and prior budgets approved by the NSW Treasury (further detail on these efficiency metrics is provided below).

Nonetheless, we agree with stakeholders that DSNSW must establish systems to collect timesheet and other costing data on a per-activity basis. This will allow any future review of the levy to assess if DSNSW has been able to achieve cost efficiencies within certain activities over time. In Chapter 6, we make recommendations on information that DSNSW should collect going forward, including activity-based costing data.

3.1.1 Efficiency metrics

After establishing DSNSW's total costs on a per-activity basis, FTI considered different methods of assessing its efficiency, including:

- How DSNSW's 2023-24 costs compare to prior years, as well as forecasts for future years.
- Whether DSNSW is fulfilling its legislative objectives within its current budget.
- The outcomes of prior independent reviews into DSNSW's resourcing, efficiency and regulatory maturity.
- The level of Board and Treasury scrutiny of DSNSW's annual budgets.

By all these measures, FTI found that DSNSW's 2023-24 costs are likely to represent the efficient costs of delivering its services to dam owners. Specifically, FTI noted that:

- DSNSW currently prioritises resources towards higher consequence rated dams, including for audits and response to non-compliance.
- DSNSW publicly reports annually on its operational activities and has identified key performance targets to assess its effectiveness.
- The DSNSW Board and NSW Treasury scrutinise proposed budgets, and the DSNSW Board regularly scrutinises expenditure and performance.[10]

A detailed assessment of DSNSW's efficiency is provided in Chapter 3 of FTI's report.

We agree with FTI's findings on efficiency. In our view, the assessment of DSNSW's efficiency through various financial, performance and governance lenses provides the best available indication that DSNSW's costs are not unreasonable, in lieu of there being any other activity-based costing data.

As part of its assessment, FTI also considered how DSNSW's costs compare to other regulators of a similar size and jurisdiction. FTI compared DSNSW's activities, resourcing and costs to dams safety regulators in Queensland, Tasmania and Victoria. While each of these regulators were distinctly different in their regulatory scope, the Queensland dams safety regulator was the most closely comparable to DSNSW in terms of functions and activities.

FTI's comparison of NSW and Queensland's dams safety regulators revealed that while there are some notable differences in functions and the numbers of regulated dams, DSNSW's costs and resourcing levels are in a similar range to its Queensland counterpart. Specifically, DSNSW has 25 FTE[c] staff and an annual budget of $4.45 million,[d] while the Queensland Department of Regional Development, Manufacturing and Water's dams safety body has 20 FTEs and an annual budget of roughly $5 million[e].[11] While not evidence of efficiency in itself, this comparison serves as a 'sense check' that DSNSW's costs are broadly aligned with what could be reasonably expected from a maturing dams safety regulator, and that DSNSW itself is unlikely to be over resourced. Section 3.3.5 of FTI's report provides a comparison of DSNSW with other jurisdictional dams safety regulators.

[c] FTE refers to 'full-time equivalent'. This figure includes one additional staff member added in 2024-25 for compliance activities.

[d] In $2023-24 terms

[e] In $2023-24 terms

In response to our Draft Report, some stakeholders (including WaterNSW) submitted that the levy should impose a continuing efficiency adjustment on DSNSW's total costs, similar to those applied in IPART's prior water pricing reviews.[12] Sydney Water reflected that individual dam owners appear to have a very limited ability to directly affect underlying costs, and that the onus should lie with DSNSW to adopt practices that minimise compliance costs for dam owners.[13] Central Coast Council also suggested that future reviews of the levy should consider benchmarking DSNSW's regulatory performance to other councils and businesses to incentivise efficiencies and compliance.[14]

We agree with stakeholders on the importance of the levy reflecting DSNSW's efficient costs. In this review, we assessed DSNSW's costs with respect to historical and forecast costs, its legislative objectives, and its Board and NSW Treasury's scrutiny of its budgets. We also examined how DSNSW's costs compare to dams safety regulators in other Australian jurisdictions, and found that its total costs were within the range of what would be reasonably expected from a comparator regulator.

In setting prices for some regulated businesses, IPART typically considers 2 types of efficiency adjustments:

- Catch up efficiency – an adjustment to reflect that a business' costs have historically been inefficient, or where there is evidence of recent operational learnings or experience that can be applied to achieve cost efficiencies. Based on FTI's advice, there is no evidence that DSNSW has been operating inefficiently up to this point, nor any evidence of specific learnings that can be leveraged to improve its efficiency in the short term. Therefore, we do not consider a catch-up efficiency adjustment necessary at this stage.
- Continuing efficiency – a forward-looking adjustment to bring down costs over future years in line with ongoing improvements to the economy-wide productivity frontier. Given DSNSW's unique scenario as a relatively new safety regulator with limited operational experience, we consider that DSNSW should focus its efforts on achieving the best value for money for dam owners within its existing expenditure envelope over the next 3 years. We therefore have not recommended an explicit continuing efficiency adjustment. However, we have decided not to increase DSNSW's funding envelope for additional resources it proposed, as we consider these costs can be absorbed by DSNSW. Our decision not to increase DSNSW's funding envelope for this new scope is, in effect, a form of continuing efficiency adjustment.

While we are not recommending an explicit efficiency adjustment this time, we do strongly recommend that future reviews use the additional information which should be available to assess how close DSNSW is to the efficient frontier. Once the framework and processes are established the issue of applying catch-up and continuing efficiencies should be considered again. In the meantime, we have made recommendations about how DSNSW can demonstrate its efficiency in section 3.1.2 and in Chapter 6.

Following our Draft Report, we also asked FTI to undertake additional benchmarking analysis on DSNSW's costs – this analysis is described in the section below.

Additional benchmarking analysis of DSNSW's costs

Following our Draft Report and Public Hearing, we requested that FTI undertake additional analysis on DSNSW's costs with the aim of understating how salaries, on costs and other operating costs compare to other NSW regulators. FTI's Supplementary Report details this analysis.

FTI compared components of DSNSW's total operating costs with 7 other NSW regulators:

- Natural Resources Access Regulator
- Independent Pricing and Regulatory Tribunal
- State Insurance Regulatory Authority
- Independent Review Office
- Independent Privacy Commission
- Architects Registration Board
- NSW Telco Authority

FTI found that DSNSW's costs of employing staff and providing support services was not materially different with the 7 other regulators. FTI stated that while DSNSW's average personnel costs were slightly higher than the other regulators, they were not materially different and were justified because:

- DSNSW has a larger proportion of highly qualified staff (particularly dams safety engineers) as compared to other regulators.
- DSNSW's relatively low number of FTEs means that the average salary would be higher due to the costs of senior executives being spread among lower numbers of non-executive staff, and
- the support costs for finance, HR and ICT are included in the costs of salaries and wages for DSNSW, whereas most of the other regulators include these in 'Operating costs'.

Based on this FTI concluded that DSNSW's operating costs were not materially inconsistent with the costs of other NSW regulators.

We have considered FTI's analysis and agree with the conclusion reached regarding DSNSW's costs. Our view is that despite personnel costs being slightly higher than other regulators in NSW, these costs are reasonable in light of the highly-specialised nature of DSNSW's work and the importance of having well qualified staff responsible for ensuring the safety of critical dams in NSW.

3.1.2 Any additional cost efficiencies should be used to offset future levies

While we have not undertaken a detailed performance review, our analysis of DSNSW's costs and resources found no evidence to suggest that it is operating inefficiently or that its current resourcing level is unreasonable. While this assessment used the best available information from a range of cost and performance metrics, we recognise that there may be opportunities for DSNSW to find further efficiencies and reduce its costs going forward.

Within this context, it is important that DSNSW actively seeks opportunities for further cost efficiencies. Any cost savings that are made should be retained in DSNSW's Special Deposits Account,[f] so that a future recalculation of the levy can use any surplus funds received through the levy to offset the amounts payable by dam owners in future periods.

In our view, this approach would allow a practice of continuing cost-efficiency, while also allowing dam owners to periodically receive the benefit of DSNSW's cost efficiencies through lower levies in future periods.

3.1.3 DSNSW's costs are based on its current transition to the new regulatory regime

DSNSW was formally established in 2019, alongside the commencement of the *Dams Safety Regulations 2019* ('Regulations'). The Regulations introduced a set of new safety requirements on dam owners, and outlined responsibilities for DSNSW to ensure that dams safety risks are minimised 'as far as reasonably practicable'.

DSNSW is currently operating in a 'transitionary phase' as it rolls out this new regulatory regime. This change will mark a shift from its current practice of profiling dams based on consequence only (i.e., the potential impacts from dam failure) to instead also profiling dams on their likelihood of failure. The product of these consequence and likelihood assessments will yield a risk rating for each dam, which will underpin DSNSW's new risk-based regulatory framework.

Over the next 2 years, DSNSW will focus on auditing dams and reviewing their risk reports to generate a risk rating for all declared dams across NSW. These risk ratings will then inform its regulatory strategy and audit/compliance priorities – and consequently its total operating costs for future years. DSNSW expects to complete this first round of risk data collection by late 2026.[15]

The costs we have included in the levy represent the costs incurred by DSNSW during this 'transitionary phase' of collecting risk data – and therefore are likely to represent only the next few years of DSNSW's operation. Once DSNSW completes this first regulatory cycle, its costs may change based on its findings around safety risks posed to the public by declared dams, and/or because of increasing familiarity of dam owners regarding the dams safety regulatory framework and DSNSW's regulatory procedures.

In fact, some stakeholders like the Central Coast Council, expected that the level of support they would need from DSNSW would reduce as the regulatory regime matures, while others including Lake Macquarie Council felt it would not change.[16]

In Chapter 6, we recommend that DSNSW's costs should be reassessed in 3 years to account for any changes in its baseline expenditure once it has fully transitioned to the new regulatory regime. We also make recommendations on how DSNSW's efficiency should continue to be assessed over the longer-term to ensure that dam owners continue to pay only the efficient and reasonable costs for DSNSW's regulatory functions.

[f] As provided in the *Dams Safety Act 2015* (NSW), s 40.

3.2 Total efficient costs

As noted earlier, our consultants identified that DSNSW's costs can be categorised into 16 activities, ranging from administering the regulations, to providing Ministerial advice, and to more general administrative activities. Assessing the cost build-up of each of these activities, FTI found these costs could be further divided into 3 types:[17]

- Direct costs – labour costs directly related to the regulation of each dam.
- Indirect costs – made up of corporate overheads (including IT systems, rent, and some labour costs associated with activities indirectly related to safety regulation).
- Non-levy costs – which represent the costs incurred on activities unrelated to declared dams (such as providing ministerial advice and processing mining development consent applications).

