

Before You Dig Australia submission to the Productivity Commission's Interim Update no.2 on National Water Reform 2026

17 July 2026

About Before You Dig Australia (BYDA)

Before You Dig Australia (BYDA) is a national not-for-profit organisation that operates Australia's primary referral service for underground utility asset location information. BYDA has over 850 asset owner members across the water, electricity, oil, gas and telecommunications sectors, as well as local councils and some non-utility asset owners.

BYDA also has over 700,000 registered service users and processes more than 2.7 million requests for underground utility asset location plans annually.

BYDA's mission goals - **Zero damage, Zero harm, Zero disruption** - are directly relevant to this National Water Reform Interim Update as it addresses NWI's core objective to deliver economic, social and environmental outcomes.

Buried water assets - water mains, sewer lines, stormwater infrastructure, recycled water networks - are the physical delivery mechanism for water services that achieve the economic, social and environmental outcomes. The systematic under-protection of those assets from **foreseeable, preventable third-party damage** is incompatible with the NWI's core objective and with the Commission's own framework of secure, resilient and sustainable water services.

Overview and context

BYDA made a submission to Interim Update 1 that identified excavation damage prevention and underground utility location data standards as missing pillars of national water infrastructure resilience and made four specific recommendations to the Commission¹.

BYDA welcomes the opportunity to make this further submission to the Productivity Commission. In the context of this update's retrospective assessment of progress against the 2004 National Water Initiative, this submission is straightforward: the complete absence of excavation damage prevention from Australia's water reform framework - across every NWI element, every jurisdiction, and every assessment period - **constitutes a persistent and significant gap in the performance of the national water reform agenda**.

¹ [Submission 73 - Before You Dig Australia \(BYDA\) - National Water Reform 2026 - Public inquiry](#)

Within this interim update, the key elements of the NWI most directly relevant to BYDA's mission and purpose are:

- Urban water reform (Table 6) covering infrastructure quality, water security and service reliability, in major cities and in regional and remote areas.
- Best practice pricing and institutional arrangements (Table 3) addressing investment adequacy, regulatory design, and long-term asset management.
- Water resource accounting (Table 5) covering measurement, monitoring, reporting and compliance.
- Knowledge and capacity building (Table 7) addressing information systems, data coordination and capability gaps.
- Community partnerships and adjustment (Table 8) which cover accountability, transparency and stakeholder engagement.

This paper should be read alongside our interim update 1 submission. It does not repeat the full evidence base and recommendations we made earlier but builds upon them in the specific context of the NWI assessment. We call on the Commission to cross-reference both submissions in its final report.

1. Infrastructure investment adequacy and asset management gaps

The Commission's assessment of urban water infrastructure investment (rated only 'Partially achieved') identifies that governments and utilities have allocated funds to major projects that have not been independently scrutinised and that benefit-cost evaluations for investment decisions are inconsistent. Multiple parties raised projected under-investment in infrastructure renewal and growing pressure from ageing assets.

BYDA's concern is that **this under-investment analysis is incomplete without accounting for the cost of unplanned, excavation-induced damage to water assets.** Third-party strikes accelerate asset degradation, generate unbudgeted emergency repair expenditure and displace planned capital. Yet this source of infrastructure damage is absent from the Commission's investment adequacy analysis.

2. Urban water service quality – regional and remote areas

The Commission rates regional and remote water service quality 'Largely achieved' but notes boil water notices, water carting requirements and persistent gaps in Aboriginal and Torres Strait Islander communities. Participants highlighted funding cuts, PFAS contamination and a lack of publicly accessible water quality data.

Poorly mapped and unregistered underground water assets in regional and remote areas increase excavation damage risk significantly. Small councils and local water utilities are least likely to maintain current BYDA membership and accurate digital asset records; precisely the communities where a strike to a water main or sewer can cause the most acute, prolonged and costly service disruption.

3. Water resource accounting and data gaps

The Commission finds water accounting 'Largely achieved' overall but identifies **persistent gaps in data consistency**, monitoring coverage and public reporting, particularly for water quality and environmental flows. The assessment is explicit that there is no comprehensive national approach to some data classes.

The same **structural data gap exists for underground asset location**. Asset location records are held across hundreds of utilities in inconsistent formats and quality levels. There is no national minimum standard, no mandatory digital provision and no independent audit of data currency or accuracy. We note the same point is made by our tech partners, Esri Australia, in their own submission² to this National Water Reform inquiry; specifically, that **reform continues to stall where data is weak**.

