

FURTHER SUBMISSION TO THE PRODUCTIVITY COMMISSION

National Water Reform 2026 Inquiry

Three Decades of National Water Reform

An Interpretive Synthesis of Converging Evidence on Infrastructure Implementation Capability

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Reference: This further submission should be read in conjunction with **Submission 085 – Infrastructure Implementation Capability**.

This further submission presents an interpretive synthesis undertaken following Submission 085. Its purpose is to assist the Productivity Commission by examining how implementation-related observations have evolved across more than three decades of national water reform and by considering their implications for the Commission's Final Report. It introduces no new recommendations, but instead provides an interpretive synthesis of the evidence underpinning those already presented in Submission 085.

1. Purpose of this Further Submission

I welcome the opportunity to provide this further submission in response to the Productivity Commission's **National Water Reform 2026 Inquiry – Interim Update**.

Submission 085 proposed that Australia's next phase of national water reform should place greater emphasis on **Infrastructure Implementation Capability**—the organisational, institutional, and collaborative capability required to translate policy intent into reliable infrastructure and service outcomes.

Following publication of the Interim Update, I revisited Australia's national water reform journey to examine whether this perspective is reflected in the accumulated evidence arising from successive reform initiatives over the past three decades.

The purpose of this further submission is not to introduce additional recommendations. Rather, it seeks to interpret the evolution of implementation-related observations across Australia's reform history and to consider what these observations may imply for the Commission's Final Report.

The central proposition is modest but significant.

The accumulated evidence suggests that Australia's principal water reform challenge is progressively shifting from identifying what reforms are required towards strengthening the capability needed to implement those reforms consistently, efficiently, and sustainably.

This submission suggests that implementation-related observations have progressively broadened, become more interconnected and increasingly converged across successive reform cycles. Viewed collectively, these observations may be interpreted through the integrating perspective of **Infrastructure Implementation Capability**.

Importantly, this perspective is not presented as a new reform framework or an alternative to existing policy, governance, or regulatory arrangements. Rather, it provides a way of understanding how the capabilities required to implement reform have assumed increasing importance as Australia's national water reform journey has matured.

2. The Interim Update in Context

The Interim Update marks an important point in the continuing evolution of Australia's national water reform journey.

Earlier phases of reform quite appropriately concentrated on establishing the institutional, policy and regulatory foundations necessary to improve the governance and management of Australia's water resources. The **1994 COAG Water Reform Framework**, the **National Water Initiative (2004)** and subsequent reform programs collectively strengthened water planning, economic regulation, environmental stewardship, institutional accountability, and transparency.

These reforms established much of the architecture upon which Australia's contemporary water sector now operates.

The Interim Update retains these important foundations while giving greater prominence to the practical conditions that influence successful implementation.

Throughout the document, increasing attention is given to matters such as:

- long-term planning and investment;
- investment readiness;
- organisational and workforce capability;
- regional and remote service delivery;
- collaboration across institutions and jurisdictions;
- First Nations participation and service outcomes;
- infrastructure resilience;
- affordability; and
- sustained institutional effectiveness.

Individually, these topics may appear to represent separate policy considerations.

Collectively, however, they suggest a broader implementation perspective.

They point towards the capability required to convert policy intent into reliable infrastructure and enduring service outcomes.

This observation does not diminish the importance of policy reform or institutional governance. Rather, it recognises that, as reform matures, the capability required to implement those reforms becomes increasingly influential in determining whether intended outcomes are realised in practice.

The Interim Update may therefore be viewed as reflecting an important evolution in national water reform thinking—from establishing the foundations for reform towards strengthening the capability required to implement those foundations consistently across organisations, programmes, and jurisdictions.

This evolution is not unique to the Interim Update.

When viewed alongside earlier national reform initiatives, a broader pattern begins to emerge.

Implementation-related observations appear to become progressively broader, more interconnected, and increasingly consistent over time.

The following section explores this pattern by examining the implementation observations that have emerged across successive national water reform cycles.

3. Evidence from Three Decades of National Water Reform

The evolution of Australia's national water reform journey suggests a gradual but discernible change in the way implementation has been considered over time.

Earlier reform initiatives understandably focused on establishing the institutional, legislative and policy foundations necessary to improve water governance. As these foundations matured, successive reviews increasingly gave attention to the organisational, commercial, technical, and collaborative capabilities required to implement reform effectively.

