

Town Water Risk Reduction Program - Phase 1 Evaluation

Findings and recommendations

A report prepared for the NSW Department of Planning and Environment 2 September 2022

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Abbreviations

	Best-Practice Management of Water Supply and Sewerage Framework		
the Department	NSW Department of Planning and Environment — Water		
IP&R Framework	Integrated Planning and Reporting Framework		
IWCM	Integrated Water Cycle Management		
JOs .	Joint Organisations		
LWUs	Local Water Utilities		
NSW	New South Wales		
OWUA	Orana Water Utilities Alliance		
the Program	the Town Water Risk Reduction Program		
the Program Evaluation Framework	the Town Water Risk Reduction Program Evaluation Framework		
KEQs	Key Evaluation Questions		
RTOs	Registered Training Organisations		
RWS	Regional Water Strategy		
SOCs	State Owned Corporations		
SSWP	Safe and Secure Water Program		
WIOA	Water Industry Operators Association		

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Executive Summary

The Town Water Risk Reduction Program is a valuable program that has made encouraging progress in achieving its foundational outcomes and addressing barriers and risks to town water and sewerage services. Collaboration, trust and respect between the Program team and the water sector has been established. The majority of stakeholders reported that the Program is worthwhile, and that its implementation should continue. Given the ambitious nature of the Program, sustained effort and resourcing will be required to achieve its longer term outcomes.

Achievements

This evaluation has provided critical insights regarding the efficiency and effectiveness of the Town Water Risk Reduction Program (the Program), as well as recommendations to enhance its future success. Importantly the Program's collaborative approach, including the decision to co-design the new regulatory framework, together with sustained effort by the Program team to embody a more cooperative regulatory posture and to strive to build effective partnerships across the water sector, has been demonstrated to be an effective way to address risks and better meet local water utility needs. Phase 1 of the Program has resulted in improved alignment and understanding of roles, responsibilities and the outcomes being sought, and is widely acknowledged and appreciated by stakeholders across the water sector. Collaboration, trust and momentum have been developed, with a clear majority of stakeholders reporting that the Program is worthwhile, and that implementation should continue.

In its first 18 months of implementation, Stage1 of the Program has:

- Achieved foundational outcomes, particularly in relation to the new Regulatory and Assurance
 Framework for Local Water Utilities (Regulatory and Assurance Framework); establishing
 collaborations between the New South Wales Government Department of Planning and
 Environment Water Group (the Department), other regulators, state-owned water corporations
 (SOCs), councils and local water utilities; improving access to funding for water operations trainees;
 and improving access to councillor training material.
- Achieved some intermediate outcomes (e.g., clarifying roles and responsibilities between the
 Department and other local water utility regulators) and shown evidence of progress against some
 others, including state government support for local water utilities on a risk- and needs-basis, and
 establishing collaborations between local water utilities.

- Identified and started collaborating with local water utilities and Joint Organisations of councils (JOs) on regional approaches to improved strategic water planning and management that could be scaled for the future.
- Addressed several risks outside of the initial Program scope, which have helped strengthen the Program's implementation.
- Set a trajectory to meeting the Program's intermediate and ultimate outcomes.

About the Town Water Risk Reduction Program and this evaluation

In December 2020, the Department established the Program to develop long-term solutions to identified barriers to effective operational and strategic risk management of water and sewerage services in regional New South Wales (NSW) by local water utilities. The Program is based on a new partnership approach, which recognises and leverages the wealth of expertise within councils and local water utilities and provides opportunities for these stakeholders to refine better solutions in collaboration with the Department.

Over 18 months to early July 2022, the Program has progressed work across five separate workstreams and more than 15 pilot projects to address issues linked to the Department's regulatory framework, local water utility scale and remoteness and skills shortages. The pilot projects (refer Appendix E -) have been developed to:

- test new approaches to local water utility strategic planning to inform the development and implementation of strategic planning elements of the new Regulatory and Assurance Framework, and
- evaluate and test new approaches to local water utility service delivery and risk management, and to consider whether the outcomes could be scalable across regional NSW more broadly.

With Phase 1 of the Program coming to an end, the Department sought an evaluation of progress against the Program's delivery, its achievement of outcomes and a review of priorities for a potential Phase 2 of the Program. Aither was engaged to develop the evaluation framework and undertake the first evaluation. The evaluation was largely qualitative and was informed by stakeholder consultation and desktop analysis.

Limitations and constraints

Staff responsible for the delivery of the Program have been required to adapt in response to challenges beyond their control in the context of already tight Program deadlines. These challenges included: covid-19 impacts on staff and stakeholder availability; stakeholder consultation fatigue (noting competition for the limited capacity and resources of councils due to concurrent large-scale water reform programs); complexities in developing and progressing strategic planning pilots under the now replaced regulatory approach; and widespread flooding in eastern NSW. Despite these challenges, important and significant projects have been delivered or substantially progressed across all workstreams.

Consistent with the decisions of Cabinet about the Program's parameters, the program did not consider legislative amendments.

Summary of key findings

Key evaluation findings in relation to Program delivery (refer Section 3.1) and the achievement of foundational outcomes (0-2 years) (refer Section 3.2) are listed below.

Findings on progress towards the achievement of the intermediate and ultimate Program outcomes are detailed in Section 3.3.

Program delivery

Evaluation findings on progress towards completing the Program's activities in line with the original rationale, timeframe and budget are:

Appropriateness

- The Program has begun to address key barriers and risks to effective operational and strategic risk management of water supply and sewerage services.
- The Program's workstreams and activities have appropriately targeted risks but there is insufficient information at present to assess which pilot projects can be scaled for the future (noting that pilots will be evaluated separately by the Program team later in 2022).
- The Program has addressed several risks outside of the initial program scope, which have helped strengthen the Program's implementation.

Efficiency and effectiveness

- The Program has been delivered efficiently within a tight timeframe.
- Progress has been made against the Program's intended Phase 1 outputs, however external factors have affected Program delivery.

Achievement of foundational outcomes (0-2 years)

Evaluation findings on the achievement of foundational Program outcomes are as follows:

Optimised regulatory mechanisms

- The Regulatory and Assurance Framework represents a positive, outcomes-based, practical and cost-effective approach to addressing barriers and reducing risks to water supply and sewerage services.
- Changes to the eligibility criteria and application processes for funding for strategic planning under the Safe and Secure Water Program could encourage the further uptake and delivery of strategic planning by local water utilities.
- The improved communication and willingness to collaborate with the water sector that was shown by the Department, and the co-design process to develop the Regulatory and Assurance Framework, were largely valuable for participants and has built sector support for ongoing collaboration with the Department.
- All interviewees and most survey participants reported that they largely understand the new Regulatory and Assurance Framework and their roles and responsibilities. This understanding will improve as the Regulatory and Assurance Framework is implemented, and guidance material becomes available.

• The Department's understanding of local water utility performance, risks and maturity is expected to develop as performance and risk monitoring is established.

Overcoming scale and remoteness

- Local water utilities and Joint Organisations (JOs) have an improved awareness of opportunities to work collaboratively and are motivated to continue to collaborate in the future.
- The Program has somewhat improved the Department and SOCs collaboration, approachability, and effectiveness in helping Local water utilities to address barriers and risks.
- Improved alignment in modelling, risk and options analysis relating to town water supplies between regional water strategies and local water utility strategic planning is expected in the future.

Skills and training

- Some progress has been made to improve access to skills and training, including the development
 of a draft Water Industry Skills and Training Action Plan (Plan). However, a lack of suitable water
 operator training and trainers remains an industry-wide problem. Significant work remains to
 implement the Plan before measurable improvements in the availability and accessibility of suitable
 training, and the number, capacity and capability of trained water operators can be realised, to
 address skills shortages and capacity challenges.
- The Program has developed better information and resources for Councillors to raise awareness of the risks in water management and their role and accountabilities as decision makers for local water utilities.

Recommendations

Overarching recommendations:

- The Town Water Risk Reduction Program should continue and be strengthened, with at least an equivalent level of resourcing over the next five years.
- To ensure maximum effectiveness, the Department should consider if Phase 2 of the Town Water Risk Reduction Program should remain a dedicated separate team or be co-located with other programs that support water utilities.

This evaluation of Phase 1 has identified several specific recommendations to strengthen the Program in Phase 2 to better target the identified barriers and risks to the effective delivery of water and sewerage services by local water utilities. The recommendations are listed below against the existing Program workstreams. The greater number of recommendations under the 'improve the regulatory and support framework' workstream reflects the focus of Phase 1 of the Program and its importance in meeting the Program outcomes.

Improve the regulatory and support framework

- Recommendation 1: The Department should continue to develop and deliver education and
 engagement activities to complement the guidance material for the Regulatory and Assurance
 Framework, to help ensure stakeholders understand the content and their roles and
 responsibilities.
- Recommendation 2: The Department should continue to implement and expand its targeted change-management process to drive any future stage of the Program and embed its new collaborative, risk and outcomes-focused regulatory, assurance and support posture within the Department's Water Utilities Branch.
- Recommendation 3: The Department should ensure that it has done the necessary policy and preparation work ahead of the next local government elections in September 2024, to be able to encourage councils to integrate their local water utility strategic planning with the Integrated Planning and Reporting (IP&R) framework of the Local Government Act 1993 by the next cycle of IP&R (i.e., July 2025 to June 2029).
- Recommendation 4: The Department should develop and test options to optimise the integration of RWS (and WaterNSW) modelling, options and risk analysis with local water utility/council strategic planning to further implement the strategic direction of the Auditor General's 2020 Performance Audit Report entitled 'Support for regional water infrastructure'.
- Recommendation 5: The Department should explore options and incentives, in consultation with the wider water sector, to address critical gaps in local water utilities regulation. Potential focus areas identified through this evaluation include local water utility strategic planning, performance standards and requirements for skills and training.

Encourage greater collaboration among local water utilities (and others)

• Recommendation 6: Given the success of the Program's stakeholder engagement approach, the Department should consider how to leverage this for any future stage of the Program and other major reforms, while also ensuring that consultation is coordinated, planned and communicated in a timely manner.

Facilitate greater State government support for local water utilities

Recommendation 7: Now that the new Regulatory and Assurance Framework is in place for local
water utility strategic planning, the Department should review its Safe and Secure Water Program
guidelines to ensure that they are aligned, to embed the new framework approach and encourage
the further uptake and delivery of strategic planning by local water utilities.

Improve access to skills and training

• Recommendation 8: The Department should, as soon as possible, update its draft Skills and Training Action Plan and lead the implementation of actions to establish an effective, accessible and sustainable training market for water operators.

Investigate alternate funding models

• Recommendation 9: The Department should progress the Phase 1 findings to investigate fit-for-purpose funding models to reduce service risks and better support local water utilities to meet their service obligations under local circumstances.

Other

• Recommendation 10: The Department should continue to collaborate with the local water utility sector (including local water utilities, JOs, other regulators and SOCs) in the implementation and delivery of future stages of the Program to ensure continued buy-in and support.

1. Introduction and context

1.1. About the Town Water Risk Reduction Program

Every person in New South Wales (NSW), wherever they live, has a right to expect access to safe drinking water for use at home and a secure and fit-for-purpose water supply in their communities¹. This helps build successful industries, support jobs and growth and make cities, towns and regions attractive places to live. The NSW Government established the Town Water Risk Reduction Program (the Program) to respond to a range of major risks and challenges to the delivery of safe and secure water and sewerage services.

The Program is being delivered by the NSW Government Department of Planning and Environment — Water Group (the Department), together with local water utilities, councils, relevant government agencies and the wider water sector. Through close partnerships and collaboration, the Program aims to develop and implement a new approach of working together that enables local water utilities to manage priority barriers and risks to town water systems more strategically and effectively and, as a result, reduce risks in regional NSW communities over time. The barriers being addressed by the Program include:

- Utility scale and remoteness
- Skills shortages
- Sub-optimal strategic planning
- Inefficiently targeted funding
- Inadequate regulatory mechanisms.

Stakeholders participate in the Program through a Stakeholder Advisory Panel² and multiple collaborative design forums, which aim to recognise and leverage the wealth of stakeholder expertise to help design and refine better solutions in collaboration with the Department.

The Program supports a broader reform agenda in NSW, underpinned by the State Water Strategy³, the development of 12 regional and two metropolitan water strategies⁴, and funding via the Safe and Secure Water Program⁵ (SSWP). The reform agenda is bringing together a wide range of tools and solutions to plan and manage the water needs in each NSW region over the next 20-40 years.

1.2. Evaluation context

Phase 1 of the Program commenced in December 2020 with initial funding of \$5 million over two years to December 2022. It has focused on voluntary measures that do not involve legislative or funding program changes. Additional Cabinet parameters relating to Phase 1 of the Program include:

https://water.nsw.gov.au/_data/assets/pdf_file/0007/409957/nsw-water-strategy.pdf (p. 4)

https://www.dpie.nsw.gov.au/water/plans-and-programs/town-water-risk-reduction-program/sap

https://www.dpie.nsw.gov.au/water/plans-and-programs/nsw-water-strategy/the-strategy

⁴ https://water.dpie.nsw.gov.au/plans-and-programs/regional-water-strategies

 $^{^{5} \}qquad \text{https://www.industry.nsw.gov.au/water/plans-programs/infrastructure-programs/safe-and-secure-water-programs/infrastructure-programs/safe-and-secure-water-programs/safe-and-sec$

- NSW Government policy is that the Program will not result in mergers or structural change.
- Councils must volunteer to participate in the Program.
- The NSW Minister for Water must report to Cabinet on the Phase 1 outcomes by December 2022, to inform any case for stronger measures.⁶

With Phase 1 coming to an end, the Department sought an evaluation of progress against the Program's delivery and its achievement of outcomes, including the identification of insights and key findings from the first 18 months of implementation, to inform recommendations for a future work program.