Non-levy costs are those that FTI recommended should be excluded from the levy because they are not driven or caused by declared dam owners. These costs are instead related to separate matters of Government policy or planning. Of DSNSW's $4.59 million budget in 2023-24, FTI recommended $0.14 million[18] (or 3%) for non-levy costs.[19]

We considered FTI's recommendations, and we broadly agree with the categorisation of DSNSW's activities as direct, indirect and non-levy. In our view, it is important that the levy only represent costs that are driven or caused by the need to regulate the safety of declared dams.

With this in mind, we identified that DSNSW currently spends approximately $0.11 million[g] on declaring new dams and revoking existing declarations. This activity is sporadic and would apply only in situations where dams are entering or exiting the regulatory framework. These costs are not driven by the entirety of the current pool of declared dams, and our view is that current dam owners should not have to bear costs that they do not drive or benefit from. We consider a more appropriate means of recovering these costs could be via a fee for service on relevant dam owners.

In Chapter 6, we make recommendations on legislative amendments that could be considered for the *Dams Safety Act 2015*, including allowing some costs to be recovered via a fee for service. In lieu of any express provision allowing a fee for service at this stage, we recommend that these $0.11 million of costs also be excluded from the levy. Adding these to the $0.14 million of non-levy costs identified by FTI, we recommend a total of $0.25 million of costs that should be excluded from any dams safety regulation levy.

Based on this categorisation of DSNSW's costs, we recommend that the levy should recover a total of $4.34 million[h] from declared dam owners, while the remaining $0.25 million (approximately 6% of its budget) should continue to be funded by the Government. Table 3.2 below summarises our recommended cost recovery from the dams safety regulation levy.

[g] Source: IPART and FTI analysis, in $2023-24 terms. The $0.11 million includes $0.08 million of direct costs, plus $0.03 million of indirect costs associated with declaring new dams.

[h] In 2023-24 terms.

Table 3.2 Costs to be included in the levy

Cost category	FTI's recommendation ($)	IPART's recommendation ($)
Direct costs	3.1 million	3.02 million
Indirect costs	1.35 million	1.32 million
Non-levy costs (to be excluded from the levy)	0.14 million	0.25 million

Note: All costs are in $2023-24 terms.
Source: IPART and FTI analysis.

Further detail about the activities inside each cost category can be found in Appendix B.

In response to our Draft Report, some stakeholders, including the Central Coast Council and Hunter Water, submitted that they agreed with the split of levy vs non-levy costs.[20] On the other hand, WaterNSW, Local Government NSW, the Central NSW Joint Organisation and others called for a greater share to be borne by Government.[21] The Hills Shire Council also noted that the Government should fund a larger portion of the levy costs for some dams that provide public benefits such as flood mitigation.[22]

Some stakeholders felt that certain indirect costs should not be recovered via the levy. For instance, Lake Macquarie Council submitted that Board remuneration & corporate support costs should not be recovered via the levy, arguing they relate to the governance of the agency more than the regulation of declared dams.[23]

We considered all stakeholder submissions to our Draft Report, including many local councils' concerns that not enough costs were allocated to the NSW Government. In our Draft Report, we estimated that roughly $0.25 million of DSNSW's total costs related to activities other than the regulation of declared dams – and we recommended that these continue to be funded by the Government.

In response to stakeholder feedback to the Draft Report and at the Public Hearing, we re-examined the costs we included in the draft levy design to test whether there were any additional costs that should be excluded from the levy. Our analysis confirmed that all the costs identified for inclusion in the draft levy are directly related to regulating declared dams. Therefore, we have maintained the share of costs to be included in the levy.

3.2.1 DSNSW proposed some additional costs to be included in the levy

In response to our Draft Report, DSNSW proposed some additional costs be included in the levy:

- Funds for an additional 0.4 FTE administrative-level officer to undertake levy billing activities
- That the levy reflect its actual expenditure of $4.88 million – which was higher than the $4.59 million[i] estimate used in our Draft Report (which was calculated using 10 months of actual costs and 2 months of forecast costs).[24]

[i] Comprising $4.34 million of costs we recommended should be recovered by the levy, and $0.25 million of non-levy costs that we recommended continue to be funded by Government.

In relation to the additional 0.4 FTE proposed by DSNSW, we asked FTI to assess and recommend whether additional administrative staff would be needed for DSNSW's levy billing function. FTI found that the additional costs to undertaking billing (once the billing system and processes are established) are likely to smaller than DSNSW's proposal and should be accommodated within the efficient funding envelope noted in our Draft Report.

We agree with FTI's recommendation to not include costs for an additional 0.4 FTE. The additional 0.4 FTE would represent just 1-2% of DSNSW's total costs, and our assessment is that there is scope for these costs to be absorbed by the envelope of efficient costs established in this review. Additionally, the costs associated with setting up a billing system would be incurred before the introduction of the levy, and could be funded by the NSW Government (which currently funds DSNSW) rather than declared dam owners. We also agree with FTI that ongoing costs of administering the levy are likely to involve a small amount of resources (i.e., less than DSNSW's request to include an additional 0.4 FTE), and we consider DSNSW should fund this activity from within the efficient cost envelope established in this review.

We also asked FTI to collect further information on the reasons for DSNSW's actual expenditure differing from the estimated expenditure, and to make a recommendation regarding whether the costs underlying the levy should be updated. In its Supplementary Report, FTI explained that the increase in actual costs ($273,000) was attributed to a recalculation of the salaries and wages assumed by the Crown. Based on confirmation from DSNSW, FTI recommended that these costs should be offset against the salary expenses incurred by DSNSW – resulting in a net change of $0.

We agree with FTI's recommendation to not include an additional $273,000 of costs in the levy. We understand the salaries and wages costs assumed by the Crown are intended to be offset with DSNSW's salaries expenditure as per DSNSW's accounting treatment for these costs.

We have decided not to make any changes to our estimate of DSNSW's total costs.

3.3 Allocating costs between dam owners

Our aim has been to design a levy that reflects efficient costs so that dam owners pay no more than necessary to fund safety regulation for their declared dams. In designing such a levy, it is important that costs are allocated to dam owners based on the extent to which they drive those costs.

We considered different methods of allocating costs between dam owners, including by:

- dam consequence category
- dam purpose (e.g. flood mitigation, tailings, water supply)
- dam owner (e.g. council, private owner, Government owner)
- number of dams owned by each owner.

Our analysis found that of all metrics, consequence category is currently most closely tied to DSNSW's costs of regulating each dam. We found that higher consequence dams require more regulatory effort, and therefore drive more of DSNSW's costs than lower consequence dams. This is because DSNSW currently audits, reviews and expends effort on declared dams based on their consequence category rather than any other factor.

In the future when DSNSW transitions to a risk-based regulatory model (following the collection of risk data on all declared dams), risk ratings may become a more accurate basis for allocating costs. However, based on DSNSW's current operations as a consequence-based regulator, our assessment is that consequence category is the most cost-reflective way of allocating costs at this stage.

To quantify the costs driven by each consequence category, DSNSW estimated 'effort ratios' – i.e., for each of its activities, DSNSW estimated the ratio of its time spent on regulating a typical low, significant, high and extreme consequence dam. For activities like safety auditing, DSNSW's estimates were based on both the likelihood of a dam being audited, and the time spent on auditing each dam. This ensured that its estimates accounted for the recurring nature of some activities, as well as differences in effort needed to undertake the same activity for different dams.

Not all activities had different effort ratios. For some activities (like educating dam owners and preparing regulatory guidelines), DSNSW estimated that its time was spent equally on all dams, regardless of their consequence category.

Table 3.3 below provides a summary of the weighted average effort spent on a typical dam in each consequence category. These ratios show that on average, DSNSW spends twice as much effort regulating an extreme consequence category dam than it does for a low consequence category dam. The effort ratios for each activity are provided in Appendix B.

Table 3.3 Estimated effort ratios by dam consequence category

Dam consequence category:	Low	Significant	High	Extreme
Number of dams	19	150	179	33
Weighted average effort ratio	1.0	1.4	1.7	2.0

Note: Weighted average effort ratios are calculated as the average of the estimated effort ratio for each activity, weighted by the total cost of each activity. Ratios are rounded to one decimal place.
Source: FTI & IPART analysis, using data from DSNSW.

Many stakeholders submitted that they agreed with the approach and results of the effort ratios calculated in our Draft Report – including for instance, Lake Macquarie Council.[25] However with respect to costs incurred in responding to incident reports, Inner West Council expressed its view that higher consequence dams create more incident reports than lower consequence dams, and should pay for a larger share of those costs.[26] In response to this, we met with staff from DSNSW to verify the effort ratios for certain activities, including responding to incident reports.

We found that in 2023-24, 17 incidents were reported to DSNSW, of which the majority occurred during rain events and were related to trigger level exceedances. Only 2 of these required follow-up by DSNSW.

Given the small sample of incident responses, there was insufficient data to obtain a reliable breakdown of incidents by consequence category. DSNSW have advised us that equal effort is spent responding to incident reports for dams of different consequence categories. On balance, our view is that in the absence of any data to the contrary, costs associated with responding to incident reports should be distributed in an equal ratio to different consequence category dams. We recommend that these effort ratios be re-examined in the future, once DSNSW has more experience to draw on.

3.3.1 Apportioning indirect costs

The effort ratios provided by DSNSW in Table 3.3 are based on estimates of direct (labour) costs incurred in conducting each of its activities. For indirect (overhead) costs, there was no clear data indicating how costs were driven by different dams. In lieu of any such data, FTI recommended allocating both direct and indirect costs using the weighted average effort ratios provided by DSNSW.

Stakeholders had mixed views about FTI's apportionment of indirect costs. Some stakeholders, such as Hunter Water and Lake Macquarie Council, felt that apportioning indirect costs based on consequence category was appropriate.[27] Others, including WaterNSW, felt that indirect costs should be split evenly between dam owners rather than allocated based on consequence category.[28]

We have considered all available evidence and agree with FTI's recommendations on cost allocations. In our view, allocating direct costs based on DSNSW's effort ratios is a suitable method of sharing costs between dam owners, in lieu of having any other activity-based costing data. We also agree that in the absence of any data to the contrary, indirect costs should be apportioned based on consequence category effort ratios. This approach balances the need for fairness, while allocating costs to those who are the most likely drivers of them.

Our final recommendation is therefore to maintain the effort ratios recommended in our Draft Report.

Recommendations

1. DSNSW's efficient costs should be set at $4.59 million per annum (in $2023-24 terms), of which:
   a. $0.25 million should be excluded from the costs to be recovered by a levy on declared dams
   b. $4.34 million should be included in the costs to be recovered by a levy on declared dams, should the Government decide to implement a levy.
2. DSNSW should continually seek to identify and implement opportunities to improve its effectiveness and efficiency, and any cost savings that are made should be retained in its Special Deposits Account. Any future review of the dams safety regulation levy should consider these surplus funds to offset the levy in subsequent years.