Although the language and emphasis of individual reform documents differ, many implementation-related observations recur across successive reform cycles.

Initially, these observations appear as relatively discrete considerations associated with governance, accountability, and institutional performance. Over time, they broaden to encompass strategic planning, investment readiness, programme governance, workforce capability, operational transition, organisational learning, and resilience.

Perhaps more significantly, these observations become progressively interconnected.

Planning influences investment readiness. Investment readiness influences programme delivery. Programme delivery influences operational performance. Operational experience informs future planning.

Rather than representing isolated organisational issues, these observations increasingly describe different aspects of a broader implementation capability system.

To illustrate this progression, Table 1 summarises the predominant implementation observations emerging from successive stages of Australia's national water reform journey.

Table 1. Progressive Convergence of Implementation Observations Across Australia's National Water Reform Journey

Reform Period	Predominant Reform Emphasis	Illustrative Reform Milestones	Emerging Implementation Observations	Progressive Convergence
1994–2003	Institutional and governance reform	1994 COAG Water Reform Framework	Governance, institutional responsibilities, accountability, and policy implementation	●○○○○
2004–2008	National policy implementation	2004 National Water Initiative (NWI)	Strategic planning, coordination, consistency across jurisdictions and implementation planning	●●○○○
2009–2014	Reform assessment and consolidation	National Water Commission Biennial Assessments	Organisational capability, collaboration, institutional effectiveness, and implementation performance	●●●○○
2015–2020	Infrastructure planning and delivery	2017 Productivity Commission – National Water Reform	Investment readiness, delivery capability, programme governance, sequencing, and integration of planning with delivery	●●●●○
2021–2026	Sustainable and resilient implementation	2026 Productivity Commission – National Water Reform Inquiry (Interim Update)	Workforce capability, operational readiness, regional capability, organisational learning, resilience, and whole-of-system implementation capability	●●●●●

Interpretive note: The filled circles illustrate the progressive convergence and integration of implementation observations across successive reform cycles. They represent an interpretive synthesis of the evidence rather than a quantitative assessment of reform performance.

Table 1 is not intended to imply that earlier reforms overlooked implementation, nor that later reforms diminished the importance of governance or policy development.

Rather, it illustrates that implementation considerations have progressively broadened and become more integrated as Australia's reform agenda has matured.

Several observations emerge from this progression.

First, implementation considerations become increasingly prominent within successive reform discussions.

Second, implementation observations extend progressively beyond governance and compliance to include organisational capability, investment readiness, delivery integration, workforce capability, and operational performance.

Third, implementation observations increasingly reinforce one another. They no longer appear as independent themes but as mutually dependent capabilities influencing performance across the infrastructure lifecycle.

Taken together, these observations suggest that Australia's implementation challenge is increasingly systemic rather than organisational.

The evidence therefore points towards the importance of understanding implementation capability as an integrated whole rather than as a collection of separate functions.

This observation provides the context within which **Infrastructure Implementation Capability** may be interpreted, not as an additional reform agenda, but as an integrating perspective capable of bringing these recurring observations together.

4. Principal Findings of the Interpretive Synthesis

The review undertaken for this submission identifies five principal observations.

These are not presented as independent findings.

Rather, they represent complementary characteristics of the way implementation thinking appears to have evolved throughout Australia's national water reform journey.

Table 2

Principal Observations from the Interpretive Synthesis

Principal Observation	Interpretation
1. Progressive broadening	Implementation observations broaden progressively from governance and policy implementation towards organisational capability, investment readiness, programme delivery, operational transition, and resilience.
2. Continuing recurrence	Similar implementation observations recur across successive reform cycles despite changes in policy settings, institutional arrangements, and reform priorities.
3. Increasing interconnection	Planning, governance, capability, investment, delivery, and operational performance increasingly appear as interconnected elements of a broader implementation system.
4. Converging interpretation	The recurring observations may be interpreted coherently through the broader perspective of Infrastructure Implementation Capability.
5. A maturing reform challenge	The accumulated evidence suggests that Australia's reform challenge is increasingly shifting from identifying reforms towards strengthening the capability required to implement them consistently.

Taken together, these observations reinforce rather than alter the central proposition advanced in Submission 085.