1.3. Evaluation approach

This evaluation was undertaken during June 2022 in alignment with the approach set out in the Program Evaluation Framework. The evaluation was largely qualitative, with a focus on delivery of outputs, progress towards outcomes and implications for future implementation, and was undertaken against a program logic that was developed as a part of the Program Evaluation Framework. The program logic can be found in Figure 1 and Appendix A - .

The evaluation was guided by key evaluation questions (KEQs) and proposed data sources as set out in the Program Evaluation Framework. KEQs were explored iteratively, using multiple lines of inquiry. This included a desktop review of program administrative data and documentation, interviews with relevant Departmental staff and Program stakeholders, and an online survey completed by Program stakeholders.

The KEQs, methods and data sources used to undertake the evaluation are included in Appendix C - . Additional information on stakeholder interviews and the online survey is included in Appendix D - .

1.4. Structure of the report

This report is structured as follows:

Section 1 (Introduction and context) provides brief background info about the Program, the evaluation, the report structure and Aither.

Section 2 (Program context and background) provides additional important background about the Program, the pilot projects and each of the three key Program outcome areas as defined in the Program Logic (i.e., optimised regulatory mechanisms, overcoming scale and remoteness and skills shortages)

Section 3 (Phase 1 Evaluation findings) includes insights drawn from the stakeholder interviews and surveys, and desktop analysis.

Section 4 (Conclusion and recommendations for Phase 2 of the Program) provides a summary of the Program evaluation and findings, with recommendations made in relation to each of the five Program workstreams.

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It is noted that aspects of the Program will continue to be implemented beyond the reporting timeframe, including many of the pilot projects which will be finalised and evaluated later in 2022.

1.5. About the evaluator

Aither is a policy, strategy, performance and economics advisory firm servicing clients working in sectors including water, infrastructure, the environment, and resilience and adaptation. Aside from preparing the Program Evaluation Framework and undertaking this evaluation, Aither has not been involved in delivery of the Program and has no commercial interest in the Program's workstreams. As such, Aither was able to provide an independent evaluation free of any conflicts.

2. Program context and background

Safe and reliable water and sewerage services are essential for community health and wellbeing, environmental protection, and economic productivity. Councils and their local water utilities are responsible for ensuring the delivery of safe, secure, efficient and affordable water supply and sewerage services to more than 1.8 million people in regional NSW. However, in providing these essential services, local water utilities can face a range of internal and external risks and challenges including in relation to:

- differences in resourcing and capacity among local water utilities and local councils, which means that a 'one size fits all' approach to water and sewerage provision does not work
- A lack of shared data, information and modelling to inform planning and decision making
- finding, retaining and/or accessing relevant expertise in regional and remote local water utilities and local councils
- ageing assets and infrastructure
- water security and supply in the face of drought, population growth and a changing climate
- a lack of clarity around responsibility and processes for strategic water planning and infrastructure management (water security, safety and service provision)
- having to deal with complex, confusing and outdated regulations and processes.

In 2019, during intense drought, around ten regional NSW cities or towns came close to running out of water and others had six to 12 months of supply. In some towns, water quality was declared unsafe.⁷ An inter-agency review of the performance of local water utilities found widespread service risks to water quality and water security across the local water utility sector, many of which have existed for some time but were accentuated by drought.

Following the drought, a performance audit of regional town water infrastructure⁸ by the Auditor-General for NSW, found that the Department had not effectively supported or overseen town water infrastructure planning in regional NSW since at least 2014. Seven recommendations for the Department were made, with a focus on 'coordinating town water planning, investments and sector engagement to more effectively support, plan for and fund town water infrastructure, and to work with local water utilities to help avoid future shortages of safe water in regional towns and cities'.

The Program was established in December 2020 in response to the recommendations of the Auditor-General's report and to fill gaps in the broader reform agenda, particularly with respect to addressing issues linked to the Department's regulatory framework, local water utility scale and remoteness and skills shortages. In this regard, the Program has begun addressing the five identified barriers to effective local water utility service delivery and risk management, by progressing work across five workstreams. A conceptual overview of the Program, including the outputs and outcomes being sought, is provided in Figure 1 below. A more detailed program logic is provided in Appendix A - .

https://www.abc.net.au/news/2019-07-14/day-zero-approaching-as-towns-run-out-of-water

 $^{^{8} \}qquad \text{https://www.audit.nsw.gov.au/our-work/reports/support-for-regional-town-water-infrastructure} \\$

Further detail about the Program's key focus areas is provided in the following three sub-sections, and brief information about how the seven recommendations from the Auditor-General's report have been addressed by the activities of the Program is provided in Appendix B - .

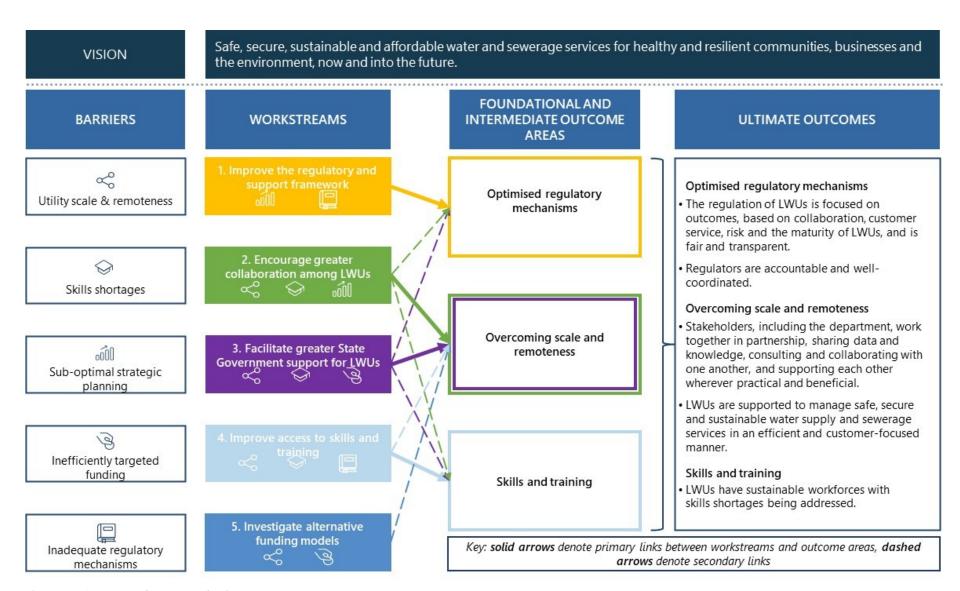


Figure 1 Conceptual program logic

2.1. Optimised regulatory mechanisms

Currently, councils undertake strategic planning according to an Integrated Planning and Reporting Framework (IP&R Framework) mandated under the *NSW Local Government Act* 1993. However, the IP&R Framework does not specifically cover important aspects of strategic *water* planning and management, such as infrastructure and non-infrastructure investments, water conservation and drought measures. ¹⁰

Prior to 1 July 2022, local water utilities were encouraged to undertake strategic planning in accordance with the Best-Practice Management of Water Supply and Sewerage (BPMWSS) Framework and Guidelines, which includes a checklist for local water utilities to prepare Integrated Water Cycle Management (IWCM) strategies.

Since October 2018, a renewed Safe and Secure Water Program (SSWP) has included funding to support local water utilities develop and deliver their IWCM strategies. However, as of 30 June 2022, only 4 of the 92 local water utilities had completed their IWCM planning with the Department's endorsement ('concurrence').¹¹ A key focus of the Program has therefore been to expect and enable local water utilities to do effective, evidence-based strategic planning to ensure they deliver safe, secure, accessible, and affordable water supply and sewerage services to customers and can manage keys risks now and into the future (including in the event of significant shocks).

The Program's work has progressed on two fronts including the development of a new Regulatory and Assurance Framework for Local Water Utilities¹² (the Regulatory and Assurance Framework), and by the Department adopting a new regulatory posture for its regulation, assurance and support functions to reflect the new risk- and outcomes-focused planning approach, with a focus on building effective partnerships through close collaboration with local water utilities and the wider water sector.

In consultation undertaken by the Program team regarding the improved Regulatory and Assurance Framework, many stakeholders expressed interest in improving the integration of local water utility strategic planning with the IP&R Framework. The Department has announced that the improved integration of local water utility strategic planning with the IP&R framework will be trialled over a series of pilots scheduled to take place over the current cycle of IP&R (July 2022 to June 2025). 13

2.2. Overcoming scale and remoteness

Many local water utilities across regional NSW face significant issues relating to their small size and remoteness, especially with regards to funding, skills and capacity. In this regard, the Program has undertaken a range of work to:

https://legislation.nsw.gov.au/view/html/inforce/current/act-1993-030#sec.8C

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0004/518260/PUB22-562-Using-the-IP-and-R-framework-for-Local-Water-Utility-Strategic-Planning-July-2022.pdf

https://www.industry.nsw.gov.au/water/water-utilities/best-practice-mgmt/iwcm/planning-status

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/518734/PUB22-498-Regulatory-and-assurance-framework-for-local-water-utilities.pdf

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/507565/using-the-Integrated-planning-and-reporting-framework-for-local-water-utility-strategic-planning.pdf

- encourage greater collaboration among local water utilities facing similar issues, so they can share
 insights and learnings and facilitate knowledge capture across the sector (including through pilots
 referred to in section 2.4 below).
- facilitate greater State Government support for local water utility strategic planning, including through the provision of access to regional water strategy (RWS) data and information, and the technical expertise of the Department and State-Owned Corporations (SOCs) (including through pilots referred to in section 2.4 below).
- Reviewing the financial needs and capacities of local water utilities to meet their community service obligations.

2.3. Skills and training

Skill shortages and workforce development are critical issues facing the water industry for the continued provision of safe, reliable water and sewage services. There is an acute lack of trained water operators in regional NSW, which poses an unacceptable risk for NSW communities and the NSW Government's \$2.1 billion investment in regional water infrastructure.

Water operators require tailored skills and training, but there is an acknowledged lack of competent registered training organisations (RTOs) and trainers across NSW. Research by the Program has identified that over the next 4 years, there is an expected deficit of 1,476 water operators' qualifications and a shortfall of up to 21 trainers and assessors to deliver training.¹⁴

Similarly, councillors play an important role in helping local water utilities plan and deliver efficient and effective water services in regional NSW towns. However, some councillors may have had limited engagement with the water aspects of their business, and some may not understand their roles and responsibilities.

To address these skills shortages and capacity challenges, the Program brought together experts in the training, water and local government sectors to identify the demand- and supply-side barriers and develop a draft Water Industry Skills and Training Action Plan to increase skills of existing operators, attract more operators into the sector and increase employment.¹⁵

The Program also developed and implemented a suite of materials to raise awareness of the risks in water management and the roles and responsibilities for councillors and other decision makers in regional NSW water utilities.¹⁶

2.4. Pilot projects

Key aspects of the Program are being delivered through more than 15 pilot projects across the strategic planning, regional collaboration and State Government support workstreams.¹⁷ The aims of the pilot projects are varied, including:

DPE unpublished data (expected to be published around September 2022)

https://water.nsw.gov.au/__data/assets/pdf_file/0007/489895/draft-action-plan-december-2021.pdf

https://www.dpie.nsw.gov.au/water/plans-and-programs/town-water-risk-reduction-program/improve-access-to-skills-and-training

https://water.dpie.nsw.gov.au/__data/assets/pdf_file/0007/486025/sap-meeting-10-presentation.pdf

- to test new approaches to local water utility strategic planning, to inform the development and implementation of the new Regulatory and Assurance Framework
- to evaluate and test new approaches to local water utility service delivery and risk management in the context of encouraging greater regional collaboration between local water utilities, and improved State Government support for local water utilities, and to consider whether the outcomes could be applied across regional NSW.

The Department has played a key role in coordinating the development of pilot projects to address specific local water utility needs, including with local water utilities, joint organisations (JOs), other regulators and SOCs. Appendix E - lists all pilot programs undertaken in Phase 1 of the Program. Two of the pilot projects are evaluated as case studies in section 3.2 (Orana Water Utilities Alliance workforce planning pilot and the WaterNSW Dam Safety Services pilot).

At the time of this Program-level evaluation, many of the pilot projects were not complete, due to a range of factors including delayed commencement due to the complexity of scoping initiatives with multiple stakeholders, and obstacles to securing support for the pilots under the now replaced BPMWSS Framework and Guidelines. The pilot projects will be evaluated by the Department later in 2022. However, some preliminary findings reported by the Program team regarding pilots are discussed in Sections 3.1 and 3.2 of this report.

3. Phase 1 Evaluation findings

This section sets out the key findings from the evaluation of Phase 1 of the Program over 18 months from December 2020 to June 2022. It includes insights drawn from the stakeholder interviews and surveys, and desktop analysis. The findings are split into three sections:

- 3.1 Delivery progress towards completing the Program's activities in line with the original rationale, timeframe, and budget (i.e., appropriateness, efficiency, and effectiveness). This section is the process evaluation.
- 3.2 Achievement of foundational outcomes (0-2 years) findings against the foundational outcomes, per each of the three key Program outcomes areas (optimised regulatory mechanisms, overcoming scale and remoteness, and skills and training). This section is part of the outcomes evaluation.
- 3.3 Achievement of intermediate and ultimate outcomes (2-5+ years) broad findings in relation to the achievement of intermediate and ultimate outcomes for each of the three outcome areas. This section is also part of the outcomes evaluation.

Evaluation findings are set out as italicised sub-section headings that correspond to:

- the key evaluation questions used to guide the process evaluation (section 3.1)
- the foundational outcomes the Program is seeking to achieve (section 3.2)
- other broad findings on the achievement of intermediate and ultimate outcomes (section 3.3).

3.1. Delivery

The Program was developed to address a clear set of barriers and risks to town water and sewerage services that were not being addressed through established NSW Government programs, as set out in sections 1.1 and 2. This section considers the appropriateness of the Program in addressing the identified barriers and risks, and the efficiency and effectiveness of Program delivery in completing activities in line with the original timeframe and budget. Evaluation findings against each evaluation theme of appropriateness, efficiency and effectiveness are set out below as italicised sub-section headings that correspond to the key evaluation questions used to guide the process evaluation (refer Appendix C -).