4 Levy design

A key role for IPART in this review is designing a levy to recover DSNSW's efficient costs of carrying out its operations – to the extent that they relate to declared dams. In designing the levy, we have applied the following 5 key principles:

1. DSNSW recovers only the costs caused by declared dams – any costs that are unrelated to declared dams are excluded from the levy, and should continue to be funded by the Government.
2. DSNSW recovers only its efficient costs – the levy should not allow DSNSW to materially over or under-recover these costs, or allow DSNSW to recover costs that have not already been assessed as efficient.
3. Costs are allocated to those who create the need for it – i.e. dams that drive more of DSNSW's costs pay a levy that is proportionate to that cost drive.
4. The levy is simple to administer – DSNSW should be able to administer the levy with relative ease, using resources already available at the organisation.
5. Dam owners have certainty on the levy amount – annual fluctuation of the levy amount is minimised as far as possible while still maintaining cost-reflectivity.

Box 4.1 Summary of what stakeholders said about levy design

Many stakeholders, including several local councils, felt that the levy should consider not only consequence category, but also dam purpose – and a lower (or no) levy should apply to dams that provide a public benefit like flood mitigation. Others felt that allocating costs between dam owners based on their consequence category is an appropriate means of apportioning costs – though some felt risk ratings would be a better measure once that data becomes available.

Some stakeholders submitted that dam owners with multiple dams should receive a discount on the total levy, owing to perceived cost efficiencies for DSNSW resulting from regulating fewer dam owners.

Many stakeholders agreed in principle that a performance incentive built into the levy could be effective at encouraging good regulatory performance and would allow dam owners the ability to influence their total levy.

We have considered all stakeholder views in preparing this report. The following sections detail our final recommendations, including our responses and actions to stakeholder feedback.

4.1 Fixed levy

As highlighted in Chapter 3, we found that DSNSW's recoverable costs are broadly divided into 2 categories: direct costs (which relate to the labour costs of regulating each dam) and indirect costs (comprising mostly of overhead costs). We also found that for many of DSNSW's regulatory activities, more effort (and therefore cost) is required to regulate higher consequence category dams. In other words, higher consequence category dams drive more of DSNSW's costs than lower consequence category dams.

Based on these findings and the principles underpinning our levy design, we recommend a fixed levy (adjusted annually for inflation) that is reflective of each dam owner's share of DSNSW's direct and indirect costs. If the levy is introduced, we recommend it be applied at the beginning of each financial year.

Table 4.1 below shows our recommended levy for year 1 using this approach.

Table 4.1 Recommended levy ($)

Dam consequence category	Low	Significant	High	Extreme
Total levy	7,651	10,588	12,621	15,269

Note: All prices are in $2024-25 terms. The levy rates have changed slightly since our Draft Report because of minor updates in the list of declared dams.
Source: IPART analysis.

This levy is designed to be reflective of the effort required to regulate each dam based on its consequence category. We consider this to be the most cost-reflective and reasonable approach to setting the levy.

Our review also considered different methods of applying the levy, including:

- Setting a fixed levy amount payable by all declared dam owners, adjusted annually for CPI.
- Setting a levy formula which DSNSW would use to calculate the levy payable by each dam owner annually. The formula would also adjust prices annually for inflation.

Under the fixed levy approach, IPART would recommend fixed levy rates which DSNSW would charge all declared dam owners. This would give dam owners certainty on their total levy and in its stability over the application period.

By contrast, under the levy formula approach, IPART would recommend a formula by which DSNSW could update inputs (such as total declared dam numbers) and recalculate the levy each year. In this scenario, the total recoverable amount would remain fixed so that there is no risk of DSNSW recovering funds that have not already been assessed as efficient. However, the levy on each dam owner could change between years as total declared dam numbers change.

In other words, the fixed levy approach would allow DSNSW's total recoverable budget to vary based on the number of declared dams, but the levy payable by each dam would remain fixed. Conversely, the levy formula approach would ensure DSNSW's total recoverable budget would remain fixed, but the levy payable by each dam owner could vary.

While there are certainly merits to both approaches, on balance we recommend applying a fixed levy. In our view, this offers the best balance of simplicity, accuracy and certainty to dam owners. From an implementation perspective, this approach would also be more administratively simple, and would allow DSNSW to comfortably transition to a levy-based cost recovery model without incurring material additional expenses in administering the levy. Given the relatively small scope of annual billing, we do not expect the costs of establishing or maintaining the billing system to be material relative to DSNSW's current overhead costs. Nonetheless, we recommend that any capital or set-up costs associated with implementing a billing system should be funded separately by the Government.

It is important to note that the prices recommended in Table 4.1 represent the recovery of DSNSW's *annual* costs in relation to declared dams. Should the Government decide to implement the levy, it must be applied on a whole of year basis to ensure DSNSW does not over-recover its costs. The Government must also ensure that DSNSW's current funding for declared dam activities ceases before the levy is implemented so that there is no risk of double cost-recovery. To enable a smooth transition, we recommend that any levy should be implemented at the beginning of a financial year, and that Government funding for DSNSW's declared dam activities cease by 30 June of the prior financial year.

Appendix C to this report provides a schedule of the total levy on each declared dam owner based on our recommendations on the levy design.

4.1.1 Levy on owners of multiple declared dams

In our Draft Report we did not recommend a levy discount for owners of multiple declared dams. This is because we found no evidence that owners of multiple dams contributed to cost savings (relative to owners of one dam) for DSNSW. In their submissions to our Draft Report, WaterNSW, Central NSW Joint Organisation and Orange Council stated that owners with multiple dams should receive a levy discount, because of potential cost efficiencies in some cost categories – such as educating & informing dam owners.[29] WaterNSW also noted that having one Dams Safety Management System across its 40 dams should result in cost savings from DSNSW having fewer systems to audit.

After receiving these submissions, we requested that FTI re-examine whether there are any efficiencies for DSNSW in regulating owners of multiple dams. FTI and IPART held an additional workshop with DSNSW to further investigate this issue. At the workshop we considered each of DSNSW's 12 direct cost activities and questioned whether DSNSW's effort would be the same in completing each activity/function for:

- 3 dam owners with one declared dam each
- One dam owner with 3 declared dams[j]

[j] We used 3 because it is the median number of declared dams owned by owners of multiple dams (i.e., within the subset of declared dam owners that own more than one dam, the median number of dams owned is 3).

DSNSW reflected on the processes involved in each of the 12 direct cost activities and found that in most cases, the effort to regulate 3 dams owned by 1 dam owner is the same as the effort to regulate 3 dams each owned by 3 different dam owners. This is because the majority of DSNSW's regulatory functions are directly driven by either the number of declared dams, or the consequence rating of each dam – rather than by the number of dam owners. In other words, DSNSW regulates on a per dam basis, and its costs are largely independent of the number of owners of declared dams.

In the case of educating and informing dam owners, DSNSW noted that it would have to spend the same effort producing and publishing guidance materials regardless of the number of declared dam owners. This is because DSNSW's guidance materials are not prepared bespoke to each dam owner, but are prepared for the benefit of all dam owners.

Similarly, DSNSW noted there may not necessarily be material efficiencies in auditing costs if multiple dams used the same Dams Safety Management System. This is because DSNSW audits not only each Dams Safety Management System itself, but how the system is being applied at each declared dam. It also noted that some owners of multiple dams use different Dams Safety Management Systems at each of their dams – for instance mining companies that acquire existing declared dams. In other words, there may be some situations or activities where there are cost savings from there being one owner for multiple dams, but other situations or activities where there are additional costs.

FTI's Supplementary Report included an additional breakdown of DSNSW's costs on a per dam owner basis, and concluded that any potential cost saving for DSNSW would be minor and relatively uncertain given the data available. In light of this, FTI concluded there is insufficient evidence to justify the introduction of a discount for owners of multiple dams at this time.

We agree with FTI's assessment. We found there was mixed evidence to support the introduction of a levy discount for owners of multiple dams.. All available information points towards DSNSW's costs being largely constant regardless of the total number of entities that owned the declared dams, and as such, any levy discount for owners of multiple dams would not be cost reflective. Our decision is therefore to maintain our draft position and not introduce a levy discount for owners of multiple dams. In Chapter 6 we recommend that the levy be reviewed in 3 years. As part of this, the reviewer could examine new evidence for a levy discount as cost drivers may have shifted and economies of scale may have emerged for DSNSW.

4.1.2 Consequence ratings and different types of dams

Some stakeholders, including Fairfield and Wingecarribee Councils, commented that their flood detention basins are dry or empty most of the time, and that their consequence rating does not factor this in. They suggested that the levy should consider dam purpose such that dams that are always full pay a higher levy than those that are only water bearing intermittently. [30] In contrast, Sydney Water agreed that consequence category should not vary based on functional differences in dam purpose/use.[31]

Our view is that the regulation exists to manage the dam at its most dangerous (i.e., in the worst case scenario), and there is no way to know what day that will be. DSNSW needs to use its resources to manage the dam in case it fails on a rainy day, and that need does not change on sunny days.

We understand from DSNSW that flood detention dams are in fact some of the most likely to fail, given the strain on infrastructure which goes from empty most of the time to full/over full very abruptly.

The purpose of a dam, or the proportion of time the dam spends full does not currently impact on the effort that DSNSW puts into regulating the dam. We acknowledge that in the coming years DSNSW will transition to a risk-based regulatory model where likelihood of dam failure would be factored into DSNSW's regulatory strategy. At this stage however, DSNSW's efforts (and costs) remain consequence based, and we do not think it is reasonable for the levy to be weighted by likelihood of failure because DSNSW itself has not collected sufficient data to apply a likelihood-weighted approach to all declared dams. Similarly, varying based on dam type would also not be a cost-reflective outcome because there is currently no evidence to suggest that the effort DSNSW puts into regulating a dam varies based on the purpose of that dam. We have therefore decided to maintain our draft position on the split of costs in the levy.

4.2 Annual adjustments for inflation and consequence category changes

Between financial years it is possible that there may be changes in the composition of declared dams and their owners. Some dams may move between consequence categories, while others may change owners or have their declaration revoked. We considered different options for how the levy could address dam changes between financial years, including:

- Pro-rating the levy based on changes to dam characteristics: For example, if a 'high' consequence dam moved to 'extreme' halfway through a financial year, then it would pay the applicable 'high' versus 'extreme' levy for the proportion of the year that it spent in each respective category.
- Not pro-rating the levy and instead applying a single fixed levy for the entirety of a financial year. Under this scenario, the applicable levy would reset at the start of every financial year based on the characteristics of the dam at that time, but would not reset mid-financial year.