Importantly, they do not suggest that Infrastructure Implementation Capability should replace existing governance arrangements, regulatory frameworks, or sector reforms.

Instead, they suggest that many of the implementation issues identified throughout Australia's national water reform journey may be interpreted as interconnected expressions of a broader capability challenge.

This distinction is important.

Individual reform initiatives naturally address specific policy questions, regulatory arrangements, or institutional responsibilities.

An interpretive synthesis looks across those individual reforms to identify recurring patterns that may not be apparent when each reform is considered in isolation.

Viewed from this broader perspective, implementation capability emerges not as another reform initiative, but as a means of understanding how organisational, institutional, and collaborative capabilities collectively influence the successful translation of policy intent into enduring infrastructure and service outcomes.

The following section considers Infrastructure Implementation Capability as this integrating perspective.

5. Infrastructure Implementation Capability as an Integrating Perspective

The interpretive synthesis presented in this submission suggests that many implementation-related observations emerging across successive national water reform cycles are not independent issues. Rather, they represent interconnected components of a broader implementation capability challenge.

Infrastructure Implementation Capability provides an integrating perspective through which these recurring observations may be understood collectively.

It is not proposed as a new reform agenda, an additional governance framework or a replacement for existing policy, regulatory or institutional arrangements. Instead, it provides a way of understanding how the capabilities required to implement reform interact across organisations, programmes, and the infrastructure lifecycle to influence long-term service outcomes.

Three complementary dimensions help explain this perspective.

Implementation Capability

Infrastructure Implementation Capability encompasses the organisational, institutional, technical, commercial, and collaborative capabilities required to translate approved policy and investment decisions into reliable infrastructure and enduring public value.

These capabilities include:

- strategic planning and prioritisation;
- governance and decision-making;
- investment readiness;
- programme and project management;
- commercial and procurement capability;
- engineering and technical capability;
- stakeholder engagement and collaboration;
- workforce capability and leadership;
- commissioning and operational transition; and
- organisational learning and continuous improvement.

These capabilities are often considered separately for administrative or functional purposes. In practice, however, they **interact continuously** throughout implementation, with strengths or weaknesses in one area influencing performance across the broader system.

Importantly, **infrastructure delivery capability forms one component of Infrastructure Implementation Capability**. While delivery capability focuses primarily on the execution of projects and programmes, implementation capability is broader. It encompasses the capabilities required throughout the infrastructure lifecycle—from identifying service needs and developing investment-ready proposals through design, procurement, delivery, commissioning, operational transition, and reliable long-term operation.

The Infrastructure Lifecycle

Implementation capability is required throughout the infrastructure lifecycle—from **service need identification to reliable operation**.

This lifecycle typically includes:

- service need identification;
- strategic planning;
- options development;
- business case preparation;
- investment approval;
- design;
- procurement;
- construction;
- commissioning;
- operational transition;
- operation and maintenance;
- renewal; and
- continual improvement.

Weaknesses introduced early in the lifecycle frequently propagate into later stages.

For example, inadequate strategic planning may reduce investment readiness. Limited investment readiness may delay procurement. Procurement delays may compress delivery programmes. Compressed delivery programmes may increase operational risk, reduce asset performance, and diminish long-term value.

In many cases, implementation bottlenecks are transferred rather than resolved.

Viewing implementation through a lifecycle perspective therefore assists in identifying systemic interactions before they become embedded within delivery programmes.

The Implementation Ecosystem

Contemporary water infrastructure is rarely delivered by a single organisation acting independently.

Successful implementation increasingly depends upon collaboration across an implementation ecosystem comprising governments, regulators, water utilities, infrastructure owners, consultants, contractors, research institutions, industry associations, First Nations organisations and the communities they serve.

Implementation capability therefore extends beyond the capability of individual organisations. It also depends upon the quality of governance arrangements, collaborative relationships, commercial models, and the effective integration of expertise across organisational boundaries.

This perspective is particularly relevant to regional and remote water services where capability constraints may occur simultaneously across multiple organisations and access to specialist expertise may be limited.

Viewed collectively, Infrastructure Implementation Capability provides an integrating perspective through which the relationships between policy, planning, governance, investment, delivery, and operational performance may be more readily understood.