3.1.1. Appropriateness

This section considers the appropriateness of the Program in addressing identified barriers to effective operational and strategic risk management of water and sewerage services, the extent to which the programs workstreams and activities have appropriately targeted risks, and whether the Program has addressed additional risks that were outside of its initial scope.

The Program has begun to address key barriers and risks to effective operational and strategic risk management of water supply and sewerage services

The Program has begun to address many of the entrenched barriers and risks identified in the Auditor-General's report and has assisted in developing a more collaborative environment to jointly manage risks.

Most stakeholders reported that the Program has been worthwhile (65.2%) and that implementation should continue (73.9%), noting that much work remains to be done. Several stakeholders identified that a future stage of the Program may be able to better address the identified barriers and risks and should look to improve upon the current Program scope. Other stakeholders identified that current work, including pilot projects, will need to continue and be fully implemented to start to see changes occur. Overall, the survey indicated that stakeholders had mixed views as to whether the Program was on a path to addressing each barrier or not:

- Most stakeholders felt the Program was on a path to largely or partly addressing **sub-optimal strategic planning** (56.5%) and **inadequate regulatory mechanisms** (47.8%).
- Stakeholders were split on whether the Program was on a path to addressing **inefficiently targeted funding** (45.5%) or not (45.5%).
- Most stakeholders felt the Program was only addressing limited aspects of or was not addressing utility scale and remoteness (65.2%) and skills shortages (56.5%).

These findings align with the areas of focus for the implementation of Phase 1 of the Program to June 2022, including a greater focus of the development or the Regulatory and Assurance Framework. They suggest a need for any future stage of the Program to incorporate increased focus on addressing barriers and risks relating to utility scale and remoteness, skills shortages and inefficiently targeted funding.

The Program's timeframe and the Cabinet parameters meant that some options to address barriers were out of the scope of the Program (for example a review of structural arrangements, or changes to the legislative framework). However, stakeholders recognised that a part of the Program's success to date was due to having clear parameters and boundaries in relation to its scope, which gave local water utilities and councillors the confidence to engage with the Program.

Last, some stakeholders indicated that increased support and funding will be required in the future to address the identified risks and barriers, and feel that the Program "must continue, be strengthened and widened" as it is only just "starting to understand the issues and solutions in a reasonable level of detail".

The Program's workstreams and activities have appropriately targeted risks but there is insufficient information at present to assess which pilot projects can be scaled for the future (noting that pilots will be evaluated separately by the Program team later in 2022)

The Program's workstreams and activities have appropriately targeted risks. However, at the time of this evaluation, many of the pilot projects were not complete making it difficult for stakeholders to assess their scalability. Stakeholders that were able to make comment indicated that the pilot projects focused on reducing risks were seen as highly scalable, as the risks to be addressed are common across local water utilities. The approach taken with the Central NSW JO pilot to consider a regional approach to strategic planning was also seen as promising and likely to "solve a lot of issues raised in

the Attorney-General's report". In relation to this pilot, it was noted that some flexibility in the approach would be required to address the needs of JOs and local water utilities.

The scalability of the pilot projects will be considered as part of the pilot project evaluations which are to be undertaken by the Program team later in 2022.

The Program has addressed several risks outside of the initial program scope, which have helped strengthen the Program's implementation

The Program has addressed some risks that were outside of the original program scope. For example:

Improving integration between local water utility strategic planning and the IP&R framework

Following feedback from the sector as part of the development of the Regulatory and Assurance Framework, additional research and consultation was undertaken by the Program to assess how local water utility strategic planning could be better aligned with the existing NSW Office of Local Government's IP&R Framework¹⁸, primarily to reduce duplication in strategic planning activities and processes. While this work was originally outside of the project scope, it is seen as a valuable addition to the Program that could help streamline future strategic planning work undertaken by councils.

This work resulted in the development of guidance for using the Integrated Planning and Reporting framework for local water utility strategic planning ¹⁹, and the establishment of a pilot program to work with interested councils to trial IP&R-focussed approaches to local water utility strategic planning. The pilots will be implemented over the current cycle of IP&R (July 2022 to June 2025) with a view to informing future guidance and support from the Department.

Development of a draft incident and emergency management framework for local water utilities

The development of the Incident and emergency management for local water utilities: proposed management framework²⁰ was also originally outside of the Program scope. Recent wide-ranging emergencies such as bushfires, floods and the covid-19 pandemic, as well as smaller localised incidents such as loss of power, infrastructure failure or water quality issues, highlighted incident and emergency management as a key area of risk for local water utilities. In response, the Program:

- convened a focus group to investigate and provide recommendations for how local water utilities can improve management of incidents and emergencies
- engaged a consultant to work with the focus group to develop a draft incident and emergency management framework to support local water utilities to improve risk management.
- Consulted with the broader industry on the *Incident and emergency management for local water utilities: proposed management framework.*²¹

https://www.olg.nsw.gov.au/councils/integrated-planning-and-reporting/

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/507565/using-the-Integrated-planning-and-reporting-framework-for-local-water-utility-strategic-planning.pdf

https://water.dpie.nsw.gov.au/__data/assets/pdf_file/0004/516136/proposed-incident-and-emergency-framework-for-lwus.pdf

https://water.dpie.nsw.gov.au/__data/assets/pdf_file/0004/516136/proposed-incident-and-emergency-framework-for-lwus.pdf

The *Incident and emergency management for local water utilities: proposed management framework* draws on several existing requirements in the NSW Government policy and legislation for incident and emergency management. It aims to guide local water utilities in their development of specific incident and emergency management processes using a risk-based and outcomes-focused approach. The Department advised that consultation on the Framework highlighted the need for further development and guidance, which will be developed in conjunction with industry stakeholders.

The inclusion of the *Incident and emergency management for local water utilities: proposed management framework* in the Program was seen by stakeholders as a positive addition, which has helped clarify roles and responsibilities and raised awareness of procedures for incident and emergency management.

Development of a local water utility regulators collaboration framework

As part of the development of the new Regulatory and Assurance framework, the Program team heard from the sector that the successful implementation of any new regulatory approach would require a coordinated approach from the regulators of local water utilities.

Under the Roadmap to an improved regulatory framework for local water utilities²² (released by the Program in October 2021), the department committed to work collaboratively with the other regulators of local water utilities to ensure regulators have clear roles and responsibilities and that regulators communicate effectively with each other and local water utilities.

In July 2022, the Program released a Regulator Collaboration Framework²³ which was developed by representatives from the following NSW Government regulatory agencies, collectively referred to as the local water utility regulators:

- Department of Planning and Environment Water
- NSW Health
- NSW Environment Protection Authority
- Office of Local Government
- Natural Resources Access Regulator
- Dams Safety NSW
- Independent Pricing and Regulatory Tribunal of NSW

3.1.2. Efficiency and effectiveness

This section considers the efficiency of Program delivery in terms of its budget, staff and time, and the effectiveness of the Program in delivering its planned workstreams and outputs. External factors and barriers that have challenged the Program's implementation are also identified.

https://water.nsw.gov.au/__data/assets/pdf_file/0010/477613/Final-Roadmap-to-an-improved-regulatory-framework-for-local-water-utilities.pdf

https://water.nsw.gov.au/__data/assets/pdf_file/0006/524076/local-water-utility-regulators-collaboration-framework.pdf

The Program has been delivered efficiently within a tight timeframe

The Department was allocated \$4.9M for implementation of Phase 1 of the Program from December 2020 to December 2022. To allow for the timeframes of Cabinet reporting by December 2022, the Program evaluation is for the Program to July 2022, as the submission to Cabinet needed to be finalised by August 2022.

Internal Program management reporting and discussion with Program staff indicate that expenditure largely aligns with the budget. By December 2022, it is anticipated that 85% of the budget will have been spent. Around 58% of the Program's expenditure occurred in 2021/2022 (\$2.9M), with around half of that (\$1.58M) being expended in May and June 2022 to expedite the implementation of pilot projects.

Delivery of the Program has progressed with a relatively small team of six core members, with additional resources taking the team to nine (at various stages of the Program). The core team included a Program Director, Manager, two workstream leads and two program officers. Two of these staff were seconded from the Department's Water Utilities team, two from the Office of Local Government, and one part time (0.4FTE) from NSW Health. The other resources were directly employed for the Program.

This structure bought together into one team a range of skills and experience in specific policy issues relating to local water utilities and stakeholder management. It has been beneficial in driving a coordinated approach and improved collaboration between the regulators of local water utilities.

Notwithstanding the above, implementation of the Program in its first few months was constrained while key Program staff were recruited and consultation with the sector was undertaken to confirm the Program's design. Further, while stakeholders identified that the Program team successfully adapted by seconding additional staff and getting additional help where needed, expanding the size of the Program team may have help drive aspects of Program delivery.

Overall, it is evident that the Program has used its staff and time resources efficiently within a tight timeframe. The Program's timeframe created some implementation challenges, including placing additional pressure on the Regulatory and Assurance Framework co-design approach, and constraining the time available to plan, develop and implement the five workstreams and pilot projects with stakeholders. As noted above, several pilot projects are yet to be completed and will be delivered by the end of Phase 1 of the Program (December 2022).

The decision to co-design the new Regulatory and Assurance Framework meant that the period between its finalisation and commencement was tight. This limited window has steepened the learning curve for the Department's Water Utilities team, who will be implementing the Regulatory and Assurance Framework. However, the risk was managed as members of the Water Utilities' team participated in the co-design process, and the wider team were consulted extensively throughout the process. To further mitigate the risk, the Program has developed, funded, and implemented training for staff of the Water Utilities team to be trained in risk-based and outcomes-focussed regulation, to support the team and help drive the necessary skill development and cultural change required to successfully implement the new framework. This also served to reduce a risk identified by the sector about ensuring that the Department resources the implementation of the new framework.

Progress has been made against the Program's intended Phase 1 outputs, however external factors have affected Program delivery

Progress has been made against several of the Program's Phase 1 outputs (refer Appendix A), and this can largely be attributed to the Program's positive team culture, as well as strong senior executive commitment to the Program. All stakeholders interviewed for the evaluation had positive feedback about the Program team as outstanding representatives of the Department who:

- ran a robust program
- were open to ideas from industry
- were transparent about their intentions and issues that needed to be worked through
- were willing to listen, learn and adapt in response to feedback.

Overall, the Program team's delivery approach and governance has resulted in stakeholders feeling supported, and the Program has benefited from the resultant trust, momentum and buy-in that has been achieved.

Some external factors and barriers have, however, hindered Program delivery. These are set out below.

Program timeframes and staging

The Program was established with a two-year time frame for Phase 1 and a report back to Cabinet before shaping Phase 2.

Key elements of the Program's design were an emphasis on collaboration as the primary delivery mechanism, together with a decision to co-design the new Regulatory and Assurance Framework. These meant that:

- resources needed to be invested in ensuring that Departmental staff and stakeholders from across the water sector were involved in every stage from early development through to implementation and that councils were supported to adjust to the new outcomes-based framework
- some parts of the Program design and detailed milestones were negotiated through the two years
- key processes within the new Regulatory and Assurance Framework were developed through co-design over time through discussions with stakeholders and staff to collaboratively work through new ideas.

Some local water utilities reported that they have at times needed to make choices to prioritise delivering services in an environment where they were being impacted by external factors like Covid-19, bushfires, floods and drought rather than participate fully in the Program. This was addressed by the inclusion of the Water Directorate and LGNSW on the Program's Stakeholder Advisory Panel who sought feedback from their members to input into the co-design of the Regulatory and Assurance framework and other Program collaboration activities.

Consultation fatigue

The time pressures of the Program and its consultation requirements were compounded by concurrent stakeholder consultation that was underway for other major NSW Government work programs, including development of the NSW Water Strategy (August 2021), the regional water strategies (underway) and the NSW Water Efficiency Program and Framework²⁴ (underway). The

²⁴ https://www.industry.nsw.gov.au/water/plans-programs/water-efficiency-program-and-framework

consultation workloads and short timeframes associated with the combined Department engagements were reported to be the most intensive that some stakeholders had ever experienced.

The tight Program timeframes may have helped keep participants on track to deliver an ambitious workload in a short space of time. However, improved planning and coordination of stakeholder consultation activities across the Department's key water reform programs could have reduced the workload and time pressures felt by stakeholders and should be considered in the future.

Complexity and delays in developing and progressing strategic planning pilots

In the early stages of the Program, local water utilities were invited to express their interest in participating in pilot projects to test new approaches to strategic planning, to inform the design of strategic planning components of the new Regulatory and Assurance Framework that was being developed by the Program. This approach differed from other pilot projects, whereby a specific approach or process has been trialled.

The different approach that was taken to developing strategic planning pilots was found to introduce complexity and delays into the scoping and approvals process. This was particularly the case for the small number of pilots that sought strategic planning funding through Stream 2 of the SSWP—because Stream 2 of the SSWP is intended to be for the development of IWCM strategies linked to the previous BPMWSS Framework, rather than strategic planning based on the risk- and outcomes-focussed approach of the new Regulatory and Assurance Framework. The different approach and focus of the Program's strategic planning pilots meant that securing internal support for pilot project design was constrained by the prescriptive nature of the then BPMWSS Framework's IWCM checklist regime.