As flagged earlier, a key design principle for this levy is simplicity – both in its methodology and its administration. We considered both options for addressing mid-year changes to consequence category. In the interest of maintaining administrative simplicity, we recommend that in any financial year, the levy should apply only to dams that are declared as at 1 July that year (i.e., a dam declared in April 2025 would begin to pay the annual levy from 1 July 2025). This would also apply to existing declared dams that are moved to a higher consequence category between billing periods.[k] This approach would:

- Allow dam owners some opportunity to undertake safety improvements to become de-declared (or lower their consequence rating) before the levy applies, and
- Minimise the administrative effort needed for DSNSW to pro-rate levies and manage different billing periods.

[k] We have made recommendations for managing this in section 6.5.3.

We also considered whether the levy should be escalated annually for CPI changes.[l] Our view is that excluding annual CPI adjustments may risk DSNSW under-recovering its real costs, which may in turn reduce the quality of regulatory services provided to dam owners over the longer term.

Since DSNSW is still in a 'set-up' phase of its new regulatory regime, allowing full cost recovery in real terms would be a prudent way of ensuring that DSNSW is best positioned to continue delivering its services to its current standard going forward. We therefore recommend escalating the levy annually for changes in CPI.

Box 4.1 below explains how the levy should be adjusted annually for CPI.

Box 4.2 Annual CPI adjustments to the levy

We recommend that annual CPI adjustments to the levy should apply the Consumer Price All Groups Index number for the weighted average of 8 capital cities, published by the Australian Bureau of Statistics on a quarterly basis. DSNSW should apply March-March quarter changes in this CPI number for annual adjustments to the levy.

For example, if the levy is implemented from 1 July 2025, then the applicable levy for a low consequence dam in the following years should be calculated as:

- $Levy_{25\text{-}26} = \$7{,}651 \times (CPI_{Mar25} / CPI_{Mar24})$
- $Levy_{26\text{-}27} = \$7{,}651 \times (CPI_{Mar26} / CPI_{Mar24})$
- $Levy_{27\text{-}28} = \$7{,}651 \times (CPI_{Mar27} / CPI_{Mar24})$

4.3 Performance incentives for future consideration

Earlier in this review, we flagged the possibility of including a 'performance adjustment' in the levy design. The aim of the performance adjustment would be to incentivise good regulatory compliance by rewarding a dam owner's good performance with a reduction to their levy. We noted that the potential to include this performance adjustment would be dependent on finding evidence that showed better regulatory performance would result in a reduction in DSNSW's costs.

Following FTI's expenditure review, we have found there is currently insufficient data to establish a performance adjustment, and as such have not recommended including a performance component to the levy at this stage. Specifically:

- DSNSW has indicated that there is currently no data being collected on dam owner's regulatory compliance, and there is no benchmark for 'good' or 'optimal' performance.

[l] Using March-March changes in CPI.

- DSNSW has existing powers to issue notices, initiate formal enquiries and levy fines[32] on dam owners that fail to comply with their safety obligations, which itself has the effect of encouraging good regulatory performance amongst dam owners.
- Implementing a forward-looking performance adjustment may unfairly penalise under-resourced smaller dam owners who are still in the process of adjusting to DSNSW's new regulatory regime.

Stakeholders submitted mixed views about a performance component in the levy. Some stakeholders including Cowra Council and the Hills Shire Council felt that a performance discount for compliant dam owners would be effective, while some others expressed concern that it could unfairly penalise small dam owners who are already struggling with the costs of complying with new regulations.[33] Hunter Water stated that a performance incentive in the levy would have no impact because other factors such as reputation and cost savings already drive compliance.[34]

While there is insufficient data to establish a performance adjustment to the levy at this stage, we agree with stakeholders that there are merits in creating financial incentives that drive regulatory compliance, and lower regulatory costs in the future. As such we recommend that any future review of the levy consider the feasibility of implementing a performance adjustment.

In Chapter 6, we discuss our recommendation that any revenue DSNSW receives through non-compliance fines could eventually be used as a base for this performance adjustment. This would ensure that additional regulatory effort spent on non-performers is paid for by those non-performers instead of the full declared dam owner base. We also make recommendations in that chapter on data that DSNSW should collect that could inform the implementation of a performance incentive in the future.

Recommendations

3. If the Government decides to implement a dams safety regulation levy, we have calculated a schedule of levies that varies by dam consequence category. These levies would recover DSNSW's efficient costs of regulating declared dams.
   a. Table 4.1 presents the schedule of dams safety levies that would apply to each dam consequence category. The levies are presented in $2024-25 terms, and would be subject to CPI adjustment on 1 July each year.
   b. The levy should be applied at the beginning of each financial year.
   c. In any financial year, the levy should apply only to dams that are declared as at 1 July that year, and the amount payable should be based on their consequence category as at 1 July that year.
   d. Once implemented, the levy should be adjusted for inflation on 1 July each year, using changes in the March-March quarter CPI. Specifically, to adjust the levy from $2024-25 to $2025-26 (which would apply from 1 July 2025 to 30 June 2026), DSNSW should adjust the levy by the percentage change in the CPI from March 2024 to March 2025.

4. Should the Government decide to implement a levy, it should apply from 1 July as an annual levy. In this event, current Government funding for DSNSW should cease by 30 June of the prior financial year for all costs other than non-levy costs.

5 Impacts of levy for dam owners

IPART's Terms of Reference does not specifically require us to look at cost recovery options, however we note this is something that the Government will need to work through should it decide to implement the levy. As such, and recognising that cost recovery is an important issue for stakeholders, we have explored options for dam owners in this chapter.

Box 5.1 Summary of what stakeholders said about levy impacts

Most stakeholders were strongly opposed to the introduction of a dams safety regulation levy, particularly local councils. Of the 19 submissions we received to our Draft Report, 7 explicitly called for the levy not to be implemented, and a further 10 voiced concerns over cost recovery and equity issues. Local councils argued that the levy is part of a trend of 'cost shifting' from state to local government.

While many submissions acknowledged that the issue is outside the scope of this review, they urged Government to reconsider the introduction of the levy. IPART has not been asked to take a view on the levy, and as such we suggest that the Government consider these stakeholder views in deciding how to proceed with the development of the levy.

Despite their views on the introduction of a levy, some stakeholders were concerned that IPART's draft levy design focused too much on cost recovery and did not give equity concerns appropriate weight.

We have designed the levy to be reflective of DSNSW's costs, which is essential for sending the efficient market signals to dam owners. We consider that equity considerations should be addressed separately to this, so as not to confuse market signals. We also note that the levy makes up a very small component of a dam's running costs, and as such an isolated rebate or exemption will not be effective. However, we recommend that Government give ability to pay/equity concerns further consideration if it chooses to introduce the levy.

There is a strong economic argument that dam owners pay the levy. Dam owners are best placed to manage the risks associated with their dams, and it is efficient that they face all the costs associated with dam management (including regulating their safety). However, we do consider dam owners should be able to pass the cost of the levy on to those that generated the need for the costs. That is, the parties that generate the need for the safety regulation – if it were not for them, the dam owner would not incur these costs.

For example, take water supply dams. Water customers are the reason those dams exist and need to be safety regulated (to protect the water supply), so dam owners should be able to pass the cost of that regulation on to water customers. In this case, they could add the levy cost on to water bills. Likewise, the reason that mining dams exist is to supply customers with coal/minerals etc. These customers can pay for the regulation of the safety of mining dams through a small increase in the price the dam owner charges for the product mined.

However, some local councils (and indeed other dam owners) may face challenges recovering the cost for dams they own for other purposes (e.g. flood mitigation dams). We conducted a survey of all dam owners to identify the number of dams that may be unable to cost recover. We had a relatively high response rate (58% of declared dams), and only identified a small number of cases where cost recovery may involve additional challenges.

We divided dams into 3 groups:

1. Dams where owners can recover cost from the customers or ratepayers that cause the need for the dam – this is the vast majority of dams. In almost all cases, dam owners will be able to recover the cost of the levy from customers/ratepayers through existing mechanisms such as water bills.
2. Dams that also provide services/benefits to other parties (beyond direct customers/ratepayers) – this made up just 4% of survey responses. In these cases, the parties that cause the need for the safety regulation (and therefore the levy) cannot be charged by the dam owner, for example flood mitigation dams that service multiple LGAs.
3. Dams that no longer serve a purpose – this is also a very small subset of the declared dam population (6%). Owners are unable to recover costs because there is no party generating the need for the safety regulation.

5.1 Dams that serve the direct customers or ratepayers of the dam owner

In most cases, dams supply services to customers or ratepayers (e.g. water supply, irrigation, power generation) and the dam owner charges for these services. In these cases, we think it is appropriate that dam owners include the cost of the levy in the prices they charge for these services. Ultimately, the levy cost will be borne by those that are the root cause of the levy (i.e. the party that generated the need for the dam safety regulation to exist). This group makes up the vast majority of declared dams (90% of our survey responses).

5.2 Dams that also serve third parties beyond direct customers/ratepayers

This subset of declared dams provide a service (most commonly flood mitigation) but their owners have a limited ability to pass costs onto all parties that are served by the dam. Most of these are council-owned dams which service more than one LGA (and therefore sit outside the council's ratepayer base). While the council could look to recover costs from its ratepayers, it would be unfair to pass the whole levy on to ratepayers when the dam is servicing more than just the local population. However, the council has no ability to pass the levy on to ratepayers in neighbouring council areas.

In these cases, we considered developing a simple rebate mechanism so that government would provide a 50% rebate for dams which meet key criteria:

1. The dam is providing a public benefit (i.e. is not solely for profit)
2. The dam owner is unable to recover costs from the parties that are driving the need for the dam to exist.

On balance, our decision is not to recommend a rebate.

A rebate would not solve the larger cost recovery issue

The main reason we do not recommend a rebate for these dams is that it would not solve the larger issue, that these owners are incurring costs to keep these dams running that should be passed on (or at least shared) with all parties that generate them.

The levy is only a very small component of the running costs of operating and maintaining a declared dam. Numerous submissions quoted significant maintenance costs to keep dams running each year.[m] Best practice would be that dam owners are able to reach agreements with their beneficiaries to share all dam related costs, not just the levy.

We consider that a rebate would not result in costs being recovered from the parties that are causing the need and/or receiving benefits from the dam and it may result in perverse incentives for dam owners to attempt to reclassify their dams in order to access a rebate.

Local Government NSW, supported by others including Albury Council, considers that IPART dismissed the partial rebate idea too quickly, and in its submission called for policy development that has a focus broader than cost recovery.[35] We maintain that cost recovery is the efficient method for setting the levy in the first instance, and that equity/ability to pay considerations are policy decisions outside the scope of our Terms of Reference, and therefore a matter for Government.

[m] For instance, Cowra Council has spent $330,000 to get 4 flood mitigation dams upgraded to a level acceptable under the DSNSW regulation. Weddin Shire Council spends $100,000 annually to operate, maintain and comply with regulations for one of its declared dams.

