Attachment 6

Capital expenditure

30 September 2024

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1 Overview

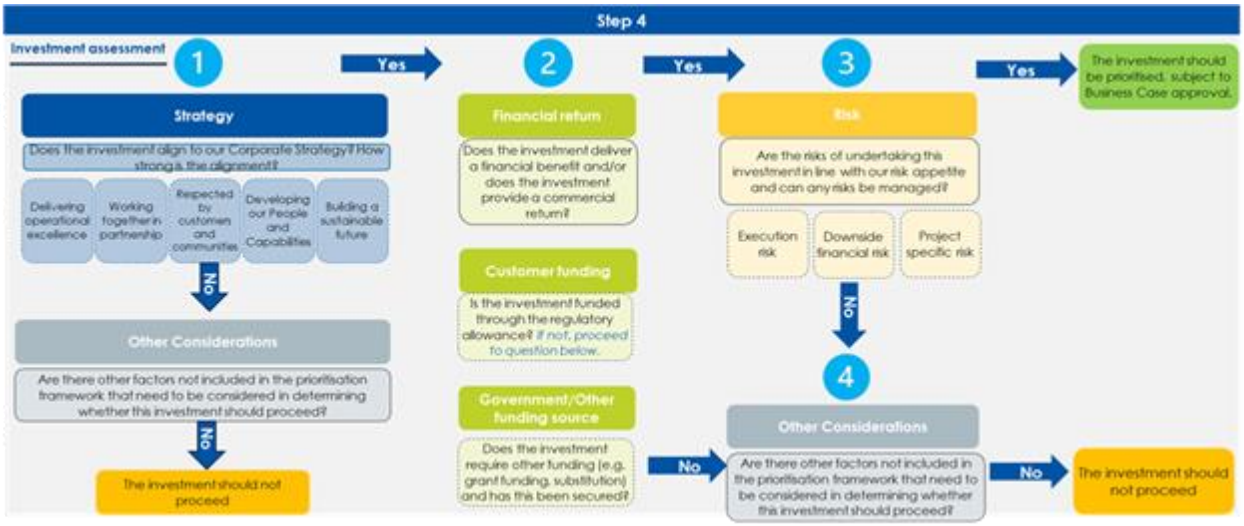
This attachment outlines a summary of WaterNSW's proposed capital expenditure for the 2025 Determination period for Greater Sydney, Rural Valleys and WAMC. This document should be read with Attachment 18- Capital expenditure for infrastructure assets and Attachment 11 Digital expenditure.

1.1 Our Prioritisation Process

We have introduced an organisation-wide approach to prioritising our proposed investments. Our approach assesses proposed investments against a set of guiding principles and constraints to support investment decision making and brings transparency to the basis of choices we make as an organisation, irrespective of whether the investment is in infrastructure assets, digital projects or operating activities.

Figure 1 provides a summary of the framework and processes used. It includes consideration of risk as part of the prioritisation process, consistent with the organisation's broader risk assessment framework, and competing needs within each funded area of service.

Figure 1 – Overview of WaterNSW's investment prioritisation framework and processes



1.2 Key notes when reading our submission

All financial figures in this Attachment are presented in $2024-25 (that is, real dollars), unless otherwise stated.

Numbers may not sum due to small rounding.

Software as a Service (SaaS) costs within Digital are included in our capital expenditure submission, consistent with the previous determination. However, for accounting purposes, these costs are reported as operating expenses in our general ledger, management reporting and financial statements.

Categories of Investment

WaterNSW's proposed capital investment falls under a number of categories with the main ones being infrastructure and digital:

Infrastructure capex largely incorporates:

- Replacement and renewals of aging infrastructure assets;
- Upgrade of assets to meet environmental regulations, such as fishways and cold water pollution
- Major projects such as the Warragamba dam resilience project and the Warragamba dam environmental flows (e-flows) project
- A range of other investments to meet dam safety, environmental, health & safety, and other regulatory obligations on our infrastructure.
- Fleet assets include the costs of owning vehicles used to perform our activities and
- Other ancillary assets.

Attachment 18 provides detailed information on the proposed capital expenditure for infrastructure assets.