Further information to illustrate the challenges that arose in the strategic planning pilot process is as follows:

- the prescriptive nature of the then BPMWSS Framework's IWCM checklist regime could not easily accommodate deviations from the prescribed approach. This introduced complexity in scoping the strategic planning pilots in the absence of clarity on what a revised approach to local water utility strategic planning would look like under the proposed new Regulatory and Assurance Framework which was not yet developed and how the new approach would ultimately be assessed by the Department. This lack of clarity required the Program to work extensively with councils and the Department's Water Utilities team to adapt the IWCM/checklist regime to provide an agreed scope that the Water Utilities team could use for any future regulatory assessment that might be needed. This back and forth meant that, for example, the Griffith pilot (refer Appendix E) was reported to take around nine months to get its scope and funding approved.
- Participating councils reported a lack of transparency around the Department's then IWCM strategy scoping processes as well as the review and approval processes for SSWP funding. Some councils were unaware of the details of the multi-stage approach and timeframes for concurrence for IWCM scoping and approval of SSWP funding, which includes:
 - agreement by SSWP to the final scope of works (as per IWCM checklist)
 - an additional value-for-money assessment of the funding proposal prior to final funding approval.

https://water.nsw.gov.au/__data/assets/pdf_file/0011/508628/sap-meeting-14-presentation.pdf (Agenda Item 7)

The learnings for the strategic planning pilots provide compelling reasons for the Department to:

- move to implementation and adoption of the new Regulatory and Assurance Framework
- review its SSWP funding guidelines to embed the new framework approach and encourage the further uptake and delivery of strategic planning by local water utilities.
- Overall, six strategic planning pilots commenced scoping discussions with the Program in July 2021, and the Program also commenced observing another three relevant local water utility strategic planning projects (see Appendix E). Pilots will be evaluated separately by the Program later in 2022.

Capacity of councils to absorb and respond to all elements of the program within the timeframe

This evaluation indicates that while most stakeholders can see immediate benefits from the Program, not all are aware of all the deliverables so far. For example, most stakeholders agreed that a significant benefit of the Regulatory and Assurance Framework is that it replaces the prescribed approach to strategic planning under the previous BPMWSS Framework (IWCM strategies) with a flexible, risk- and outcomes-focused approach. However, some stakeholders also reported a concern that the new approach to strategic planning will still create unnecessary work as it may duplicate part of council's IP&R processes. These concerns were raised during the evaluation consultation in June 2022; just prior to the Program releasing guidance material in July 2022 for using the IP&R framework for local water utility strategic planning. This guidance material anticipated this issue and includes advice for councils and local water utilities to avoid duplication of effort and resourcing.

The evaluation suggests further time and communication is needed to help councils absorb all the materials and improvements instituted through the program. In this regard, the Department intends to work with interested councils and joint organisations of councils over the current cycle of IP&R (July 2022 to 30 June 2025) to support pilots using the IP&R framework for local water utility strategic planning. Learnings form the IP&R pilots will be used to update the guidance material.

The Covid-19 pandemic created challenges for Program implementation

Program implementation was reportedly challenged by the Covid-19 pandemic and associated restrictions across NSW since early 2020, which meant that the majority of Program implementation, including stakeholder consultation, has had to be conducted virtually. The lack of face-to-face meetings is reported to have affected the ability to build rapport among some stakeholders. However, increased skills in navigating video-conferencing meant that there were efficiencies in organising and conducting meetings, and this new way of operating is now well established across the water sector.

Flooding throughout NSW affected pilot project implementation

Widespread flooding across eastern NSW in 2021 and 2022 affected the ability of some councils to participate in pilot projects. For example, the WaterNSW catchment and water quality pilot originally included the Tweed Council, however had to be altered to reduce input from the council as they needed to focus on short-term flood-recovery. Similarly, a planned Integrated Planning and Reporting focussed pilot involving Richmond Valley Council had to be abandoned due to the inability of the council to participate following the flooding disaster which impacted its communities.

https://water.dpie.nsw.gov.au/__data/assets/pdf_file/0004/518224/using-the-ipr-framework-for-lwu-strategic-planning.pdf

3.2. Achievement of foundational outcomes (0-2 years)

The program logic (Appendix A) provides a set of foundational, intermediate and ultimate outcomes that the Department is seeking to achieve through the delivery of the Program's workstreams and outputs. This section considers the effectiveness of Program delivery in achieving the foundational outcomes (Figure 2). Evaluation findings are presented in sub-sections that align with the three foundational outcome areas in the program logic (optimised regulatory mechanisms, overcoming scale and remoteness and skills and training).

FOUNDATIONAL

0-2 years

Optimised regulatory mechanisms

- 1A: The new regulatory framework represents a positive outcomes-based, practical, cost-effective approach to addressing barriers and reducing risks to town water and sewerage services.
- 1B: The collaborative process for developing the new regulatory framework was valuable for participants, enabled DPE to effectively respond to LWU needs, and has built sector support for the new framework and ongoing collaboration with the Department.
- 1C: LWUs and regulators understand the new regulatory framework and their roles and responsibilities.
- 1D: DPE has a better understanding of LWU performance, risks and maturity, to inform its regulatory and support activities.

Overcoming scale and remoteness

- 2A: LWUs/JOs understand regional opportunities to work collaboratively and are motivated to maintain or enhance their collaborative efforts.
- 2B: The Department and SOCs are more collaborative, approachable and effective in helping LWUs to address barriers and risks in alignment with LWUs' needs.
- 2C: Improved alignment in modelling, risk and options analysis relating to town water supplies between RWSs and LWU strategic planning.

Skills and training

- 3A: Training opportunities are now available for water operators to address skills shortages and capacity challenges.
- 3B: Councillors have access to better information for understanding their role and accountabilities related to local water management.

Figure 2 Foundational outcomes to be achieved by the Program

3.2.1. Optimised regulatory mechanisms

Development of the new Regulatory and Assurance Framework has required close collaboration and partnership between the Department and more than 200 people from various organisations across the water sector (local water utilities, local government, other regulators, and the private sector). Discussions have been progressed through multiple collaborative design forums (e.g., face-to-face regional workshops, strategic planning and technical assessment and approvals working groups etc) and in consultation with the Program's Stakeholder Advisory Panel. In addition, several strategic planning pilot projects have been initiated in partnership with JOs and local water utilities to test:

- new and flexible approaches to regulating local water utility strategic planning
- how local water utility strategic water planning can be better integrated with council's general planning requirements under the IP&R Framework
- regional collaboration approaches to incident and emergency management.

In the past 18 months, the Program has developed a new Regulatory and Assurance Framework that represents a positive outcomes-focused, practical and cost-effective approach to addressing barriers and reducing risks to town water and sewerage services. The Regulatory and Assurance Framework commenced on 1 July 2022, with strategic planning components expected to become operational from December 2022.

In relation to strategic planning, it was further identified that changes to the eligibility criteria and application processes for funding for strategic planning under the Safe and Secure Water Program could encourage the further uptake and delivery of strategic planning by local water utilities.

The collaborative process to develop the Regulatory and Assurance Framework was seen as largely valuable for participants and has built sector support for ongoing collaboration with the Department. Gains won through the partnership approach will be very valuable to maintain during the next phase of implementation.

The Regulatory and Assurance Framework as well as local water utility and regulator roles and responsibilities within it are clear to most stakeholders.

The Department's understanding of local water utility performance, risks and maturity is expected to develop as performance and risk monitoring is established. While the Regulatory and Assurance Framework promises a positive, outcomes-based, practical and cost-effective approach to regulation, achievement of that will depend on how well it is implemented.

These findings are set out in greater detail below.

The Regulatory and Assurance Framework represents a positive, outcomes-based, practical and cost-effective approach to addressing barriers and reducing risks to water supply and sewerage services.

The Regulatory and Assurance Framework promises a significant improvement on the previous BPMWSS Framework. It contains necessary elements to support a positive, streamlined, outcomesbased, practical and -cost-effective approach to addressing barriers and reducing risks to town water and sewerage services, better defines roles and responsibilities, and seeks to tackle many of the issues that stakeholders wanted to be addressed.

The Regulatory and Assurance Framework seeks to reduce red-tape associated with the approval of strategic plans and asset investments and help councillors and senior council staff to understand their roles and accountabilities. The ability for councils and local water utilities to challenge regulatory decisions, particularly section 60 approvals under the *Local Government Act* 1993 (Ministerial approval required for certain council works), and the transition away from prescriptive resource-intensive IWCM strategies are both seen as major improvements. However, most interviewees and over a third of survey participants felt it was too soon to tell whether the Regulatory and Assurance Framework would achieve this outcome, as the "proof of its success will be in its implementation".

At the time of this evaluation, guidance material to support implementation of each element of the Regulatory and Assurance Framework was under development. While most stakeholders were aware of this and believe the material will help support implementation, some expressed concerns that the Regulatory and Assurance Framework has been finalised without the guidance material. This was cited as a key reason why stakeholders qualified their support for the Regulatory and Assurance Framework with statements to the effect that the ultimate success of the new Regulatory and Assurance Framework will depend on how it is implemented.

If implementation is not conducted with the same culture of collaboration between the Department, other regulators, SOCs, councils and local water utilities, as has been emblematic of the Program, concerns have been raised that there could be a return to the Department's previous prescriptive approach to regulation.

Some stakeholders have argued that elements of the new Regulatory and Assurance Framework continue to duplicate some of the work councils already undertake in line with the IP&R Framework. However, as described in Section 3.1, the Program has recently released guidance material to avoid duplication of effort and resourcing.²⁷ As such, further communication and engagement with councils and local water utilities about the guidance material and forthcoming IP&R pilots is suggested.

The Department has advised that its intention is to integrate strategic water planning considerations into the Office of Local Government's IP&R Guidance, ahead of the next refresh of Councils' Community Strategic Plans and IP&R after the next local government election. It was not practical or feasible to have made this change at the time that most councils were in the final stages of completing and endorsing their Community Strategic Plans and IP&R in the first half of 2022.

Changes to the eligibility criteria and application processes for funding for strategic planning under the Safe and Secure Water Program could encourage the further uptake and delivery of strategic planning by local water utilities.

Funding to support strategic water planning was highlighted as a key concern for regional and remote local water utilities. As set out in Section 3.1.2, some strategic planning pilots sought funding through the SSWP but found it to be more difficult and time consuming to access than expected. It is noted that Water Infrastructure NSW (which administers the SSWP funding program) is in the process of making changes to guidance materials around the SSWP funding program to improve transparency regarding funding approval processes.

https://water.dpie.nsw.gov.au/plans-and-programs/town-water-risk-reduction-program/framework/guidance-for-local-water-utility-strategic-planning

It will be critical to ensure that the outcomes-based approach to strategic planning set out in the new Regulatory and Assurance Framework, and any future Program elements focused on strategic planning (e.g., IP&R pilots) are sufficiently funded to enable achievement of these outcomes.

The Department and Water Infrastructure NSW should consider whether changes could be made to SSWP strategic planning funding eligibility criteria and processes to encourage the further uptake and delivery of strategic planning by local water utilities.

The improved communication and willingness to collaborate with the water sector that was shown by the Department, and the co-design process to develop the Regulatory and Assurance Framework, were largely valuable for participants and has built sector support for ongoing collaboration with the Department

The co-design process that was used to develop the Regulatory and Assurance Framework helped build sector support for the Regulatory and Assurance Framework and for ongoing collaboration with the Department. Most stakeholders viewed the co-design approach as effective, well-structured and inclusive, and thought that the Department displayed good communication and a willingness to collaborate that many participants had not experienced before. The Department's approach and the co-design process helped tackle many issues that stakeholders wanted addressed and, as a result, has helped build trust and support for future collaboration with the Department.

Close to half of the survey participants felt the collaborative process to develop the Regulatory and Assurance Framework helped lay foundations for future productive collaboration with the Department (47.8%), and that the process helped them feel supportive of the new approach to regulation (43.5%). About a fifth of survey participants do not feel supportive of the new approach to regulation (21.5%), and a small number felt the process was a waste of time (13%). However, half of the participants that provided a negative response reported that they had little to no involvement in the co-design process.

As set out in Section 3.1.2, the co-design process and the tight program timeframes placed pressures on all involved, as comments and constructive feedback on the Regulatory and Assurance Framework were expected on a tight schedule, particularly towards the end of the process. This may have been compounded by consultation fatigue from other NSW Government programs and capacity issues in participating local water utilities. Some participants felt the process might have been improved through better stakeholder consultation planning and coordination, and stronger facilitation to maintain focussed and constructive conversations among participants.

Based on the above findings, stakeholder perceptions of the Department's performance as a regulator of local water utilities and continual improvement of its processes are anticipated to improve over time as the new Regulatory and Assurance Framework is implemented; noting that many of the issues raised by the sector are longer-term matters needing interventions and cultural shifts that will take some time to fully embed. The Department measures stakeholder perceptions through its bi-annual regulator perceptions survey, which commenced in June 2021.²⁸

https://water.dpie.nsw.gov.au/plans-and-programs/town-water-risk-reduction-program/framework/regulator-perception-survey-and-results

With respect to the implementation of the new Regulatory and Assurance Framework, most survey participants reported that they will use it in the future (78.3%), with a small number stating they are not likely to use it (17.4%) or are unsure about its use within their organisation (4.3%). Of the participants that stated they are not likely to use the Regulatory and Assurance Framework, one felt that important checks that were in place to stop service providers from increasing their fees had been removed.

All interviewees and most survey participants reported that they largely understand the new Regulatory and Assurance Framework and their roles and responsibilities. This understanding will improve as the Regulatory and Assurance Framework is implemented, and guidance material becomes available.

All interviewees and most survey participants (86.9%) reported that they largely understand the Regulatory and Assurance Framework and their roles and responsibilities. This includes participants who reported that they had little to no involvement in the collaborative work to co-design the Regulatory and Assurance Framework. Only a small number of survey participants reported that they find the Regulatory and Assurance Framework unclear (8.7%) or have not engaged with it enough to understand it (4.3%). Only one of these responses (4.3%) involved a stakeholder that reported that they had high involvement in the co-design process.