Only a small subset of dams will face this problem

A secondary reason for not recommending a rebate is the administrative complexity it would introduce, for very little payoff. Only 4% of sampled declared dams face this challenge (equating to roughly 16 of the 380 declared dams in NSW). Even the dams that could qualify would likely only have a portion of the levy rebated (recognising that in most cases, the dam owner is able to pass on a portion of costs to the efficient party).

Any rebate system established for this purpose would need to have guidelines established, a mechanism for determining which dams qualify, and a system for paying the rebate to each dam owner. All of this will need resources (either through DSNSW or the Government), and given the materiality of the levy, it does not seem reasonable to impose that administrative burden.

There are other solutions under development

There are ongoing government reviews that are looking into local councils' ability to pay these types of costs. For instance, we note the NSW Legislative Council's inquiry into the "Ability of local governments to fund infrastructure and services",[36] and the ongoing NSW Productivity Commission's "Review into the funding models for local water utilities".[37]

Lake Macquarie Council argued in its submission that IPART needs to facilitate cost recovery for councils that own dams by either allowing councils to administer cost recoupment through the rate peg system or by directing government funding to councils whose dams providing public benefit.[38]

IPART cannot direct government funding, but we do understand the position that councils are in. We have recently reviewed our rate peg methodology, and if the levy is introduced, we will ensure that it is on the agenda for the newly established Council Reference Group which advises on issues relating to rate peg impacts. If this group considers the issue material, IPART is open to considering a special adjustment factor for affected councils in a future rate peg.[n] We note that the Council Reference Group could also be a forum for councils to discuss wider dam cost sharing agreements in those cases where a dam provides benefits across local government areas.

5.3 Dams that no longer serve a purpose

The survey also identified 14 dams that no longer serve a purpose. Of these:

- 2 are state government owned, awaiting closure
- 4 are owned by state agencies (as an owner of last resort) which have no funds to decommission them
- 5 are owned by councils – largely not closed due to lack of funds

[n] The Council Reference Group is a consultative body and not a decision-making body. It will provide a forum for identifying opportunities for addressing current and emergent issues related to the rate peg methodology. This includes establishing a process for specific adjustment factors to be included in the rate peg for specific costs faced by councils or groups of councils where ratepayers benefit from activities generating the costs and where we have the necessary information to ascertain the quantum of these costs. For more information, see the Council Reference Group Terms of Reference.

- 2 are owned by WaterNSW, and
- 1 is privately owned.

In these cases, the dam does not provide services to customers or ratepayers that should ultimately fund the cost of the dam, including dam safety related costs. The efficient decision, therefore, may be to close the dam rather than incur ongoing maintenance and dam safety costs. From submissions to our Issues Paper, we know that many of these dams would be decommissioned if funds were available to undertake these works.

We do not consider a rebate appropriate for these dams either. We have confirmed with DSNSW that dam purpose (or lack thereof) has no impact on the regulatory effort DSNSW needs to spend on a dam. Dam owners need to trade-off between the ongoing maintenance and regulatory costs needed to ensure ongoing safety of the dam, and the one-off capital cost of decommissioning the dam. Providing a rebate would artificially lower the ongoing cost and distort the decision for dam owners.

Instead, if the Government decides to implement a dams safety regulation levy, we recommend that it also consider making funds available to assist with decommissioning dams that are Local Government or NSW Government owned and no longer serve a purpose. Decommissioning these dams may result in a net benefit in terms of removing the need for ongoing maintenance and dam safety costs and also eliminating the safety risk posed by the dam for the local community. Tamworth Council expressed support of this proposal in its submission to our Draft Report.[39]

5.4 Impacts for smaller populations

Submissions to our Draft Report showed considerable concern amongst local councils that the levy will be unaffordable. Most councils felt that the levy design should consider a dam owner's ability to pay, and that councils with small populations would feel the impact of the levy more. Fairfield Council and the Central NSW Joint Organisation noted that some councils would need to redirect funds away from existing services in order to pay the levy.[40]

We have assessed the potential bill impact for regional customers (see some examples in Table 5.1 below) and consider that the materiality of the levy would not warrant the administrative complexity of a rebate.

Table 2.1 Impacts of levy for local councils

Local Council	Number of dams	Annual levy cost per person in LGA[a]	Levy as a proportion of budget[b]
Fairfield Council	11	$0.61	0.13%
Orange Council	4	$3.40	0.12%
Cowra Council	4	$3.35	0.52%
Kiama Council	1	$0.10	0.06%
Sutherland Council	1	$0.03	0.00%

Note: All prices are in $2024-25 terms.
Source: IPART analysis. Population data from ABS Regional Population estimates 2023.

Cowra Council's submission calculated the impact of paying the levy for its 4 high consequence dams at $6.86 per annum per ratepayer.[41] We note that this calculation uses number of ratepayers as opposed to population in the LGA. We have used population in each LGA for consistency, but acknowledge costs would be slightly higher if looking on a per ratepayer basis.

As with the owners that cannot pass costs on to the efficient party, introducing a rebate will not fix the larger issue: that dams are expensive to manage, and the levy is only a small part of that. We consider that a levy rebate would only distort market forces by disproportionately reducing these costs associated with managing a dam.

However, we acknowledge that many councils are facing cost pressures, and that a new levy would add to these pressures. We recommend the NSW Government consider these impacts and factor this into its decisions on if, when and how to implement the levy.

5.5 Impacts on flood mitigation activities

One of the points that some stakeholders raised in response to our Issues Paper was a concern that the introduction of a levy would disincentivise investment in flood mitigation. Several stakeholders argued that local council budgets are already stretched, and a new cost (in the form of a levy) would only make flood mitigation more costly and could even mean that flood mitigation works are postponed or cancelled to avoid the levy.

We consider that a levy to recover the costs of keeping a dam safe is an efficient cost to be faced by dam owners. There is an argument that if flood mitigation efforts are too expensive, they should be subsidised for the community's benefit. However, we observe that this may be more effectively achieved through a government subsidy, rather than implicitly through a rebate to offset the efficient costs of dam safety regulation.

Recommendations

5. Local Councils and the NSW Government could give further consideration to the issue of cost sharing for dams which provide benefits across LGA lines.

6. The Government should consider making funds available to decommission unused Local Government and NSW Government dams that no longer serve a purpose.

6 Recommendations for the future

The final task in IPART's Terms of Reference is to recommend information that DSNSW should collect to inform future assessments of efficient costs and determination of the levy. We have identified 4 key recommendations, laid out below.

Box 6.1 Summary of what stakeholders said about future reviews

There was wide support amongst stakeholders that the levy should be independently reviewed in 3 years, including the costs underlying the levy and the basis for cost allocation. Stakeholders suggested IPART or the NSW Audit Office as independent authorities to review the levy.

Stakeholders made useful suggestions as to the types of information that DSNSW should publicly report on for accountability and transparency purposes. Some argued that levy implementation should be delayed until more cost data is available.

6.1 The levy should be reviewed in 3 years

This is the first time that IPART has considered DSNSW's efficient costs and designed a levy to recover these efficient costs from owners of declared dams. As such, we recommend that the levy be independently reviewed in 2027 to assess whether it is still fit for purpose. We note it is good practice to review pricing arrangements regularly and consider it particularly important in this case.

Given that DSNSW is expected to be transitioning into a more 'steady state' once it has completed the initial risk assessments by end 2026, we consider it would be timely to review DSNSW's operations, costs and the levy in 2027.

Several submissions to our Draft Report see merit in reassessing effort ratios in particular, and benchmarking DSNSW costs in the future once more data is available. Hunter Water submitted that if a levy is to be imposed, then DSNSW must be subject to ongoing regulation to ensure its costs (and therefore the levy) remain efficient over time.[42] We agree that DSNSW should be subject to periodic review, but consider that periodic review of its efficient costs and subsequent resetting of the levy is sufficient at this stage.

DSNSW's activities will change as the regulatory regime matures

As previously discussed, DSNSW is a relatively new regulator, and its operations have not yet reached a 'business as usual' phase. DSNSW has expressed that while it is currently investing heavily in education for dam owners and developing an accurate risk profile for each of the declared dams, this will change when it completes its first round of the regulatory cycle (in 2026).

We have designed the levy based on DSNSW's operations today, but it is likely that costs will shift as the regulatory regime matures. We agree with our consultant's recommendation that there be another review of expenditure once the dam risk profile is better understood. The levy should be updated to reflect DSNSW's new cost profile.

Snowy Valleys and Goulburn Mulwaree councils proposed that levy implementation be postponed until DSNSW has completed its risk profile, and the upcoming statutory review has been completed, so the levy can be set according to dam risk.[43] We do not consider this necessary. We set the levy based on consequence category because that is key factor that drives DSNSW's efforts (and costs) at present. We acknowledge that in the coming years DSNSW will transition to a risk-based regulatory model, and at that point redesigning the levy to be based on dam risk would be appropriate, but at this stage using consequence is an efficient method for DSNSW cost recovery.

Stakeholders asked for a re-review

Submissions to both our Issues Paper and Draft Report overwhelmingly called for another review of the levy after its implementation. Stakeholders want to ensure that only DSNSW's efficient costs are recovered by a levy, and that the levy is as fair as possible.

A number of dam owners consider that the level of regulatory support they require from DSNSW will likely change after this first regulatory cycle, and this should be reflected in the levy they pay. We note that a number of submissions explicitly call for the re-review to assess whether there should be a levy at all, noting that this is out of scope this time around.

A performance component to the levy may be feasible in the future

As discussed in Chapter 4, we have not included a performance component in our levy design at this stage. However, we consider there is merit in exploring this issue further at the next levy review when more information is available. To facilitate this, we have made specific recommendations about the data that DSNSW should collect to inform the next levy review.

6.2 DSNSW should improve data collection

As the new regulatory regime matures and as DSNSW transitions to a steady state, it is critical that it develop a solid evidence base to inform review of its efficient costs and adjustments to the levy. Therefore, we consider that DSNSW should begin collecting more specific data on how it delivers on its obligations, and should report publicly on this.

6.2.1 DSNSW should collect activity-based costing data

In designing the levy, we broke down costs according to DSNSW's key regulatory activities. It is important that as the regime matures and DSNSW's operations transition to a steady state, DSNSW builds the evidence base to inform future reviews and provide assurance that its costs are efficient and the levy is reasonable.

To enable this, we recommend DSNSW begin collecting timesheet data from staff which captures how each staff member spends their time. This data could then be used to calculate costs from the bottom up, showing how resources are used to deliver safe dams in NSW.

This could also be used to evaluate whether a performance adjustment is warranted. If timesheets showed that staff are spending more time on a specific subset of dam owners who are not responding to DSNSW instructions, this group could be isolated, and the extra costs be distributed between them through an extra levy charge. Likewise, this information could help inform whether a discount for owners of multiple dams is warranted.