6. Emerging Convergence Across the Sector

One of the more notable observations arising from this Inquiry is the degree of convergence evident across submissions from governments, water utilities, industry organisations, professional bodies, and practitioners.

Although contributors approach reform from different institutional perspectives, many identify remarkably similar implementation conditions as fundamental to achieving successful reform outcomes.

Recurring themes include:

- strengthening investment readiness;
- improving long-term planning certainty;
- developing organisational and workforce capability;
- enhancing collaboration across governments and institutions;
- strengthening programme governance;
- improving regional capability;
- integrating planning with delivery;
- supporting effective operational transition; and
- embedding organisational learning and continuous improvement.

The terminology naturally varies between submissions.

Nevertheless, the underlying implementation observations display a notable degree of consistency.

This convergence is significant.

It suggests that Australia's future reform challenge may increasingly depend not upon identifying additional reforms, but upon strengthening the capability required to implement existing reforms consistently across diverse organisational settings.

Recognising this convergence does not require the creation of new institutions or regulatory obligations.

Rather, it provides an opportunity to interpret many apparently separate implementation issues as interconnected components of a broader capability system.

7. Implications for the Final Report

Australia's national water reform journey has established strong foundations through successive improvements in governance, policy development, institutional arrangements, and economic regulation.

These achievements remain fundamental.

The interpretive synthesis presented in this submission suggests that the next phase of reform may benefit from giving greater recognition to the capabilities required to implement these foundations effectively.

Accordingly, the Commission may wish to recognise **Infrastructure Implementation Capability as an integrating perspective** through which governance, planning, investment readiness, organisational capability, programme delivery, workforce development, and operational transition may be considered collectively.

Such recognition would not require additional regulatory obligations or new institutional structures.

Rather, it may assist governments, utilities, and delivery organisations to:

- identify implementation constraints earlier in the infrastructure lifecycle;
- improve investment readiness before major delivery commitments are made;
- strengthen coordination between planning, delivery, and operations;
- reduce the transfer of unresolved risks between lifecycle stages;
- support capability development within regional and remote organisations;
- encourage organisational learning across jurisdictions; and
- improve the reliability with which reform intent is translated into enduring infrastructure and service outcomes.

This perspective complements, rather than replaces, the Commission's broader policy, regulatory and institutional recommendations.

"Policy determines what should be achieved. Capability determines whether it is achieved."

– **Author's reflection**

8. Closing Reflection

Australia has now accumulated more than three decades of experience in national water reform.

During this period, substantial progress has been achieved in policy development, governance, institutional design, and economic regulation.

The interpretive synthesis presented in this submission suggests that implementation-related observations have also evolved.

They have broadened.

They have become increasingly interconnected.

Most significantly, they appear to have progressively converged towards a shared understanding that successful reform depends not only on sound policy, but equally on the capability required to implement policy effectively.

Submission 085 proposed **Infrastructure Implementation Capability** as a perspective through which future national water reform could be strengthened.

This further submission has sought to examine that proposition against Australia's accumulated reform experience.

The convergence of implementation observations across successive reform cycles suggests that Infrastructure Implementation Capability provides a useful integrating perspective through which many of the implementation challenges identified throughout the Inquiry may be better understood.

Viewed collectively, three decades of national water reform suggest that Australia's future success will depend not only on the quality of its reforms, but also on the capability to implement those reforms consistently across organisations, programmes, and jurisdictions.

Recognising Infrastructure Implementation Capability as an integrating perspective may therefore assist the Commission in framing the next phase of national water reform—not by changing the direction of reform, but by strengthening the translation of policy intent into enduring infrastructure and service outcomes.

It is respectfully submitted that this perspective may assist the Commission in preparing its Final Report.

Selected National Water Reform References

The following publications informed the interpretive synthesis presented in this submission:

1. Council of Australian Governments (1994). *Water Reform Framework*.
2. Council of Australian Governments (2004). *Intergovernmental Agreement on a National Water Initiative*.
3. National Water Commission (2009–2014). *Biennial Assessments of National Water Initiative Implementation*.
4. Productivity Commission (2017). *National Water Reform*.
5. Australian Government. *National Water Grid Fund and associated strategic infrastructure publications*.
6. Australian Government. *National Water Agreement and related policy documents*.
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8. Nirmalarajan, W.T. (2026). *Submission 085 – Infrastructure Implementation Capability*.

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