Digital capex largely incorporates:

- Infrastructure, systems, hardware and software used to provide corporate, operational and network support and online functions to assist customers with more efficient interactions with WaterNSW. These also include operating technology such as systems that monitor and control network performance and security
- New digital (transformation) programs which relate to uplifting our data capabilities, strengthening our security posture, further supporting our customer base and compliance with regulations have been developed in conjunction with NRAR and DCCEEW. These initiatives feature either in one single determination or are allocated to more than one determination depending on the beneficiaries; i.e. where the initiatives are 'joint' in nature. There are 13 proposed programs in total; 4 relate to the NSW Water Sector and the remainder are designed to uplift the WaterNSW technical capability and enhance our digital services.
- There are also other assets not in Infrastructure or Digital which largely relate to commercial offices to house our staff and fleet

Corporate Facilities – Facilities relate to property lease costs, including the Parramatta Support Office where operating lease costs are recognised as capex Following the introduction of Australian Accounting Standard AASB 16 Leases, effective 1 July 2019, lessees are required to recognise a right of use asset (and corresponding lease liability) on Balance Sheet. Whilst rental payments in FY20-FY25 determination period were treated as operating expenditure for regulatory purposes, WaterNSW proposes to add right of use assets to the closing RAB for FY25 to align with the accounting treatment. The right of use asset includes an estimate of make-good costs at the end of a lease, but fit-out costs continue to be treated as property, plant & equipment. Related lease payments will no longer be treated as operating expenditure.
The proposal also includes some refurbishment work.

Other – Includes new operating licence for Rural Valleys and Greater Sydney, Water Quality Modelling System Improvements and some preliminary Environmental Compliance investments.

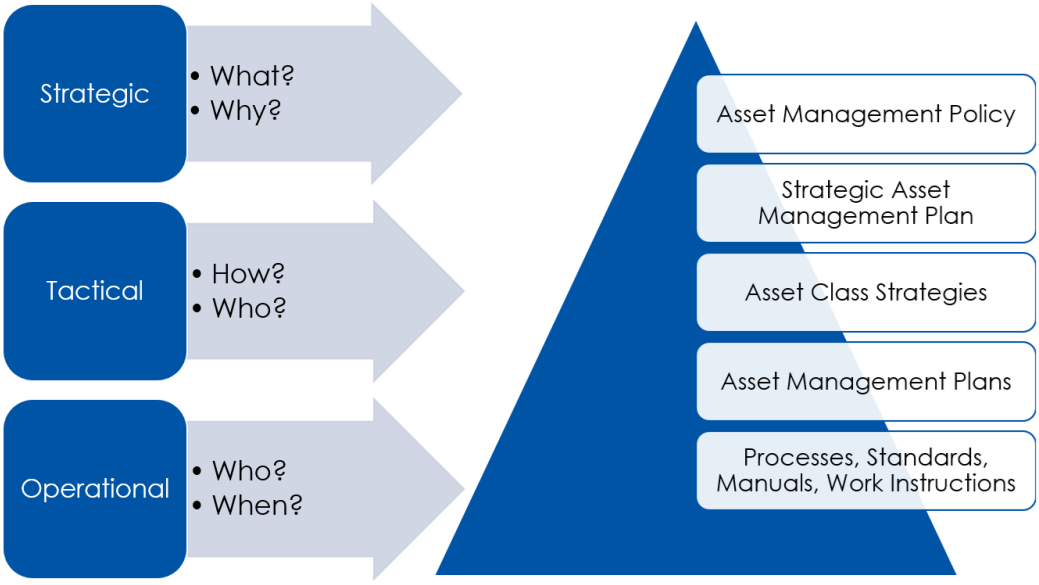
1.3 Capital Program Development - Infrastructure

Our proposed infrastructure capital program was developed following a range of processes intended to ensure that our forecast capital allows us to meet customer expectations and regulatory obligations, whilst minimising impacts to customer bills. This is covered in more detail in Attachment 18 – Capital expenditure for infrastructure assets.

Asset Strategy

WaterNSW's Asset Strategy balances risk, cost, and performance to efficiently and prudently manage the assets in a manner consistent with the organisation's risk appetite and customer needs. The strategy is established and delivered through a hierarchy, shown in Figure **2** belowError! Reference source not found. which ensures effective translation of strategy into operational action. Effective management of assets enables the delivery of water to customers.

Figure 2 – WaterNSW asset hierarchy



Asset Planning

The identification of when new assets are required to be built, and when existing assets are required for renewal is a key task of delivering WaterNSW's Asset Strategy. This function is identified as Asset Planning within WaterNSW.

WaterNSW's Asset Planning passes through a prioritisation process prior to a recommendation for expenditure on a new asset, or asset renewal. The prioritisation process provides confidence that only projects that are absolutely necessary and provide adequate benefit are included in WaterNSW's pricing proposals.

Once projects are prioritised, investment programs are included within Asset Management Plans of each valley and discussed with customers. This approach ensures that the process of identifying projects and programs is rigorous, and there is transparency for customers regarding what/why certain actions are to be taken, and why some other actions will not be taken.