This data would also help build a picture of how DSNSW's mix of regulatory activities is shifting as the regime matures. An independent reviewer could use the information collected between now and 2027 to develop a better understanding of what DSNSW's 'steady state' of operations looks like, and therefore what efficient costs would be.

6.2.2 DSNSW should review its efficiency regularly

DSNSW is a new regulator and is showing strong signs of maturing. We did not find evidence that its current costs are inefficient, but DSNSW should be innovative and look for ways to deliver its regulatory functions more efficiently over time.

We agree with our consultant's recommendation that DSNSW begin assessing its own efficiency by reviewing resourcing and identifying any areas where it could deliver on its obligations more efficiently. Further, we recommend that another independent review in 2027 use the activity-based costing data collected by DSNSW to conduct a thorough cost efficiency review.

6.2.3 DSNSW should be transparent and report on performance

Finally, we commend DSNSW on its commitment to report its progress against goals laid out in its Strategic Plan.[44] We also note that DSNSW publishes key statistics about its operations in its annual reports.

If Government introduces this levy, it will be critical that DSNSW is transparent and accountable to the dam owners paying the levy. Stakeholders strongly argued for this, and feel that dam owners should be able to provide feedback on DSNSW's measures of success.

To this end, we recommend that DSNSW publish a dashboard which regularly tracks its performance against key targets in its Strategic Plan (including whether it is on schedule for completing the risk profile by 2027). This would provide stakeholders with more up to date information on DSNSW's performance, and provide DSNSW with a further incentive to reach its goals. We note that DSNSW has already begun collecting this information internally, so the recommendation that this be regularly published should not impose much administrative burden.

Blue Mountains Council also suggested DSNSW report on cost of whole of life dam management (that is, costs for all parties relating to risk management, compliance, operating, renewal and upgrade).[45] We consider this issue may be outside the scope of the current review. However, we encourage DSNSW to be open to consider suggestions like this from dam owners.

6.3 DSNSW's implementation of the levy and performance should be reviewed

If the Government decides to implement a levy, we consider it would be appropriate for its implementation to be audited periodically. This would be a new function for DSNSW, and it will be important to ensure that the levy is being collected and used as intended. We understand that DSNSW is financially audited annually by the NSW Audit Office (as is standard for most government agencies). One option would be to consider whether there is merit in expanding the scope of this audit to include consideration of levy revenue.

More broadly, we note that DSNSW conducts an essential role in NSW – particularly as climate change causes more frequent severe weather events. The consequence of a dam failing could be catastrophic, and as such it is important that reasonable steps are taken to ensure that DSNSW remains best placed both financially and operationally to appropriately manage dam safety risks. In California, the dams safety regulator is examined every second year, in recognition of the high risk work it conducts.[46] However, to our knowledge there has not been a performance audit conducted of DSNSW.

We strongly recommend that regardless of whether the levy is introduced, DSNSW's performance should be periodically reviewed, to ensure that it is delivering on its obligations.

6.4 The upcoming statutory review should consider minor changes to the Act

Section 55 of the *Dams Safety Act 2015* requires the Minister to review the Act 5 years after its commencement.[o] DSNSW has informed us that this review will commence within the next 6 months. We have identified 2 key issues that we recommend DSNSW considers as part of this review.

6.4.1 Introduce a 'fee for service' model

At present, the Act refers to a 'levy' to be imposed on owners of declared dams. There is a question as to whether a 'levy' could be charged in the form of a fee for specific services. For instance, whether DSNSW could charge dam owners for specific audit elements each time they are performed (e.g. decommissioning a dam, or reviewing its reports). If this were possible, the levy could over time be refined so that dam owners only pay for the services they use.

Subject to appropriate regulations being made, the Act would currently allow DSNSW to collect fees for specific services from existing declared dam owners, but not from other parties. We recommend that DSNSW should consider including an explicit ability to charge other parties on a fee for service basis. This would allow DSNSW to recover costs that we have excluded from the levy (specifically, providing advice to the Minister/other government departments, and reviewing mining consent applications at the request of the Department of Planning) from the relevant parties instead of being funded through general government revenue.

[o] It commenced on 1 November 2019.

We note that DSNSW's submission to our Draft Report references specific powers in the Act to allow DSNSW to collect fees from dam owners in some cases. We understand these powers allow DSNSW to recover emergency costs where it has had to undertake works when dam owners have not complied with orders.[47]

6.4.2 Consider the ability for DSNSW to retain some funding from penalties

We recommend the Act review consider the merits of allowing DSNSW to retain at least a portion of any revenue it receives through penalty notices and fines from non-complying dam owners. This would ensure that DSNSW is able to recover the resources used on non-compliance, instead of including those costs in the levy (meaning that only poor performers pay, not all dam owners). In essence, it would be a kind of proxy for the dam owner performance component of the levy that we did not include in our design due to lack of data.

We recommend this revenue be directed to DSNSW's Special Deposits Account[p] (along with levy revenue), so that DSNSW can retain those funds year on year. This would ensure the funds are quarantined to use for dams safety regulatory purposes, and potentially for future levy reductions.

We note the concern that this could incentivise DSNSW to issue more penalty notices to increase revenue, however we consider this incentive can be minimised provided there are transparent and rigid guides in place to determine when a fine is issued.

6.5 Implementation considerations for Government

Several dam owners have expressed a view that the introduction of a new dams safety regulation levy would not be equitable. These stakeholders are concerned about the financial impact of the levy their ability to pay. While we consider that the questions of if and when the levy is introduced are matters for the NSW Government, we have outlined the potential impacts of the levy and identified some potential options to mitigate some of these impacts.

If the NSW Government decides to implement the levy, we have assembled a list of implementation risks/recommendations for consideration.

6.5.1 Require DSNSW to update records

In developing this levy we have worked through DSNSW data, and at times found minor discrepancies in its record keeping (for instance, some outdated consequence ratings attached to declared dams). One council brought to IPART's attention that DSNSW's list of declared dams included a dam that was not declared and should not have been on the list.[48]

If a levy is implemented, bills will be issued based on the data in the DSNSW database, and we consider there is a risk that a dam owner could receive an incorrect levy amount if there is a mistake in DSNSW's database.

[p] As provided in the *Dams Safety Act 2015* (NSW), s 40.

Therefore, we recommend that the Government require DSNSW to contact each dam owner and confirm the number of dams owned and their associated consequence ratings. This should be done before any levy is introduced. This would give all parties confidence that the levy is being collected appropriately, it would reduce the risk of disputes, and it would also account for any dam consequence rating changes between now and the time of levy implementation.

6.5.2 Enforcement mechanism

Section 41 of the *Dams Safety Act 2015*:

- allows for regulations to be made "for or with respect to the payment by owners of declared dams of a dams safety levy"
- provides that any such levy is payable to DSNSW, and
- allows the regulations to determine the amount and time for payment of the levy.

However the Act is otherwise silent about details of a levy. One consequence of this is that there is currently no express way for DSNSW to enforce the levy if an owner of a declared dam refuses to pay.

We therefore recommend that DSNSW seek a regulation under section 41 providing for an enforcement mechanism. We suggest that DSNSW, with the advice of the Parliamentary Counsel's Office, determines the best mechanism in the event that the levy is introduced. One option could be to pursue a provision that enables DSNSW to recover an unpaid levy as a debt, in a court of competent jurisdiction. This would allow DSNSW to bring civil proceedings to recover money owing to it. It would also provide a forum for a dam owner to dispute its liability to pay, or the calculation of, a levy.

6.5.3 Processing time for dam reclassification/declassification

We have recommended that the levy apply to declared dams as they stand on 1 July each year. However, sometimes dams are reclassified (in consequence terms) or de-declared. As one stakeholder noted in the Public Hearing,[49] there could be situations where a dam owner is waiting for DSNSW to finalise a consequence downgrade for their dam and the 1 July deadline passes. In those cases the dam owner could end up paying the levy for the old, higher dam classification even though the dam owner had done the work to have the dam downgraded.

For this reason, we recommend that Government work with DSNSW to establish and publicise deadlines for dam owner applications for these reclassifications if the levy is introduced. Our conversations with DSNSW suggest that it requires 28 days to process a consequence reclassification, and longer to revoke a dam's declared status. Providing that a dam owner makes a complete application before these agreed deadlines, they could be assured they will have the dam reclassified before 1 July. This would provide DSNSW with an incentive to work through applications efficiently, while ensuring it has sufficient time to complete its due diligence on reclassification.

Recommendations

7. The levy should be independently reviewed in 3 years. We recommend any future review of the levy reassess cost allocation between dam owners, and consider the feasibility of applying a performance adjustment.

8. DSNSW should improve data collection and record keeping, specifically around activity-based costing and dam consequence ratings.

9. DSNSW's performance should be reviewed regardless of whether a levy is introduced.

10. The Minister should request the upcoming statutory review of the *Dams Safety Act* 2015 consider:
    a. introducing a power to levy a 'fee for service' from persons other than declared dam owners
    b. the ability to retain funding from penalties.

11. Should the Government decide to implement a levy, the Minister should consider introducing a levy payment enforcement mechanism through the regulations.

12. The Minister should require DSNSW to contact each dam owner to confirm its records are correct regarding number of dams and their consequence ratings.

Appendices

A Determining dam consequence category

DSNSW assigns dams a 'consequence rating' to each of its declared dams based on the potential for loss of life and severity of damage/loss in the event of a failure. It has a methodology in place which dam owners follow in calculating their own level of risk before submitting to DSNSW for an official rating.

There are 2 different methods available to determine a dam's consequence rating:

1. Population at risk (PAR) – this is a simple method where a radius is drawn around a dam and anyone living in/using that area is considered at risk in the case of a dam failure.
2. Potential loss of life (PLL) – this is a more sophisticated method to estimate the potential consequence of dam failure. The population at risk method factors in a range of other considerations including the volume of water in the dam, the quality of early warning systems, ease of evacuation channels etc.

The intention of allowing 2 methods to estimate consequence rating is to allow a simpler lower cost option (PAR) for dam owners that do not have the resources to undertake the more sophisticated approach (PLL). Both methods produce a 'sunny day' and a 'flood day' consequence rating, and DSNSW uses the flood day rating to classify each declared dam.

The consequence thresholds for each method have been calibrated such that both methods should generate, on average, the same consequence rating. The PAR method uses a higher threshold to classify a dam's consequence rating in recognition of the fact that it does not factor in the likelihood of loss of life into the calculation. For instance, to be classified as high consequence, a dam needs a PAR rating of 1, or a PLL rating of 0.1.

While the dams in NSW currently use a mix of PAR and PLL, DSNSW has confirmed that all dams need to use PLL by the end of 2026 as part of DSNSW building a clear risk profile of all dams.