The Commission's findings about the inadequacy of data consistency in NWI-mandated areas should prompt equal concern about the absence of any equivalent framework for underground asset location data.

4. Best practice pricing, regulation and under-investment

The Commission's assessment of urban water pricing and regulation (rated 'Partially achieved') identifies that some regulators still lack price-setting power, that short-term cost-of-living pressures distort long-term investment signals, and that infrastructure renewal is at risk of chronic underfunding. Participants cited this tension as creating deferred maintenance cycles that inflate long-term costs.

BYDA submits that **excavation damage prevention is a missing input to this analysis**. Regulatory frameworks that incentivise efficient capital expenditure should also account for the cost of preventable third-party damage; a recurring, foreseeable and quantifiable risk that regulatory pricing models currently ignore. Damage prevention obligations should be treated as a component of prudent asset management, recoverable through regulated revenue streams.

5. Knowledge and capacity-building – data coordination deficit

The Commission finds that national coordination of water knowledge generation remains 'Partially achieved', with an independent review of water science finding Australia lacks a collective set of strategic and collaborative water research priorities. Participants called for improved coordination of data, digital tools and information systems.

BYDA's Digital Utility Portal (BDUP) - currently in multi-state pilot phase - directly addresses the gap for underground asset location data. A national framework for digital utility data

² [Submission 046 - Esri Australia Pty Ltd - National Water Reform 2026 - Public inquiry](#)

sharing, with BYDA as the established intermediary, would materially advance knowledge and capacity building objectives for all utility stakeholders.

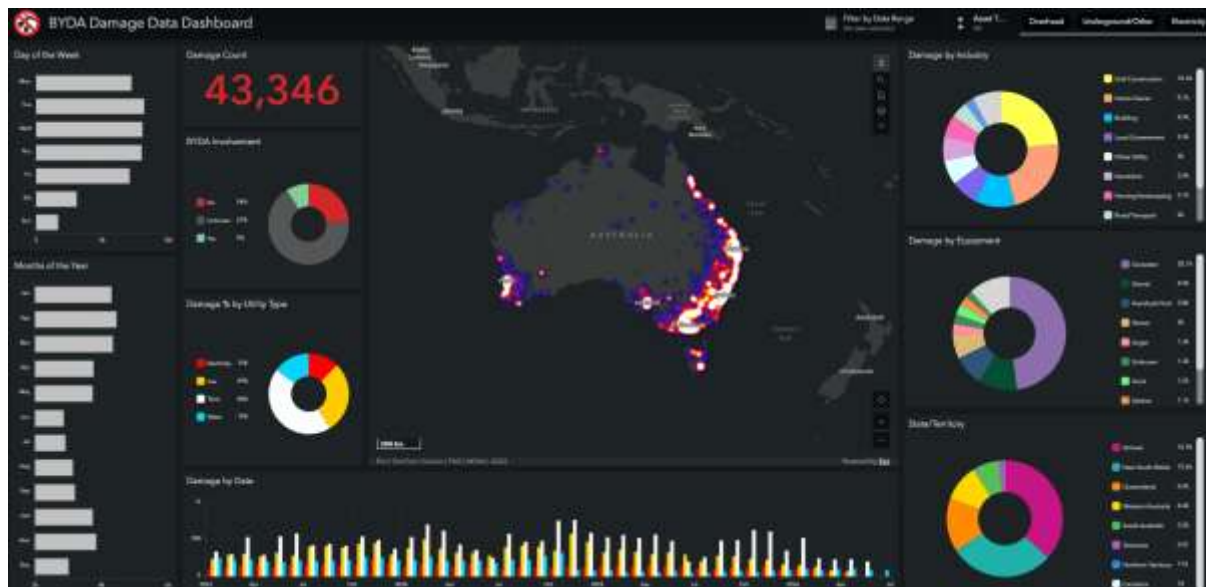


Fig. 1: national heatmap depicting bulk of utility strikes (source: Damage Data Dashboard)

6. Compliance, enforcement and accountability

Across multiple NWI elements, the Commission identifies that monitoring, compliance and enforcement are 'Partially achieved'. Participants in the Commission's stakeholder consultations called for independent, fully-funded regulators, better audit and review mechanisms and greater transparency in decision-making. The Commission notes that accountability for outcomes is weakened by fragmented institutional responsibilities.