It is expected that regulators and local water utilities that have had little involvement in the development of the Regulatory and Assurance Framework may only come to understand their roles and responsibilities as they start to apply it. The Department has an essential role to play in supporting stakeholders to understand their roles and responsibilities, and to embrace the move from IWCM planning under the previous BPMWSS Framework to the risk- and outcomes-focussed approach of the new Regulatory and Assurance Framework. The guidance material that is in development is expected to provide additional clarity on roles and responsibilities.

The Department's understanding of local water utility performance, risks and maturity is expected to develop as performance and risk monitoring is established

The Department is currently working on establishing performance and risk monitoring to better understand local water utility performance, risks and maturity and inform its regulatory, assurance and support activities. As performance and risk monitoring has not yet been fully established, this outcome is yet to be achieved.

3.2.2. Overcoming scale and remoteness

The Program has worked to address local water utility issues related to scale and remoteness, particularly with respect to local water utility funding, skills and capacity. This work has included:

- Extensive engagement with the local water utility sector, including face-to-face and online meetings and workshops with over 260 stakeholders to:
 - better understand existing collaborative approaches and opportunities for local water utilities to participate in collaboration
 - identify areas of opportunity to reduce local water utility risks by expanding or enhancing inkind support from NSW Government entities
 - gather information about the financial needs and capacity of diverse local water utilities to meet their service obligations in their local circumstances.

- The establishment of a range of pilot projects focused on testing and improving aspects of the Regulatory and Assurance Framework and reducing identified risks, with the aim of:
 - encouraging greater collaboration among local water utilities facing similar issues
 - facilitating greater State Government support for strategic planning by local water utilities
 - helping to review the financial needs and capacities of local water utilities to meet their community service obligations.

The pilot projects have been undertaken with a range of councils, local water utilities, JOs and Water Alliances from across NSW.

Phase 1 of the Program has aimed to make local water utilities and JOs aware of regional opportunities to work collaboratively and increase their motivation to maintain or enhance their collaborative efforts, improve the Department and SOCs collaboration, approachability and effectiveness in helping local water utilities address barriers and risks, and improve the alignment of modelling, risk and options analysis between RWSs and strategic planning by local water utilities.

The Program has made progress in improving local water utility and JO awareness of opportunities and motivation to collaborate, and has somewhat improved the Department and SOCs collaboration, approachability and effectiveness. However, it is noted that the evaluation of relevant pilots remains incomplete at the time of reporting. Sector feedback to date suggests that further work is required to improve the alignment of modelling, risk and options analysis for strategic planning. These findings are set out in greater detail below.

Local water utilities and Joint Organisations (JOs) have an improved awareness of opportunities to work collaboratively and are motivated to continue to collaborate in the future

Local water utilities and JOs are aware of regional opportunities to work collaboratively and are motivated to participate in future collaborative processes. Most interviewees were aware of regional opportunities for collaboration through their participation in pilot projects, while most local water utility and JO survey participants (80%) were aware of opportunities for collaboration to help address barriers and risks in their region. Similarly, most survey participants (81.8%) feel motivated to increase their participation in available regional opportunities in the future.

The Program has somewhat improved the Department and SOCs collaboration, approachability, and effectiveness in helping Local water utilities to address barriers and risks

The Program was designed with a focus on improving collaboration between the Department, SOCs and local water utilities to address barriers and risks to town water and sewerage services. Overall, stakeholders reported an improvement in collaboration because of the program (50%), however many stakeholders felt there was still room for improved collaboration in the future. Close to a quarter of stakeholders reported no change in collaboration (27.3%) because of the Program.

There has been less of an improvement in the perceived approachability and effectiveness of the Department and SOCs in helping local water utilities address barriers and risks. An almost equal proportion of survey participants reported there had been both some improvement in approachability (40.9%) and effectiveness (36.4%) and no improvement in approachability (36.4%) or effectiveness (40.9%). It should however be noted that it was difficult for stakeholders to assess progress against the pilot projects focused on addressing overcoming scale and remoteness, as many of these pilots were still in their infancy at the time of this evaluation.

Suggestions by stakeholders to improve collaboration include:

- more face-to-face meetings, including in relation to broader strategic water planning and management issues and options
- regional visits by central staff from the Department, other regulators and SOCs
- developing a stakeholder engagement and consultation plan to better align and integrate with other major NSW water programs that may be occurring concurrently
- closer engagement and collaboration between the Department and other regulators to agree on priorities and areas of focus.

Improved alignment in modelling, risk and options analysis relating to town water supplies between regional water strategies and local water utility strategic planning is expected in the future

While modelling has been undertaken by the Department, work has not yet commenced to incorporate or align modelling, risk and options analysis between RWS and local water utility strategic planning to further implement the strategic direction of the Auditor General's 2020 Performance Audit Report entitled 'Support for regional water infrastructure'.²⁹ This work will need to be undertaken to ensure this outcome is met. Moreover, WaterNSW indicated that it had undertaken sustainable yield modelling that could also be helpful in local water utility strategic planning.

https://www.parliament.nsw.gov.au/la/papers/Pages/tabled-paper-details.aspx?pk=78196

Case study 1: Orana Water Utilities Alliance workforce planning pilot

Testing a regional approach to workforce planning, and operator competency and training

There are known problems relating to the availability and accessibility of suitable water operator trainers and training material across regional NSW. These have been linked to multiple factors including an absence of minimum training requirements creating a low incentive and demand for training, the small and unique nature of the workforce's training needs (niche market), the expense of developing training resources, and a lack of understanding of the priority training needs.

This pilot project is supporting 12 Far West water utilities in the Orana Water Utilities Alliance (OWUA) (Bogan Shire, Bourke Shire, Brewarrina Shire, Central Darling Shire, Cobar Shire, Coonamble Shire, Gilgandra Shire, Mid-Western Regional, Narromine Shire, Walgett Shire, Warren Shire and Warrumbungle Shire councils) to understand and identify their water operator training needs by:

- developing generic professional role descriptions and identified training and skills requirements for supervisors, operators, and engineers
- mapping competencies and skills for these roles across the urban water cycle
- developing a water operator training needs assessment framework and supporting software (named, 'Acuario') for local water utilities and individual water operators to self-determine their training needs in relation to the regulatory requirements
- undertaking a gap analysis of training needs for each utility within the OWUA.

The pilot crosses the 'Encourage greater collaboration among local water utilities' and the 'Improve access to skills and training' workstreams and is aiming to ensure local water utilities in the OWUA have suitably trained staff to reliably provide essential water services to their communities.

The outputs of the pilot will enable the OWUA to identify the critical skills gaps and capacity challenges (skills shortages) in the Far West region. Subsequently, RTOs can be engaged to tailor training packages to addresses the specific needs.

In terms of resourcing for the pilot, the OWUA is providing human and data resources and a project manager (in-kind), and the Program is funding delivery and oversight from the Water Industry Operators Association of Australia (the national peak body for people in operational roles in the water industry).

In terms of delivery, the pilot commenced in January 2022 and was due for completion by July 2022. However, the project has experienced delays due to the time required for developing effective working relationships, and a shortage of qualified and experienced staff in the regional councils that can respond to requests for information. Consequently, the development of the framework and the gap analysis is ongoing.

The feasibility of scaling the pilot to the state or national-scale will require further consideration and assessment of potential linkages and alignment with similar work that is underway elsewhere, including in Victoria.³⁰

Doug Moorby, Narromine Shire Council, pers. comm.

Case study 2: WaterNSW Dam Safety Services pilot

Improving regional local water utility dam safety compliance and performance

The WaterNSW Dam Safety Services pilot is a collaborative effort between the Program, WaterNSW and the Clarence Valley, Orange City and Tamworth Regional Councils. Its aim is for WaterNSW to utilise its dam safety expertise and established relationships with consultants and technical experts within the dam industry to help councils to improve their regulatory compliance and performance with respect to NSW's dam safety legislative framework and reforms³¹, and therefore reduce dam safety risks.

The work of the pilot aligns with several Program workstreams including:

- Encourage greater state government support for local water utilities
- Improving the regulatory and support framework
- Improving access to skills and training.

It is supporting work to address barriers and risks linked to sub-optimal strategic planning, local water utility scale and remoteness and skills shortages.

The need for the project was identified during stakeholder consultation in August 2021, following audits by Dams Safety NSW of the management of dam safety risk and regulatory compliance by councils. At that time, the Clarence Valley Council raised concerns about resourcing impacts associated with work that would be needed to meet the regulatory requirements.

WaterNSW is a state-owned corporation (SOC) that is well qualified to assist councils with this work. It has significant experience and expertise in dam safety management, including risk assessments on dams and developing and implementing practical emergency preparedness exercises, which were identified as gaps for all participating councils.

The project commenced in March 2022 and was scheduled for completion in July 2022. The project seeks to develop a template for regulatory compliance by councils, diagnose existing gaps and issues and develop an action plan to address them, and provide an indication of costs. At the time of this evaluation, site assessments and interviews had been completed by WaterNSW in collaboration with participating councils and draft summary findings reports were being finalised.

The approach aims to build a shared understanding between councils, the Department and WaterNSW of known issues, and is the basis to consider options to improve compliance and performance. Subsequently, WaterNSW will work with the three participating councils to develop a commercial model and offer if this is deemed viable.

In terms of delivery, the three councils participating in this pilot are relatively large and well resourced. WaterNSW reports that they demonstrated a willingness to respond to the identified risks and had the capacity and capability to participate in the pilot project in a meaningful and fulsome way.

https://www.damsafety.nsw.gov.au/about-us/dam-safety-legislation-and-reforms#:~:text=The%20Dams%20Safety%20Act%202015,dam%20owners%20must%20comply%20with.

Overall, the findings from this pilot indicate a likely broader need for WaterNSW's expertise to assist councils across NSW to understand their regulatory requirements relating to dam safety and to ensure appropriate risk management and compliance. WaterNSW believes in the utility of the pilot and its ability to be scaled to other councils across NSW.

Further work is needed to understand the willingness and capability of other councils to address the identified risks to achieve dam safety compliance, either alone or in partnership with WaterNSW and/or the Department's Water Utilities team. WaterNSW agree they could have an ongoing role to play, subject to further assessment of implementation needs and funding. These issues will be explored further in the forthcoming evaluation of this pilot.

3.2.3. Skills and training

The Program is working in partnership with Training Services NSW, and training and local water utility sectors to address both supply and demand challenges to increase the skills of existing operators, attract more operators into the sector and increase employment and jobs in regional NSW.

Work undertaken in the Program to date to improve skills and access to training includes:

- The development of a Water Operations Skills Strategy in partnership with Training Services NSW, the training and the local water utility sectors.
- The development of a micro-credentialing course at UNSW Graduate School of Engineering and Management, which is anticipated to lead to a certificate for local water utility water operators. This course is to be designed and delivered by people in local water utilities.
- The development of a project proposal for a *National approach to development of training* resources for the *National Water Package*.
- A pilot project to develop a suite of tangible councillor awareness and training materials. These
 materials will help councillors to understand their roles and accountabilities in local water
 management and play a more active role in managing risks to town water and sewerage services.
- A pilot project testing a regional approach to workforce planning, and operator competency and training (refer to the Orana skills and training pilot case study in the previous Overcoming Scale and Remoteness sub-section).

While the Program has made progress in identifying options to improve skills and training to address skills shortages and capacity challenges, training opportunities for water operators are yet to be established. Consolidating and implementing the preferred options to properly address skills and capacity shortages will need to be a future focus for the Program.

These findings are set out in greater detail below.

Some progress has been made to improve access to skills and training, including the development of a draft Water Industry Skills and Training Action Plan (Plan). However, a lack of suitable water operator training and trainers remains an industry-wide problem. Significant work remains to implement the Plan before measurable improvements in the availability and accessibility of suitable training, and the number, capacity and capability of trained water operators can be realised, to address skills shortages and capacity challenges

Some progress has been made to improve access to skills and training, including through the development of the draft Water Industry Skills and Training Action Plan (Plan)³² and the work undertaken in the Orana skills and training pilot (refer to Case Study 1). However, elements of this workstream were delayed in order to focus on the development of the Regulatory and Assurance Framework, hence it has not progressed as quickly as planned.

Stakeholders reported that significant additional work was required to address supply and demand issues in relation to skill sand training, including with respect to finding and engaging suitable RTOs and trainers, developing tailored training packages that align with local water utility needs, and ensuring that opportunities for water operators and local water utility staff are made available and accessible in the future. At present just under half (41.6%) of water operators or local water utility staff that participated in the evaluation survey were aware of training opportunities.

Research by the Program has identified that over the next 4 years, there is an expected deficit of 1,476 water operators' qualifications and a shortfall of up to 21 trainers and assessors to deliver training³³. This research highlights that the current skills shortages and capacity challenges are an industry-wide problem.

Stakeholder concerns about skills shortages and capacity challenges are considered by the draft Plan. Emphasis is now needed in relation to finalising the Plan and implementing it before measurable improvements in the availability and accessibility of suitable training, and the number, capacity and capability of trained water operators can be realised, to address skills shortages and capacity challenges.

Note: with the completion of the new Regulatory and Assurance Framework, the Program team has advised that it is able to allocate significantly more resources to this aspect of Phase 1 of the Program for the final six months of the Program. However, this work and outcomes are outside of the reporting period of this evaluation.

The Program has developed better information and resources for Councillors to raise awareness of the risks in water management and their role and accountabilities as decision makers for local water utilities

The Program included a project that aimed to provide councillor awareness and training materials to help councillors play a more active role in managing risk (refer to Case Study 3 below). The project was developed in collaboration with the Office of Local Government, the NSW Water Directorate and Local Government NSW, and implemented to coincide with OLG's councillor induction process following the December 2021 local government elections.

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0007/489895/draft-action-plan-december-2021.pdf

³³ DPE unpublished data

The councillor training program was well-received and had broad stakeholder support. Overall, participants found the training materials valuable and had suggestions for how to expand and improve upon the training in future, including expanding it to be run for broader local water utility staff and within the Department. Participants were keen to see the councillor training embedded in induction and ongoing education programs in the future to optimise its uptake and effectiveness.