Table A.1 below sets out how declared dams are categorised by DSNSW.

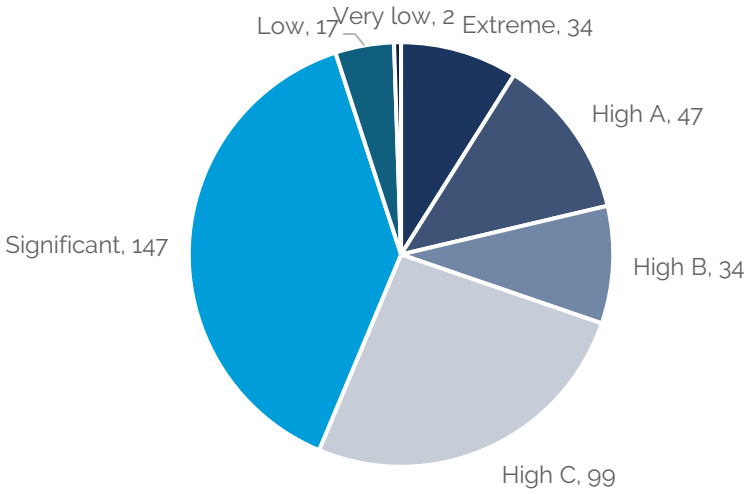
Table A.1 DSNSW consequence category assessment

Potential Loss of Life	**Severity of Damage and Loss**			
	Minor	**Medium**	**Major**	**Catastrophic**
Less than 0.1	Very Low	Low	Significant	High C
0.1 to less than 1	Significant	Significant	High C	High B
1 to less than 5		High C	High B	High A
5 to less than 50		High A	High A	Extreme
50 or more			Extreme	Extreme

Source: Government Gazette No 113 of Friday 18 March 2022

As at 1 September 2024, DSNSW classified 34 dams as extreme risk, 327 high to significant, and 19 low risk (see Figure A.1 below).

Figure A.1 Breakdown of declared dams by consequence category



Source: DSNSW

B Allocation of DSNSW costs

As discussed in Chapter 3, we categorised each of DSNSW's 16 regulatory activities as direct (directly attributable to dam owners), indirect (necessary for providing services to dam owners, but not directly linked to individual dams), or non-levy (to be paid by government).

Table B.1 Recommended allocation of costs – by activity ($)

Activity	Total cost	% recoverable via the levy	Direct costs in levy	Indirect costs in levy
Advice to Minister/Government	17,800	0	-	-
Annual dams safety standards report	67,370	100	67,370	-
Audit compliance - decommissioning	27,900	100	27,900	-
Audit compliance - design and construction	111,250	100	111,250	-
Audit compliance - operations and maintenance	586,900	100	586,900	-
Audit compliance - reviewing reports	257,650	100	257,650	-
Corporate support/overheads[a]	1,249,380	94	-	1,180,399
Dam declaration and revocation	78,200	0		-
Declaring a dam mining notification area	66,590	100	66,590	-
Develop regulatory framework and guidelines	159,370	100	159,370	-
Educate and inform dam owners	966,350	100	966,350	-
IT system build (DIMS) & maintenance[a]	144,750	94	-	136,758
Monitor dams above the safety threshold	78,450	100	78,450	-
Respond to incident reports	79,210	100	79,210	-
Respond to non-compliance	618,380	100	618,380	-
Review mining consent applications	80,450	0	-	-
Total	**4,590,000**	**94**	**3,019,420**	**1,317,157**

Note: All costs are in $2023-24 terms.

a. Approximately 6% of indirect costs (from the 'Corporate support/overheads' and 'IT system build & maintenance' items) are incurred in completing non-recoverable activities (Advice to Minister/Government, Dam declaration and Reviewing mining consent applications). Therefore, these costs have also been excluded from the levy.

Source: IPART analysis.

For each of the direct cost activities, DSNSW estimated 'effort ratios' to quantify the ratio of its time spent regulating a typical low, significant, high and extreme consequence dam. These ratios are presented in Table B.2 below. We then used the weighted average of these direct cost ratios to allocate the indirect costs (corporate support/overheads and IT systems).

Table B.2 Effort ratios – by activity

Activity	Low	Significant	High	Extreme
Advice to Minister/Government	n/a	n/a	n/a	n/a
Annual dams safety standards report	1.00	1.00	1.00	1.00
Audit compliance - decommissioning	1.00	1.00	2.00	3.00
Audit compliance - design and construction	1.00	1.00	2.00	3.00
Audit compliance - operations and maintenance	1.00	3.00	5.00	7.00
Audit compliance - reviewing reports	1.00	1.00	2.00	3.00
Corporate support/overheads[a]	-	-	-	-
Dam declaration and revocation	n/a	n/a	n/a	n/a
Declaring a dam mining notification area	1.00	1.00	1.00	1.00
Develop regulatory framework and guidelines	1.00	1.00	1.00	1.00
Educate and inform dam owners	1.00	1.00	1.00	1.00
IT system build (DIMS) & maintenance[a]	-	-	-	-
Monitor dams above the safety threshold	1.00	1.00	1.00	1.00
Respond to incident reports	1.00	1.00	1.00	1.00
Respond to non-compliance	1.00	4.00	4.00	5.00
Review mining consent applications	n/a	n/a	n/a	n/a
Weighted average	**1.00**	**1.38**	**1.65**	**2.00**

a. 'Corporate support/overheads' and 'IT system build (DIMS) & maintenance' represent indirect costs, for which no effort ratios were estimated by DSNSW. In this report, we have recommended that indirect costs be shared between dam consequences using the weighted average effort ratios for direct cost activities, as shown in the table above.

Source: IPART analysis, using estimates from DSNSW.

C Schedule of recommended levy rates

Table C.1 Recommended total levy by dam owner

Dam owner	No. of dams	Total annual levy ($)
Adam Cabot	1	7,651
AGL Macquarie Ltd	9	102,519
AK Soave Pty Limited	1	7,651
Albury City Council	2	25,242
Armidale Regional Council	2	25,242
Ashton Coal Operations Ltd	1	10,588
Aurelia Metals Limited - Hera Resources	1	10,588
Bathurst Regional Council	2	27,890
Bega Valley Shire Council	3	37,863
Bengalla Mining Company	2	23,209
BHP Billiton-Coal	3	25,890
BHP Billiton-Energy Coal	1	12,621
Big Island Mining Pty Ltd	1	12,621
Blacktown City Council	3	35,830
Bloomfield Collieries Pty Ltd	3	31,764
Blue Mountains City Council	1	10,588
Broken Hill Operations Pty Ltd	1	12,621
Bulga Coal Management Pty Ltd - Glencore	4	44,385
Burragorang Valley Coal Pty Ltd	1	10,588
Cabonne Shire Council	2	20,272
Cadia Holdings Pty Ltd	5	58,135
Camden Council	1	12,621
Campbelltown City Council	5	54,972
Castle Hill Country Club	1	10,588
Centennial Newstan Pty Ltd	1	12,621
Central Coast Council	6	76,340
Central Tablelands Water	1	12,621
Cessnock City Council	2	23,209
Challenger Mines Pty Ltd	1	10,588
City of Newcastle Council	2	21,176
City of Parramatta	5	63,719
Clarence Valley Council	2	25,857

Dam owner	No. of dams	Total annual levy ($)
Cochrane Dam Pty Ltd	1	10,588
Coffs Harbour City Council	7	86,314
Cowra Shire Council	4	42,351
Cumberland City Council	1	10,588
Dartbrook Operations Pty Ltd	1	10,588
Delta Electricity	2	21,176
Elanora Country Club	1	12,621
Ellerston Pty Ltd	1	12,621
EMC Metals Australia Pty Ltd	2	25,242
Endeavor Operations Pty Ltd	1	10,588
Energy Australia | Mount Piper Power Station	2	27,890
Essential Water	2	23,209
Eurobodalla Shire Council	3	37,863
Evolution Mining Ltd	4	42,351
Fairfield City Council	11	128,665
Forest Grove Community Association	1	10,588
Generator Property Management Pty Ltd	2	23,209
Glen Innes Severn Council	1	10,588
Glencore Mt Owen Pty Limited	2	21,176
Glencore Ravensworth Operations	3	33,797
Goulburn Mulwaree Council	2	27,890
Greater Sydney Local Land Services	1	15,269
Greater Sydney Parklands Trust	1	10,588
Greenspot Developments Pty Ltd	1	12,621
Hawkesbury City Council	1	12,621
Hillgrove Mines Pty Ltd	3	35,830
Hilltops Council	1	10,588
Hunter Water Corporation	4	49,065
HV Operations Pty Ltd	4	39,415
Icon Water Limited	1	15,269
Illawarra Coke Company	1	10,588
Inner West Council	1	12,621
Inverell Shire Council	1	12,621
Kempsey Shire Council	1	12,621
Kiama Municipal Council	1	12,621
Killara Golf Club Ltd	1	12,621

Dam owner	No. of dams	Total annual levy ($)
Ku-ring-gai Council	1	10,588
Kyogle Council	1	12,621
Lake Macquarie City Council	2	21,176
Liddell Tenements Pty Ltd	1	7,651
Lithgow City Council	2	27,890
Liverpool City Council	11	136,797
Liverpool Plains Shire Council	2	20,272
MACH Energy	3	35,830
Macquarie Coal Pty Ltd	1	10,588
Mangoola Coal Operations Pty Ltd - Glencore	3	35,830
Manuka Resources Limited	1	10,588
Matt Crossingham	1	10,588
Maxwell Ventures (Management) Pty Ltd	1	10,588
Metals Acquisition Limited	1	10,588
Midcoast Council	1	10,588
Mid-Western Regional Council	1	12,621
Mineral Hill Limited	2	18,239
Muirfield Golf Club Limited	1	10,588
Murray-Darling Basin Authority	2	27,890
Nambucca Valley Council	1	12,621
Narambulla Partnership	1	10,588
Narrabri Coal Operations Pty Ltd	1	10,588
Northparkes Mines	5	63,105
NSW Department of Industry - Lands	3	30,860
NSW Department of Primary Industries	1	10,588
NSW National Parks and Wildlife Service	1	10,588
Orange City Council	4	48,451
Origin Energy Limited	2	25,242
Parkes Shire Council	2	18,239
Peak Gold Mines PTY LTD	1	10,588
Penrith City Council	2	23,209
Perilya Broken Hill Limited	1	10,588
Port Macquarie Hastings Council	2	27,890
Queanbeyan-Palerang Regional Council	1	12,621
Ravensworth Operations Pty Ltd	1	10,588
Redbank Mines	1	7,651