Exactly the same accountability deficit exists in excavation safety. No national regulator has visibility of utility strike data across all asset classes and all jurisdictions.

Without a national mandate and minimum data standards, enforcement of pre-excavation obligations for water assets is patchy, inconsistent and largely unmonitored.

Recommendation 1: Express recognition of utility damage by excavation activity as a water reform gap

Reaffirming our primary recommendation in our submission to Interim Update 1 and the points above, we strongly recommend that the Commission's final report should explicitly **identify the absence of excavation damage prevention from Australia's water reform framework** as a persistent and material gap; one that is measurable, foreseeable and addressable through policy reform.

This recognition should appear in the Commission's assessment of urban water reform performance and should inform the Commission's overall assessment of jurisdictions' progress against the NWI's objectives of secure, resilient and sustainable water services.

Recommendation 2: National pre-excavation BYDA mandate

Also reaffirming BYDA's second reform call from our Interim Update 1 submission, the Commission's final report should recommend that all Australian jurisdictions amend their WHS legislation, water industry acts and relevant planning and construction regulations to **legally require a BYDA enquiry before any excavation work commences near buried water utility assets.**

This mandate should be included as a condition of Commonwealth water infrastructure funding under the National Water Agreement.

Recommendation 3: Minimum data standards and national data insights for regulation and enforcement

The Commission's final report should recommend that the federal government **legislate minimum data standards for underground water utility asset location information under the Water Act 2007 (Cth).** These standards should require digital, spatially accurate asset location records at defined minimum quality levels.

The Commission's final report should recommend that national data collected through mandatory pre-excavation enquiry services be made available to water and WHS regulators for targeted enforcement and performance benchmarking. Damage prevention metrics should be incorporated into the National Performance Report and into economic regulatory frameworks for water utilities.

BYDA further recommends that the National Water Reform recognises the **Before You Dig Australia process, including the BYDA Digital Utility Portal (BDUP)**³, as an established mechanism for achieving this goal.

For this objective to be achieved, responsible entities and water utility asset owners must ensure that accurate, current and usable utility location information is available through BYDA.

This should include the sharing of digital utility location data with BYDA, including GIS-based asset location information where available, so that project owners, designers, contractors and excavators can identify the presence and approximate location of underground assets before construction or excavation activity begins.

Recommendation 4: NWI performance assessment to include excavation damage indicators

NEW recommendation: For future NWI progress assessments, BYDA strongly recommends Commission should recommend that jurisdictions be assessed against indicators covering:

³ <https://portal.byda.com.au/wp-content/uploads/2025/10/Boosting-productivity-strengthening-safety-The-BYDA-Digital-Utility-Portal.pdf>

1. The existence of legislative requirements for pre-excavation enquiry before work near water assets;
2. The quality and accessibility of underground water asset location data, and;
3. Annual utility strike rates by asset class and jurisdiction. These indicators should be included in the National Performance Report framework and in jurisdictional reporting obligations under the renewed National Water Agreement.

Conclusion

BYDA's submission to this Update regarding the NWI progress assessment reinforces our core assertion about the gaps we identified in on our earlier submission to Interim Update 1: that is, the absence of excavation damage prevention from the reform agenda, regulatory fragmentation, poor asset data quality and the lack of national compliance infrastructure are not new problems. They are structural, persistent and measurable failures that have persisted across multiple NWI assessment cycles. What's more, the issue of excavation damage and utility strikes is **foreseeable and preventable**.

The Commission's final report to the federal government is an opportunity to close this gap.

The recommendations we make between both submissions do not require new systems or new institutions. Rather, they call for strengthening the legal and regulatory environment so Australia's existing underground utility infrastructure protection ecosystem can operate effectively, so that future NWI assessments can measure progress against meaningful, quantifiable indicators.

BYDA has the evidence, the platform and the national reach to support implementation of these reforms. We strongly encourage the Commission to include our recommendations in its final report and to call for their incorporation into the renewed National Water Agreement, relevant Commonwealth legislation and jurisdictional water industry and WHS legislation.

We are only too happy to provide upon request further evidence, data and expert input at any stage of the inquiry process.

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