Case study 3: Councillor awareness and training

New councillor awareness and training material available via the Department's website.

In this project, in response to feedback from the local water utility sector, the Program partnered with key stakeholders (including NSW Water Directorate and Local Government NSW) and other regulators (including the Office of Local Government, NSW Health and the EPA) to develop a suite of councillor awareness and training materials, to help councillors play a more active role in managing risks to the delivery of water and sewerage services. The material included:

- A water industry induction handbook for decision-makers working in local water utilities (February 2022). The handbook is also available as a customisable MSWord template.
- A video series on the role and responsibilities of councillors in regional NSW local water utilities, with six case study presentations by existing regional NSW councillors (March 2022).
- A customisable councillor induction presentation template (March 2022).
- A councillor induction webinar, focusing on the importance of water services to regional communities, and the role and responsibilities of councillors (April 2022).

The material was developed in response to acknowledgement that councillors need suitable induction and ongoing training material to better understand their roles and responsibilities in water planning and management and decision making.

This pilot aligns with the 'Improve access to skills and training' and 'Facilitate greater State Government support for local water utilities' workstreams and sought to address barriers and risks relating to skills shortages, utility scale and remoteness and sub-optimal strategic planning.

In terms of resourcing and progress, the training materials were developed and made publicly available on Program's website³⁴ throughout early to mid-2022. The councillor webinar was also included in a series of 'Hit the Ground Running' workshops for newly elected councillors run by the NSW Office of Local Government³⁵ during February to April 2022. The pilot has been recognised as an excellent example of collaboration amongst the Department, other regulators, councillors and local water utilities, and no additional material is proposed to be developed.

In terms of the transferability of the findings to systemic or scalable improvements and risk management across the sector, we heard that the training materials that have been delivered are informative and useful, easy to find and accessible, and have been well received.

The challenge now is to ensure the material continues to remain up-to date, fit for purpose, accessible and is understood by new and existing councillors across NSW's 92 council-owned local water utilities. Updating the material could be considered business as usual for the Department. However, making sure the information is understood may require dedicated resourcing to provide copies of the handbook and regular (every 1-2 year) on the ground training via online webinars or roadshows — not just for councillors but also for council staff, Departmental staff and other stakeholders who need to understand what a councillor's role is.

³⁴ https://www.dpie.nsw.gov.au/water/plans-and-programs/town-water-risk-reduction-program/improve-access-to-skills-and-training

https://www.olg.nsw.gov.au/programs-and-initiatives/local-government-elections-4-december-2021/support-for-councillors/

3.3. Achievement of intermediate and ultimate outcomes (2-5+ years)

The intermediate and ultimate outcomes that the Department is seeking to achieve through the delivery of the Program's workstreams and outputs are included in the program logic at Appendix A, and are repeated in Figure 3 below.

INTERMEDIATE

ULTIMATE

2-5 years

5+ years

Optimised regulatory mechanisms

- 1E: More LWUs are applying the new framework for strategic planning.
- 1F: Risks to water <u>security</u>, and impacts on water quality and the environment are reduced in regions where the new framework is applied.
- 1G: Roles and responsibilities between the Department and other LWU regulators are clear and transparent.

Overcoming scale and remoteness

- 2D: Collaboration and partnerships between the Department, coregulators, SOCs and LWUs are overcoming barriers of scale, remoteness, skills and resourcing, and enhance the sector's ability to better manage risk, including through shared/regional solutions (where appropriate).
- 2E: Improved consistency and alignment between LWU strategic planning and RWSs, including objectives, priorities, and underpinning information/evidence.
- 2F: LWUs are supported by state government on a risk- and needsbasis.

Skills and training

- 3C: A range of LWU staff can access training and certification programs that are appropriate to their role and managing risks.
- 3D: LWUs can increasingly meet their skills and resourcing needs to effectively apply the new regulatory framework.
- 3E: Councillors play an active role in helping LWUs to better manage risks.

Optimised regulatory mechanisms

- 1H: The regulation of LWUs is focused on outcomes, based on collaboration, customer service, risk and the maturity of LWUs, and is fair and transparent.
- 11: Regulators are accountable and wellcoordinated.

Overcoming scale and remoteness

- 2G: Stakeholders, including the department, work together in partnership, sharing data and knowledge, consulting and collaborating with one another, and supporting each other where applicable.
- 2H: LWUs are supported to manage safe, secure and sustainable water supply and sewerage services in an efficient and customerfocused manner.

Skills and training

 3F: LWUs have sustainable workforces with skills shortages being addressed.

Figure 3 The intermediate and ultimate outcomes to be achieved by the Program.

The intermediate outcomes are expected to be achieved within 2 to 5 years from the commencement of the Program, whereas ultimate outcomes are expected after 5 or more years of implementation.

After 18 months of Program implementation, most survey participants were either somewhat confident that intermediate and ultimate outcomes would be achieved across each of the three outcome areas or felt that it was too soon to tell.

The following sub-sections set out areas of work that the evaluation identified as being required to enable the achievement of intermediate and ultimate outcomes for each outcome area.

3.3.1. Optimised regulatory mechanisms

This section sets out areas of work that were identified from the evaluation as being required to achieve intermediate and ultimate outcomes related to optimised regulatory mechanisms.

The success of the Regulatory and Assurance Framework and achievement of future outcomes will depend on the Department's implementation of its new regulatory, assurance and support approach

Many stakeholders cited that the success of the Regulatory and Assurance Framework and achievement of future outcomes will depend on the Department's adoption and implementation of its new collaborative, outcomes-focussed and risk based regulatory, assurance and support posture. A range of stakeholders felt that this could only be achieved if it was accompanied by a cultural change across the Department more broadly (i.e., outside of the Program team).

There were significant concerns that without cultural change, implementation of the Regulatory and Assurance Framework could risk becoming more prescriptive over time, which would "lose the overall value of the Program".

Many of the cultural change concerns that were mentioned in interviews were linked to distrust caused by historic Departmental decisions that pre-date the Program — including in relation to proposed local water utility amalgamations, the creation of Water Infrastructure NSW, and the Department's previously prescriptive approach to regulation and its allocation of funding and grants.

While stakeholders acknowledged that change was starting to occur, particularly among the Program team and associated senior executives, many perceive that there may be resistance among parts of the Department to the new regulatory, assurance and support posture and Regulatory and Assurance Framework. It will be important to ensure that implementation of the Regulatory and Assurance Framework maintains the same culture of transparency and accountability that has been emblematic of the Program, and that the implementation team seek to build trust with stakeholders early on.

Guidance material, together with education and engagement activities, will be important to ensure understanding and take up of the Regulatory and Assurance Framework by local water utilities

At the time of this evaluation internal and external guidance material to support implementation of each element of the Regulatory and Assurance Framework was under development by the Department. The Water Utilities Branch is closely involved in internal working groups to develop the materials, as they will own the documents.

While most stakeholders reported they largely understand the Regulatory and Assurance Framework and their roles and responsibilities within it, the interview and survey sample came from participants that are engaged in the Program. There are many local water utilities that did not participate or have had no exposure to the Regulatory and Assurance Framework to date. While it is expected that regulators and local water utilities that have had little involvement in the development of the Regulatory and Assurance Framework may only come to understand their roles and responsibilities as they start to apply it, it will be important to ensure guidance materials are accessible and meet local water utility and the Department's needs.

The guidance material will be essential for supporting stakeholder understanding, implementation and adoption of each element of the new Regulatory and Assurance Framework, and in particular, to encourage local water utilities to undertake strategic planning and risk management and to continue to update their plans in the future. Education and engagement activities are also likely to be essential to facilitate understanding of the guidance material and Regulatory and Assurance Framework.

While the Regulatory and Assurance Framework has optimised the implementation of the existing legislative framework, additional options and incentives may be needed to achieve regulatory outcomes in the future

As set out in Section 1.2, legislative changes were outside of the Phase 1 Program scope.

With regards to the new Regulatory and Assurance Framework, some stakeholders noted that the absence of legislative incentives, including no mandatory requirement for local water utilities to undertake strategic planning (including asset management planning) and no minimum performance standards, may hinder implementation and compliance. Therefore, additional options and incentives may be needed to achieve regulatory outcomes in the future.

If legislative changes are within scope for future phases of the Program, they could consider:

- mandating minimum skills and training requirements for water operators
- mandating the development and maintenance of effective strategic water plans by local water utilities
- better defining the roles and responsibilities of local water utility regulators in relation to the provision of support, advice, approvals, assurance, compliance and enforcement.

Any changes should be made in line with the Department's new regulatory approach, including appropriate engagement and collaboration with the wider water sector, and ensure the Regulatory and Assurance Framework maintains a positive outcomes-based, practical and cost-effectiveness approach to regulation.

3.3.2. Overcoming scale and remoteness

This section sets out areas of work that were identified from the evaluation as being required to achieve intermediate and ultimate outcomes for overcoming scale and remoteness.

Resourcing and capacity constraints within local water utilities are a significant risk to the achievement of outcomes related to overcoming scale and remoteness

Difficulties in employing and retaining suitable skilled staff in local water utilities in regional and remote areas was cited by stakeholders as a key risk to achieving Program outcomes related to overcoming scale and remoteness. Limited staff resources and associated capacity constraints within

local water utilities meant that many Program stakeholders also experienced consultation fatigue and found aspects of the Program workload unsustainable.

Since much of the work to overcome issues of scale and remoteness focuses on increasing collaboration among local water utilities, and between local water utilities and the Department, other regulators and SOCs, local water utility resourcing will be critical when designing and implementing future stages of the Program. The evaluation of pilot projects focussed on improving regional collaboration will inform future options.

3.3.3. Skills and training

This section sets out areas of work that were identified from the evaluation as being required to achieve intermediate and ultimate outcomes improving skills and training to address skills shortages and capacity challenges.

Resourcing and capacity constraints within local water utilities are a significant risk to the achievement of outcomes related to skills and training

Stakeholders cited resourcing and capacity constraints within local water utilities as a key concern related to the achievement of skills and training outcomes. Difficulties were identified in employing and retaining staff in remote areas, particularly staff with an appropriate level of basic skills that could then be further trained. The high level of risk that accompanies jobs in the water and sewerage industry compared with jobs of a similar pay grade in remote areas was also cited as a barrier that may affect achievement of outcomes related to skills and training, as it makes it difficult to attract and retain staff.

Systemic factors including supply and demand issues in a thin market have led to difficulties in engaging with RTOs, and resourcing challenges and limited opportunities for local water utility staff to access training and certification programs that are appropriate to their role and managing risks

Difficulties in engaging with RTOs and trainers and ensuring training courses meet the needs of local water utilities was cited as something that will affect the provision of skills and training outcomes. Stakeholders highlighted that contemporary RTO training and courses were not available, particularly for remote water operators and councils, and that there is a need for RTOs to raise their standards and better coordinate programs to provide consistent training.

It will be critical that future stages of the Program work with RTOs to develop skills and training programs that align with local water utility needs and that local water utility staff can access training and certification programs that are appropriate to their role and managing risks.

As previously noted, with the completion of the new Regulatory and Assurance Framework, the Department has been able to allocate significantly more resources to this aspect of Phase 1 of the Program for the final six months of the Program. However, this work and outcomes are outside of the reporting period of this evaluation.

4. Conclusion and recommendations for Phase 2 of the Program

The Program's vision, as articulated in the program logic (Figure 1 and Appendix A), is for 'safe, secure, sustainable and affordable water and sewerage services for healthy and resilient communities, businesses and the environment, now and into the future'. This ambitious vision seeks to address fundamental barriers and risks to the delivery of effective water and sewerage services by local water utilities. In this light, the Program promises to be a key pillar of the broader NSW water reform agenda, by addressing known gaps in existing state-wide water planning and management.

The stakeholder interviews, surveys and desktop analyses undertaken as part of this evaluation have provided critical insights regarding the Program's utility, as well as recommendations to enhance its future success. Importantly the collaborative approach and the decision to co-design the new regulatory framework, together with sustained effort by the Program team to embody a more cooperative regulatory posture and to strive to build effective partnerships across the water sector, promises to be an effective way to address risks and better meet local water utility needs. Collaborations, trust and momentum have been developed, with a clear majority of stakeholders reporting that the Program is worthwhile, and that implementation should continue.

Through Phase 1 of the Program, there has been progress towards the achievement of foundational outcomes at a high-level, despite timeframe constraints and other challenges. Moreover, the Program has begun to address several risks outside of the initial Program scope, which have helped strengthen the Program's implementation. Realistically, however, the Phase 1 work program will need to continue and be fully implemented before improvements in the management of strategic and operational risks by local water utilities will be realised. Given the ambitious nature of the Program, achieving the intermediate and ultimate outcomes Phase 2 will require sustained effort and resourcing, together with continued evaluation and refinement of the Program scope and approach.

4.1. Overarching recommendations for Phase 2

Given the conclusions above, the overarching recommendations for Phase 2 are:

- The Town Water Risk Reduction Program should continue and be strengthened, with at least an equivalent level of resourcing over the next five years.
- To ensure maximum effectiveness, the Department should consider if Phase 2 of the Town
 Water Risk Reduction Program should remain a dedicated separate team or be co-located
 with other programs that support water utilities.

4.2. Detailed recommendations

This evaluation of Phase 1 has identified several specific recommendations to strengthen the Program in Phase 2 to better target the identified barriers and risks to the effective delivery of water and sewerage services by local water utilities. The recommendations are listed below against the existing Program workstreams. The greater number of recommendations under the 'improve the regulatory and support framework' workstream reflects the focus of Phase 1 of the Program and its importance in meeting the Program outcomes.