Dam owner	No. of dams	Total annual levy ($)
Rous County Council	2	25,242
Santos NSW (Eastern) Pty Ltd	1	10,588
Shellharbour City Council	4	42,351
Shoalhaven City Council	4	39,415
Snowy Hydro Limited	15	185,574
Snowy Valleys Council	1	12,621
South32 Limited	1	10,588
Springvale Coal Pty Ltd	1	10,588
Stockland	1	10,588
Sunshine Reclamation Group	1	7,651
Sutherland Shire Council	1	7,651
Sydney Water	16	190,351
Tamworth Regional Council	3	37,863
Tarago Operations Pty Ltd	5	63,105
Tenterfield Shire Council	1	12,621
The Hills Shire Council	2	23,209
The Owners - DP 270644	1	12,621
The Owners of Lot 1 DP 285400	1	10,588
Tomingley Gold Operations Pty Ltd	3	33,797
Transport Asset Holding Entity	1	10,588
Transport for NSW	1	12,621
Transport for NSW - RMS (East West)	1	10,588
Tritton Resources Pty Ltd	1	10,588
Tronox Mining Australia Limited	1	10,588
Tweed Shire Council	1	12,621
United Collieries Pty Ltd	1	10,588
University of New South Wales	1	10,588
Upper Hunter Shire Council	1	12,621
Upper Lachlan Shire Council	2	23,209
Uralla Shire Council	1	10,588
Veolia Environmental Services (Australia) PTY Ltd	1	12,621
Visy Pulp & Paper	3	33,797
Vitalharvest Pty Ltd	1	10,588
Wambo Coal Pty Ltd	3	33,797
Warrumbungle Shire Council	1	12,621
Water Administration Ministerial Corporation	1	10,588

Dam owner	No. of dams	Total annual levy ($)
WaterNSW	40	539,395
WCX M5 PT Pty Ltd	2	25,242
Weddin Shire Council	1	12,621
Werris Creek Coal Pty Ltd	3	31,764
White Rock Minerals (MTC) Pty Ltd	2	23,209
Whitehaven Coal - Narrabri Mine	1	10,588
Wilpinjong Coal Pty Ltd	2	21,176
Wingecarribee Shire Council	3	33,797
Wollongong City Council	8	92,835
Wollongong Resources Pty Ltd	1	12,621
Yancoal - Stratford Coal	3	37,863
Yancoal Australia - Mt Thorley Warkworth Operations	5	59,039
Yancoal Australia Ltd	1	12,621
Yass Valley Council	1	15,269

Note: All prices in $2024-25 terms.
Source: IPART analysis.

D IPART's Terms of Reference

The Hon Chris Minns MP
Premier of New South Wales

NSW GOVERNMENT

Ref: A5897105

The Hon. Rose Jackson MLC
Minister for Water
52 Martin Place
SYDNEY NSW 2000

Re: Requesting IPART to recommend fees for a dams safety levy

Dear Minister,

Thank you for your letter dated 24 October 2023 seeking approval for IPART to recommend fees for a dams safety levy under the *Dams Safety Act 2015*.

I approve the arrangement as set out in your letter and updated proposed terms of reference (**enclosed**), pursuant to section 9(2) of the *Independent Pricing and Regulatory Tribunal Act 1992*. You may issue the enclosed terms of reference to IPART at your convenience.

Thank you for taking the time to bring this matter to my attention.

Sincerely,

[redacted]

Chris Minns MP
Premier of New South Wales

26/11

52 Martin Place Sydney NSW 2000
GPO Box 5341 Sydney NSW 2001

02 7225 6000
nsw.gov.au/premier

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OFFICIAL

Review of the dam safety levy

I, The Hon. Rose Jackson MLC, with the approval of the Premier under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* (IPART Act), enter into an arrangement for the Independent Pricing and Regulatory Tribunal (IPART) to provide the services described in this Terms of Reference.

The Services

IPART will provide the following services:

- Investigate and report on the efficient costs of Dam Safety NSW carrying out its functions under the *Dam Safety Act 2015*
- Recommend a methodology for recovering the efficient cost from individual dam owners (as referred to in section 41 of the *Dams Safety Act 2015*)
- Recommended a methodology for determining a levy, and the quantum of the levy, to be assigned to individual dam owners
- Recommend information that Dams Safety NSW should collect to inform:
    - future assessments of the efficiency of the cost of Dams Safety NSW carrying out its functions under the Act
    - the future application of the methodology for determining the levy.

Relevant considerations

In providing these services, IPART will consider:

1. Dams Safety NSW's budget for 2022/23
2. affordability, including (but not limited to) the potential impact of the levy on smaller dam owners and Local Government
3. the desirability of clear, cost-reflective, and efficient outcomes
4. Dam Safety NSW's capacity to scale up and recoup costs, given many operations and processes are developing
5. consultant report (CIE) "Proposed funding model for Dams Safety NSW", prepared for Dams Safety NSW in October 2020, and
6. any other matter IPART considers relevant.

The process

IPART will publicly consult in providing these services, including publishing a draft report for comment prior to finalising its final report. IPART will undertake any other consultation, including targeted consultation, that it considers appropriate.

IPART will provide the final report to the Minister administering the IPART Act and the Minister for Water within 9 months of these Terms of Reference being finalised.

[redacted]

The Hon. Rose Jackson MLC

Minister for Water

Date: 11.12.23

OFFICIAL

Review of the dam safety levy

I, the Hon. Christopher John Minns, Premier, under section 9(3) of the *Independent Pricing and Regulatory Tribunal Act 1992* (IPART Act), approve the Independent Pricing and Regulatory Tribunal (IPART) providing the services described in this Terms of Reference.

The Services

IPART will provide the following services:

- Investigate and report on the efficient costs of Dam Safety NSW carrying out its functions under the *Dam Safety Act 2015*
- Recommend a methodology for recovering the efficient cost from individual dam owners (as referred to in section 41 of *Dams Safety Act 2015*)
- Recommended a methodology for determining a levy, and the quantum of the levy, to be assigned to individual dam owners
- Recommend information that Dams Safety NSW should collect to inform:
  - future assessments of the efficiency of the cost of Dams Safety NSW carrying out its functions under the Act
  - the future application of the methodology for determining the levy

Relevant considerations

In providing these services, IPART will consider:

1. Dams Safety NSW's budget for 2022/23
2. affordability, including (but not limited to) the potential impact of the levy on smaller dam owners and Local Government
3. the desirability of clear, cost-reflective, and efficient outcomes
4. Dam Safety NSW's capacity to scale up and recoup costs, given many operations and processes are developing
5. consultant report (CIE) "Proposed funding model for Dams Safety NSW", prepared for Dams Safety NSW in October 2020, and
6. any other matter IPART considers relevant.

The process

IPART will publicly consult in providing these services, including publishing a draft report for comment prior to finalising its final report. IPART will undertake any other consultation, including targeted consultation, that it considers appropriate.

IPART will provide the final report to the Minister administering the IPART Act and the Minister for Water within 9 months of these Terms of Reference being finalised.

1 Dams Safety NSW, Annual Report 2022-23, p10.
2 Dams Safety NSW, Annual Report 2022-23, p10.
3 Response to IPART data request.
4 KPMG, *Review of the Dams Safety Act 1978 and Dams Safety Committee*, 2013, p 47.
5 SIRA, *Annual Report 2022-23*, 2023, p 98.
6 Australian Maritime Safety Authority, Marine navigation levy.

[7] Based on consultation between IPART and the Californian Department of Water Resources.
[8] World Bank Group, *Laying the Foundations: A Global Analysis of Regulatory Frameworks for the Safety of Dams and Downstream Communities*, 2020, p 210.
[9] Goulburn Mulwaree Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1; Central Coast Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1
[10] FTI Consulting, *Dams Safety NSW Expenditure: Review of efficient expenditure related to declared dams*, July 2024, p 29.
[11] FTI Consulting, *Dams Safety NSW Expenditure: Review of efficient expenditure related to declared dams*, July 2024, p 37.
[12] WaterNSW, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 4
[13] Sydney Water, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 2
[14] Central Coast Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 2
[15] Dams Safety NSW, Dams Safety NSW Strategic Plan 2022-27.
[16] Central Coast Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1; Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[17] FTI Consulting, *Dams Safety NSW Expenditure: Review of efficient expenditure related to declared dams*, July 2024, pp 13-14.
[18] IPART and FTI Consulting analysis, in $2023-24 terms.
[19] FTI Consulting, *Dams Safety NSW Expenditure: Review of efficient expenditure related to declared dams*, July 2024, p 19.
[20] Central Coast Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1; Hunter Water, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[21] WaterNSW, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, pp. 1-2; Local Government NSW, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, pp. 2-3; Central NSW Joint Organisation, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[22] The Hills Shire Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, pp. 1-2
[23] Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[24] Dams Safety NSW, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[25] Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[26] IPART, *Dams Safety Levy Review Public Hearing Transcript*, August 2024, p. 14
[27] Hunter Water, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2 Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[28] WaterNSW, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, pp. 4-5
[29] WaterNSW, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, pp. 5-6; Central NSW Joint Organisation, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 3; Orange Council, *Submission to PART Draft Report on Dams Safety Levy*, August 2024, p. 2
[30] Fairfield City Council, *Submission to PART Draft Report on Dams Safety Levy*, August 2024, p. 1; Wingecarribee Shire Council, *Submission to PART Draft Report on Dams Safety Levy*, August 2024, p. 1 IPART, *Dams Safety Levy Review Public Hearing Transcript*, August 2024, pp. 16-18
[31] Sydney Water, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 3
[32] *Dams Safety Act 2015* (NSW), s 35, ss 42-46.
[33] Cowra Council, *Submission to PART Draft Report on Dams Safety Levy*, August 2024, p. 1; The Hills Shire Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 2
[34] Hunter Water, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 3
[35] Local Government NSW, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1-2, and Albury Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1.
[36] Parliament of NSW, *Ability of local governments to fund infrastructure and services,* March 2024.
[37] NSW productivity and Equality Commission, *Review into the funding models for local water utilities*, July 2024.
[38] Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 3.
[39] Tamworth Regional Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 2.
[40] Fairfield Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 1; and Central NSW Joint Organisation, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 5.
[41] Cowra Council, *Submission to PART Draft Report on Dams Safety Levy*, August 2024, p. 1.
[42] Hunter Water, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 1.
[43] Snowy Valleys Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2, and Goulburn Mulwaree Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 1.
[44] Dams Safety NSW, Dams Safety NSW Strategic Plan 2022-27.
[45] Blue Mountains Council, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 4.
[46] Based on consultation between IPART and the Californian Department of Water Resources.
[47] Dams Safety NSW, *Submission to IPART Draft Report on Dams Safety Levy*, August 2024, p. 2
[48] Lake Macquarie Council, *Submission to IPART Draft Report on Dams Safety Levy,* August 2024, p. 5.
[49] IPART, *Dams Safety Public Hearing Transcript,* August 2024, p. 15.

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