Improve the regulatory and support framework

- Recommendation 1: The Department should continue to develop and deliver education and
 engagement activities to complement the guidance material for the Regulatory and Assurance
 Framework, to help ensure stakeholders understand the content and their roles and
 responsibilities.
- Recommendation 2: The Department should continue to implement and expand its targeted change-management process to drive any future stage of the Program and embed its new collaborative, risk and outcomes-focused regulatory, assurance and support posture within the Department's Water Utilities Branch.
- Recommendation 3: The Department should ensure that it has done the necessary policy and preparation work ahead of the next local government elections in September 2024, to be able to encourage councils to integrate their local water utility strategic planning with the Integrated Planning and Reporting (IP&R) framework of the Local Government Act 1993 by the next cycle of IP&R (i.e., July 2025 to June 2029).
- Recommendation 4: The Department should develop and test options to optimise the integration of RWS (and WaterNSW) modelling, options and risk analysis with local water utility/council strategic planning to further implement the strategic direction of the Auditor General's 2020 Performance Audit Report entitled 'Support for regional water infrastructure'.
- Recommendation 5: The Department should explore options and incentives, in consultation with the wider water sector, to address critical gaps in local water utilities regulation. Potential focus areas identified through this evaluation include local water utility strategic planning, performance standards and requirements for skills and training.

Encourage greater collaboration among local water utilities (and others)

• Recommendation 6: Given the success of the Program's stakeholder engagement approach, the Department should consider how to leverage this for any future stage of the Program and other major reforms, while also ensuring that consultation is coordinated, planned and communicated in a timely manner.

Facilitate greater State government support for local water utilities

• Recommendation 7: Now that the new Regulatory and Assurance Framework is in place for local water utility strategic planning, the Department should review its Safe and Secure Water Program guidelines to ensure that they are aligned, to embed the new framework approach and encourage the further uptake and delivery of strategic planning by local water utilities.

Improve access to skills and training

• Recommendation 8: The Department should, as soon as possible, update its draft Skills and Training Action Plan and lead the implementation of actions to establish an effective, accessible and sustainable training market for water operators.

Investigate alternate funding models

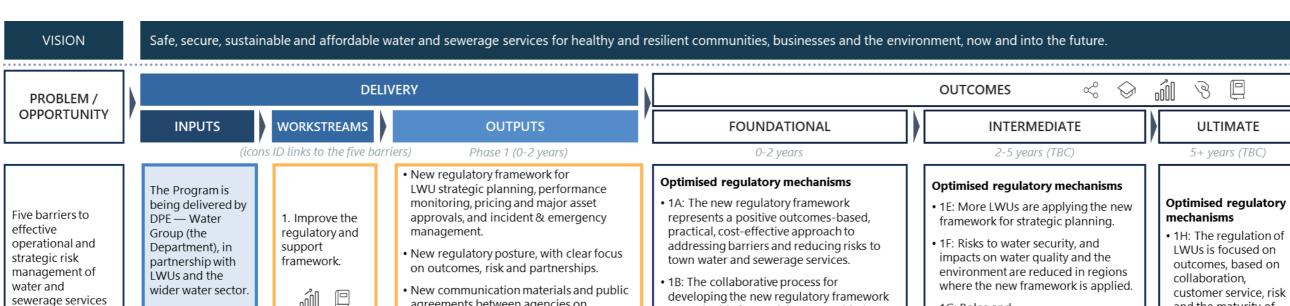
• Recommendation 9: The Department should progress the Phase 1 findings to investigate fit-for-purpose funding models to reduce service risks and better support local water utilities to meet their service obligations under local circumstances.

Other

• Recommendation 10: The Department should continue to collaborate with the local water utility sector (including local water utilities, JOs, other regulators and SOCs) in the implementation and delivery of future stages of the Program to ensure continued buy-in and support.

Appendix A - Program logic

The detailed program logic provides a high-level summary of the barriers that the Program is seeking to address, and the inputs, workstreams, outputs and foundational, intermediate, and ultimate outcomes to be achieved (Figure 4).



were: Ω Utility scale and

in regional NSW by

local water utilities

identified in 2020.

(LWUs) were

These barriers

Skills shortages

remoteness

Sub-optimal strategic planning

Inefficiently targeted funding

Inadequate regulatory mechanisms

The Town Water Risk Reduction Program (Program) was established to work in partnership with the water sector to identify and develop longterm solutions to these barriers.

Stakeholders participate through the Stakeholder Advisory Panel and multiple collaborative design forums comprising representatives from:

- DPIE Water
- EPA
- OLG NRAR
- Dams Safety NSW
- IPART
- LWUs Joint Organisations of Councils (JOs)
- LGNSW
- NSW Health
- OLG
- Public Works Advisory
- Consultants

The Program has initial funding for two (2) years. Further funding is subject to progress and NSW Government approval.



2. Encourage greater collaboration among LWUs



3. Facilitate greater State Government support for LWUs



4. Improve access to skills and training







5. Investigate alternative funding models

3

implemented, including: new water industry skills strategy with Training Services NSW, training subsidies, skills and competency guidance for LWUs, increased pipeline of trainers, and resources for registered training organisations).

specific areas of risk.

agreements between agencies on

Improved access to Regional Water

about options to align, inform and

• Evidence base from pilots is used to

New framework to better facilitate

corporations (SOCs) for LWUs.

inform LWU collaboration opportunities

commercial and non-commercial support

by state agencies and state-owned water

used to assess opportunities for agencies

and SOCs to support LWUs in addressing

• Evidence-base from pilot programs is

Early actions of skills and training plan

planning and service delivery.

Strategy (RWS) data, and information

facilitate joint/regional LWU strategic

roles/responsibilities.

and incentives.

 New materials for Councillor awareness and training.

 Review report about LWU financial needs and capacities to meet their community service obligations.

- developing the new regulatory framework was valuable for participants, enabled DPE to effectively respond to LWU needs, and has built sector support for the new framework and ongoing collaboration with the Department.
- 1C: LWUs and regulators understand the new regulatory framework and their roles and responsibilities.
- 1D: DPE has a better understanding of LWU performance, risks and maturity, to inform its regulatory and support activities.

Overcoming scale and remoteness

- 2A: LWUs/JOs understand regional opportunities to work collaboratively and are motivated to maintain or enhance their collaborative efforts.
- 2B: The Department and SOCs are more collaborative, approachable and effective in helping LWUs to address barriers and risks in alignment with LWUs' needs.
- 2C: Improved alignment in modelling, risk and options analysis relating to town water supplies between RWSs and LWU strategic planning.

Skills and training

- 3A: Training opportunities are now available for water operators to address skills shortages and capacity challenges.
- 3B: Councillors have access to better information for understanding their role and accountabilities related to local water management.

1G: Roles and responsibilities between the Department and other LWU regulators are clear and transparent.

Overcoming scale and remoteness

- 2D: Collaboration and partnerships between the Department, coregulators, SOCs and LWUs are overcoming barriers of scale, remoteness, skills and resourcing, and enhance the sector's ability to better manage risk, including through shared/regional solutions (where appropriate).
- 2E: Improved consistency and alignment between LWU strategic planning and RWSs, including objectives, priorities, and underpinning information/evidence.
- 2F: LWUs are supported by state government on a risk- and needsbasis.

Skills and training

- 3C: A range of LWU staff can access training and certification programs that are appropriate to their role and managing risks.
- 3D: LWUs can increasingly meet their skills and resourcing needs to effectively apply the new regulatory framework.
- 3E: Councillors play an active role in helping LWUs to better manage risks.

- customer service, risk and the maturity of LWUs, and is fair and transparent.
- 11: Regulators are accountable and wellcoordinated.

Overcoming scale and remoteness

- 2G: Stakeholders, including the department, work together in partnership, sharing data and knowledge, consulting and collaborating with one another, and supporting each other where applicable.
- 2H: LWUs are supported to manage safe, secure and sustainable water supply and sewerage services in an efficient and customerfocused manner.

Skills and training

• 3F: LWUs have sustainable workforces with skills shortages being addressed.

Appendix B - Program activities in response to the Auditor General's report recommendations

Table 1 provides a summary of the Program activities in response to recommendations in the Auditor-General's Performance Audit Report entitled 'Support for regional water infrastructure' that was tabled on 24 September 2020³⁶. The Department accepts all seven of the NSW Auditor-General's recommendations made in the report. The Department has progressed all actions either through the Program, Regional Water Strategies or the SSWP.

The Auditor-General's recommendations strongly identify the need for consultation with the local water utility sector and the Department has heard this from the sector. Collaboration takes time to build momentum; the Program team notes that this added a number of additional months to the targeted milestones.

Table 1 Summary of the Program activities in response to the Auditor-General's report

Recommendation Activities delivered or assisted by the Program Recommendation 1: As a matter of priority, The new Regulatory and Assurance Framework for the Department of Planning, Industry and Local Water Utilities commenced on 1 July 2022, Environment should: Develop and following an extensive collaborative process with implement a clear policy and regulatory the sector led by the Program. This included the approach to overseeing and supporting publication of the Roadmap to an improved LWUs. It should do this in consultation with regulatory framework for local water utilities in the LWU sector. October 2021.37 The Regulatory and Assurance Framework outlines a clear policy and regulatory approach to overseeing and supporting local water utilities. As part of the Program, the Department convened the Local Water Utility Regulators Forum, with members from DPE Water, Office of Local Government, NSW Health, Environment Protection Authority, Natural Resources Access Regulator, Dams Safety NSW and IPART. The members of the forum are working together to identify actions to improve regulatory collaboration and coordination and have endorsed the Local Water Utility Regulators Collaboration Framework.

https://www.parliament.nsw.gov.au/la/papers/Pages/tabled-paper-details.aspx?pk=78196

https://www.industry.nsw.gov.au/__data/assets/pdf_file/0010/477613/Final-Roadmap-to-an-improved-regulatory-framework-for-local-water-utilities.pdf

Recommendation

Recommendation 2: As a matter of priority, the Department of Planning, Industry and Environment should: Address Coordination, timing and LWU sector engagement risks to integrating state-wide regional water planning with investments in town water infrastructure and risk reduction. This should include Coordinating the development and continuous improvement of regional water strategies with current evidence of town water risks and investment priorities; ensuring consultations on regional water strategies provide adequate and transparent opportunities for LWUs' input about town water risks and proposals to resolve these; providing LWUs with timely access to its climate risk and water availability data and modelling approaches, as these become available.

Activities delivered or assisted by the Program

The Department is working closely with local water utilities, councils and Joint Organisations on the development of the Regional Water Strategies to ensure that councils have ample opportunity to input and provide direction to the planning outcomes and priorities.

Regional Water Strategies are being delivered by the Department outside of the Program. However, the Program team has also provided support and assistance to relevant Departmental teams in relation local water utility issues.

Recommendation 3: By 31 October 2021, the Department of Planning, Industry and Environment should: Design and commence implementation of an outcomes-focused approach to its oversight and support of LWUs' Integrated Water Cycle Management (IWCM) planning, supported by:

- a) clear definitions, assessment criteria, procedures and timeframes for the assessment of IWCM planning instruments.
- b) accurate data to monitor and publicly report on IWCM planning and implementation status.
- c) assistance to LWUs to procure value-formoney IWCM planning services, including enabling joint or regional approaches.

The Regulatory and Assurance Framework includes an assurance framework for local water utility strategic planning.

The Department is implementing a transition plan for local water utility strategic planning, a central principle of which is ensuring there is no disadvantage to local water utilities currently undertaking strategic planning under the former framework. Transition will include guidance and support for local water utilities to understand the new outcomes focussed approach to strategic planning.

The Program is also piloting a variety of alternate and flexible approaches to local water utility strategic planning, which are providing insights into the new approach for local water utility strategic planning and the guidance, systems and processes that the Department is implementing to provide assurance to local water utility strategic planning.

Recommendation

Recommendation 4: By October 2021, the Department of Planning, Industry and Environment should: Improve the administration and transparency of its LWU oversight, support and funding activities. At a minimum, the requirements of the New South Wales' State Records Act 1998 should be met. Actions should also involve implementing clear procedures for key decision-making points and for quality improvement and assurance processes; clear procedures that delineate the delivery of its regulatory and support activities, including to identify and resolve conflicting duties; an evidence-based approach to targeting engagement with the LWU sector; customer and outcomes-focused metrics to measure impact.

Activities delivered or assisted by the Program

As a part of the implementation of the new Regulatory and Assurance Framework, the Department is developing external and internal guidance as well as processes and procedures. Guidance for proposed works approvals is complete, work is ongoing for strategic planning with guidance due to be in place to support the framework in October 2022.

Appropriate records management is a major consideration in the development of these documents and the systems that support the Department in its new regulatory and assurance role.

Recommendation 5: By October 2021, establish governance arrangements that coordinate its strategic planning, investment prioritisation and regulatory approaches to improving town water outcomes. This should include arrangements for: coordinating LWU sector engagement with whole-of-government priorities and approaches to partnering with Local Government; promoting interagency coordination on LWU sector regulation issues across town water security, quality and environmental risks.

As part of the Program, the Department convened the Local Water Utility Regulators Forum, with members from DPE Water, Office of Local Government, NSW Health, Environment Protection Authority, Natural Resources Access Regulator, Dams Safety NSW and IPART. The members of the forum are working together to identify actions to improve regulatory collaboration and coordination and have endorsed the Local Water Utility Regulators Collaboration Framework.

A process for local water utilities to raise concerns about duplication is also set out new Regulatory and Assurance Framework for local water utilities.

Recommendation 6: By October 2021, formalise consultative arrangements with the LWU sector that better enables collaboration and at a minimum: delivers clear and consistent communications about its regulatory purpose, oversight activities and supports especially related to IWCM planning, and funding activities; ensures LWU feedback is actively sought, documented and considered in its design and delivery of regulatory approaches, planning guidelines and funding programs.

The Program's Stakeholder Advisory Panel includes representative from across the local water utility sector to recognise and leverage the wealth of expertise within councils, local water utilities, relevant government agencies and the private sector.

Recommendation

Activities delivered or assisted by the Program

The Panel meets monthly and is used to advise, help design, facilitate and refine the program and to identify broader engagement opportunities. The Panel is used by the Water Group to test our approach in other areas relevant to local water utilities including, the Safe and Secure Water Program, data from regional water strategies, secure yield analysis, water efficiency and leakage programs.

The Program has also created targeted collaboration groups in designing the regulatory framework, improving access to skills and training and incident and emergency management. Over 50 people actively participate in the collaboration groups. These groups have regular meeting schedules, generally meeting monthly.

The Program has engaged with 85% of NSW local water utilities and communicated with 100%.

Recommendation 7: On an ongoing basis, the Department of Planning, Industry and Environment should:

- Monitor and evaluate its investments in town water risk reduction and infrastructure funding to improve transparency and enable the department to identify outcomes and the contributions of its investments towards its policy goals. This should include maintaining accurate data on the status of Safe and Secure Water Program (SSWPv1) projects, supported by formal information sharing with Infrastructure NSW; updating and implementing a monitoring and evaluation plan for the SSWPv2; monitoring the status and resolution of cross-LWU boundary town water risks.

The Safe and Secure Water Program, which is administered by Water Infrastructure NSW, provides co-funding to help regional towns remove risks and issues to water quality, water security, and environment.

The Program is working with Water Infrastructure NSW to ensure the Safe and Secure Water Program aligns with the new Regulatory and Assurance Framework for Local Water Utilities.

Source The New South Wales Department of Planning and Environment - Water Group

Appendix C - Key evaluation questions, methods and data sources

The KEQs used to guide the evaluation, as well as methods and data sources uses for this evaluation are provided below. The KEQs are grouped by evaluation theme within each evaluation type below (i.e., process evaluation, Table 2; outcomes evaluation, Table 3). The evaluation themes and the evaluation types that they are applied to are:

- Appropriateness of the Phase 1 Program design, given the problems it was trying to address, and the timeframe and limitations i.e., Cabinet parameters (process)
- **Efficiency** in the delivery of Phase 1 of the Program, given the timeframe and limitations i.e., Cabinet parameters (process)
- Effectiveness in delivering actions/outputs that have achieved, or are likely to achieve, the foundational outcomes, given the timeframe and limitations i.e., Cabinet parameters (process and outcomes)

Table 2 Key evaluation questions - process evaluation

Theme and KEQ(s)	Methods and data/information	Data sources
 Appropriateness of the Phase 1 Program design Given the constraints (i.e., timeframes and Cabinet parameters), to what extent is the Program addressing the barriers to effective operational and strategic risk management of water and sewerage services identified at the beginning of the Program? Has the Program been worthwhile, and should it continue? Given the constraints (i.e., timeframes and Cabinet parameters), to what extent have the Program's workstreams and activities appropriately targeted risks and pilots that can be scaled for the future? To what extent has the Program sought to address any other risks outside of the initial program scope? If so which, why, and should the Program continue to address these? 	 Review alignment of program plan against problem (key risks to be addressed) Qualitative insights from interviews Qualitative and quantitative insights from survey 	 Program scoping and planning documents, including: Roadmap to an Improved Regulatory Framework Elton Report – stakeholder engagement in 2021 Stakeholder interviews Stakeholder survey
 Efficiency in the delivery of the Program Given the constraints (i.e., timeframes and Cabinet parameters), to what extent has the program used its budget, staff and time resources wisely? Is there anything that could be done differently or better? 	 Summary of expected and actual implementation costs Qualitative insights from interviews 	 Program financial data Stakeholder interviews (program delivery staff)
Effectiveness in delivering the Program's actions/outputs	 Review program progress tracking against implementation/delivery plans Qualitative insights from interviews 	 Program implementation/delivery plan Program management documentation

T	heme and KEQ(s)	Methods and data/information	Data sources
•	Given the constraints (i.e., timeframes and Cabinet parameters), to what extent have the Program's actions/outputs been delivered as intended and in accordance with expected timelines?		Stakeholder interviews (program delivery staff)
•	To what extent have external factors or barriers affected delivery of outputs? If needed, how can the Program be improved to respond to these?		

Table 3 Key evaluation questions - outcomes evaluation

Theme and KEQ	Methods and data/information	Data sources
 Effectiveness in achievement of outcomes What outcomes have been observed as a result of the Program? What unintended outcomes (positive or negative) have arisen, if any? 	 Synthesis of information against foundational outcomes and indicators (refer Table 4 of the Program Evaluation Framework). Case studies (up to three) that provide examples 	 Data sources for specific outcomes and indicators (refer Table 4 of the Program Evaluation Framework). Select stakeholder submissions on
 For actions being delivered in Phase 1 of the Program, do stakeholders have confidence that these (when fully implemented) are likely to lead to the expected outcomes? 	 of achievement across one or more outcome or outcome theme and are representative of program results. Qualitative insights from interviews 	the draft regulatory frameworkStakeholder interviewsStakeholder survey
• To what extent have external factors or barriers influenced outcomes? If needed, how can the program be improved to respond to these?	 Assessment of stage one inputs and outcomes, to assess likelihood of impacts over time (or at scale) 	
	Qualitative and quantitative insights from survey	

Appendix D - Stakeholder engagement

Insights from stakeholders were the primary data source for the evaluation. A summary of each stakeholder consultation activity is provided in Table 4.

Table 4 Stakeholder groups invited to participate in the evaluation

Activity	Stakeholder interviews	Stakeholder survey
Format and approach	 Semi-structured online interviews with 1-3 individuals; each ~ 1-hour. Interviews were guided by a concise set of consistent, open-ended questions that were aligned with the purpose outlined above and unpack the KEQs (refer Appendix C). Additional tailored questions were asked of specific stakeholders depending on their involvement in the Program. 	 Questions were designed to capture respondents' perceptions, agreement, and satisfaction, using multiple choice, Likert scale, and open-ended questions. The survey was prepared in Typeform and conducted online.
Targeted stakeholders	 Participants were nominated by the Department and included representatives from: WaterNSW, NSW Health, Local councils, the Office of Local Government, Central NSW Joint Organisation, Namoi Unlimited Joint Organisation, Goldenfields Water, NSW EPA, Atom Consulting, the Program, and DPE Water Utilities. Many of the interviewees were members of the Program's Stakeholder Advisory Panel. 	 Over 100 participants were nominated by the Department and included representatives from: County councils (Goldenfields Water, Riverina Water, Rous Water, Central Tablelands Water), the Canberra Region Joint Organisation, Consultants, Internal DPE Water staff, other NSW government regulators (OLG, NRAR, Dams Safety NSW), other key government stakeholders (WaterNSW, Public Works Advisory, Department of Regional NSW, Public Interest Advocacy Centre), and local water utilities that had actively participated in the Program (i.e. 'consult' or higher on the IAP2 spectrum³⁸).
Timeframe	• 30 May to 10 June 2022	• 2-10 June 2022
Number of participants	16 to discuss the Program and to inform the case studies.1 with Program staff.	• 23 (approximately 100 invited)

³⁸ https://iap2.org.au/wp-content/uploads/2020/01/2018_IAP2_Spectrum.pdf

Appendix E - Summary of pilot programs

A summary of all pilot programs undertaken as a part of the Program are included in Table 5 below.

Table 5 Summary of pilot programs undertaken in Phase 1 of the Program

Pilot type	Councils / local water utilities involved	Scope
Pilots to test and improve the	regulatory framework	
 Co-design and test different and flexible approaches to regulating local water utility strategic 	Cowra Shire Council	Test a more flexible approach to address scenario and options analysis in a much more streamlined way.
 Council led process Testing approaches to	Griffith City Council	 Streamlined IWCM strategy relevant to local community/ council needs.
facilitate more outcomes focused and flexible regulation of strategic planning	 Shoalhaven Water and Bega Valley Shire Council 	 User perspective exercise for asset management, financial planning and pricing needs.
 Co-design and test regional approaches to strategic planning Regional town water strategies Testing approaches to facilitate more outcomes focused and flexible regulation of strategic 	Central NSW JO	Co-design through a workshop with Central NSW JO councils, DPE Water and other stakeholders, an overview of what a regional approach to strategic planning could look like, and how to incentivise collaboration through relevant funding and governance arrangements.
planning	Namoi JO	Test a more flexible approach to address scenario and options analysis in a much more streamlined way (linked to existing Regional Town Water Strategy).
 Test integration between local water utility strategic planning and IP&R Framework 	 Richmond Valley Shire Council Did not proceed due to flooding in NSW. 	Undertake strategic water planning via the IP&R framework (using different approach to TWRRP IWCM/IP&R project approach).

Pilot type	Councils / local water utilities involved	Scope
 Broad industry support to consider options to integrate water planning with IP&R Framework Test how to best integrate Understand barriers to 		
integration		
 Test new approaches to secure yield analysis Use data and models from Regional Water Strategies 	 Central Tablelands Water, Cabonne Shire Council, Orange City Council 	 Secure yield analysis for subregional town water strategic plan, regulated river systems and existing groundwater.
 Trialling interim guidance for secure yield analysis for town water scheme on 	Narromine Council	Water security options. Existing groundwater and new alternate regulated river system
 regulated river systems Trialling guidance document – Groundwater investigations for existing water schemes 	Namoi JO, Tamworth Regional Council	Secure yield analysis, including town water security using RWS data & water demand forecasting investigation
Pilots to reduce risks		
Test WaterNSW support for catchment/water quality management, dam safety and river operations	Richmond Valley Council, Kyogle Council, Tweed Shire Council Note At the time of this evaluation Tweed Shire Council remained involved in scoping discussions with the Program and WaterNSW. However, Richmond Valley Council was unable to participate due to flooding in NSW, and subsequent discussions with Kyogle Council revealed more specific approaches were required to address its key concerns.	 Reduce water quality and environment risks Catchment management and water quality pilots

Pilot type	Councils / local water utilities involved	Scope
	Clarence Valley Council, Orange City Council, Tamworth Regional Council	 Reduce dam safety risks. Dam safety management pilots focused on: undertaking a maturity assessment to help the councils identify immediate and longer-term issues, developing an action plan to address the issues, and providing an overview of indicative costs.
	Hay Council, Murrumbidgee Council	 Reduce dam safety risks. Pilot focuses on leveraging WaterNSW river operations – including water quality and quantity monitoring, analysis of information, and decision- making support
Test private sector operational support, regarding asset management, water quality, and operations.	Cobar Council, Bourke Council	 Reduce water quality, environment and operational risks Remote operational support for incidents and problem solving, including: Virtual reality support Real time wearable camera/video

Pilot type	Councils / local water utilities involved	Scope
Test regional approach to workforce planning, and operator competency and training	Orana Water Utilities Alliance (OWUA), including the Bogan Shire Council, Bourke Shire Council, Brewarrina Shire Council, Cobar Shire Council, Coonamble Shire Council, Gilgandra Shire Council, Mid-Western Regional Council, Narromine Shire Council, Walgett Shire Council, Warren Shire Council, and Warrumbungle Shire Council	 Reduce water quality, environment and operational risks Mapping competencies and skills for operators across the urban water cycle Develop training needs analysis for each utility in Alliance to identify training gaps and attracting training providers Develop template for other utilities to self-determine training needs
Test regional collaboration asset management and trade waste management	 Kempsey, Mid-Coast, Nambucca and Port Macquarie Hasting Councils 	 Reduce asset management risks Assess management gap analysis and capacity building
	Namoi JO	Trade Waste audit and assessment
	Canberra Region Joint Organisation	 Support provided by the Program in relation to establishing a voluntary water focussed working group.

Further information about the strategic planning pilots

The strategic planning pilots have already informed the Regulatory and Assurance Framework development process, as intended, and are also informing changes to the Department's internal processes to support the implementation of the Regulatory and Assurance Framework. For example:

- The Regulatory and Assurance Framework has defined the key outcomes of strategic planning that the Department expects local water utilities to address, with further guidance on each of the key outcome areas due to be released by October 2022.
- The Regulatory and Assurance Framework also provides clarity on how local water utility strategic planning will be assessed by the Department, including clear turnaround times.
- Water Infrastructure NSW (which administers the SSWP funding program) is also in the process of making changes to guidance materials around the SSWP funding program to improve transparency regarding funding approval processes.

Further information about regional collaboration pilots

The pilots are in the process of being finalised and will be evaluated by the Program later in 2022. The Program reports that while many of the pilots appear to be providing participating councils with important information about opportunities to address risks through regional collaboration, they are also highlighting key barriers to regional collaboration. This includes factors such as:

- a limited capacity for smaller, less well-resourced councils to participate in regional collaboration
- the impetus to participate in regional collaboration and the successful implementation of regional collaboration approaches appears to be strongly influenced by the availability of external funding
- many regional collaboration approaches are long-term in nature, making it difficult to assess the
 impact of relatively short-term initiatives, particularly in relation to building relationships between
 utilities or when project outcomes are dependent on participants implementing recommended
 actions.

Further information about State government support pilots

Between June and September 2021, the Program team engaged with local water utilities and other industry stakeholders to identify areas where they saw the most opportunity to reduce local water utility risks by expanding or enhancing in-kind support or commercial services from NSW Government entities.

A number of interested local water utilities nominated opportunities that they considered WaterNSW would be best place to lead, including dams safety, catchment management and water quality, and river operations. The Program reported that local water utilities were less likely to identify opportunities for Hunter Water or Sydney Water to provide support, likely due to the existing presence of WaterNSW in regional NSW.

The Program subsequently established pilots with WaterNSW in relation to dam safety services support and Integrated River Operations (with Hay Shire Council and Murrumbidgee Council). At the time of this evaluation a further pilot addressing catchment management risks was still in scoping with WaterNSW and Tweed Shire Council.

The Program reported that the commencement of the pilots was delayed due to unforeseen complexities in scoping. The Program will evaluate the pilots later in 2022. However, the Program reports that early indications are that both pilots are providing participating councils with valuable information to address risk and inform future prioritisation of resourcing, particularly in the case of the dam safety pilot.

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