Project Identification

WaterNSW identified candidate capital projects from a range of sources including:

- **Managing ageing assets**
- **Compliance driven projects**
- **Site specific requirements**
- **Water supply needs and resilience**
- **Dam Safety Compliance**
- **Security and safety**

- **Growth in network and customer connections**
- **Strategic planning**
- **WaterNSW strategic corporate priorities**.

WaterNSW identified a large number of potential capital projects required in the short, medium and longer term. As such these projects were subject to a prioritisation process.

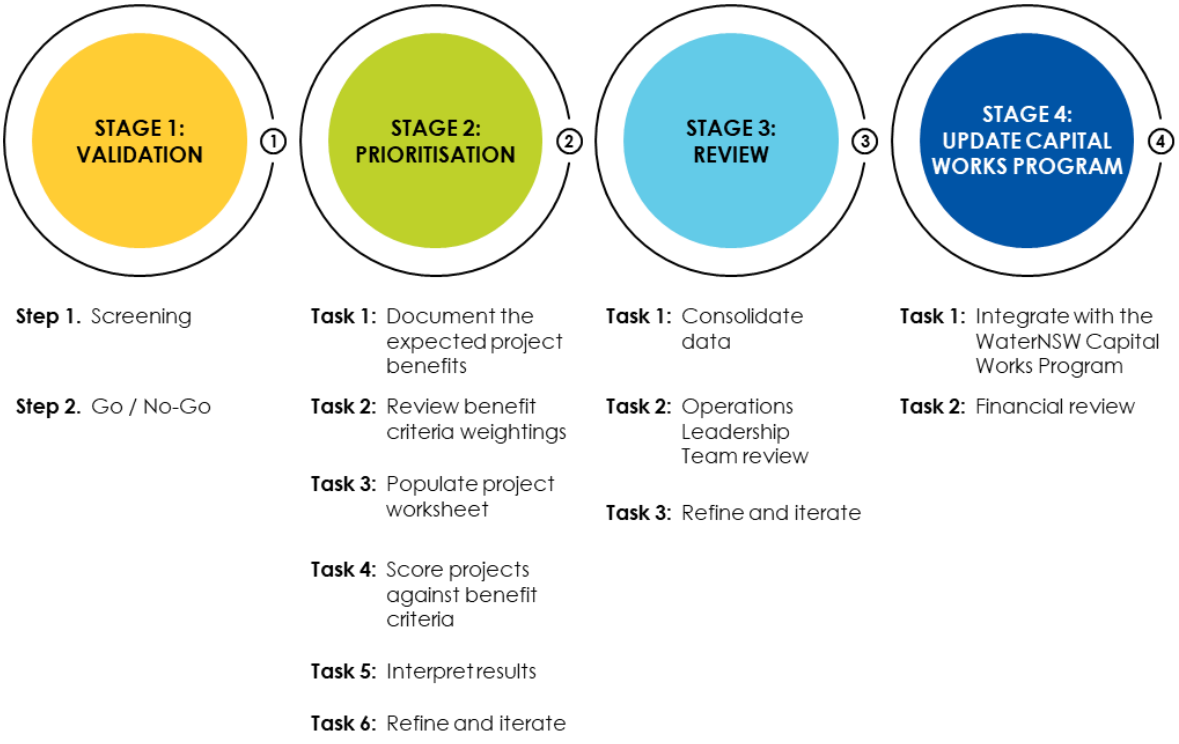
Project Prioritisation

Like any organisation, WaterNSW's investment choices must be prioritised. WaterNSW's Investment Prioritisation Framework is a robust process used by the organisation to support investment decisions by:

- **Being strategically aligned:** Having a framework that is strategically aligned to WaterNSW's corporate objectives can strengthen the justifications for prioritised investments to customer, shareholders, regulators and external stakeholders with transparency.
- **Increasing objectivity:** By having a structured approach across the organisation, WaterNSW applies an evidence-based decision-making process to prioritise investments. This results in a reduction of subjectivity and biases in evaluating investment opportunities.
- **Enabling trade-offs:** This structured approach will ensure that limited resources / available funding are directed towards projects that align to strategic objectives, customer priorities and ensure regulatory compliance.

The Operations Capital Project Prioritisation Procedure forms part of WaterNSW's Investment Prioritisation Framework. This procedure is applied to provide a structured and consistent process for prioritising identified capital investment. The process enables WaterNSW to direct funding to the highest priority projects and make informed decisions about the prudent level of investment in each valley or system. WaterNSW's Operations Capital Project Prioritisation Procedure is summarised in **Figure 3** and described in further detail in the following sections.

Figure 3 – WaterNSW Operations Capital Project Prioritisation Procedure



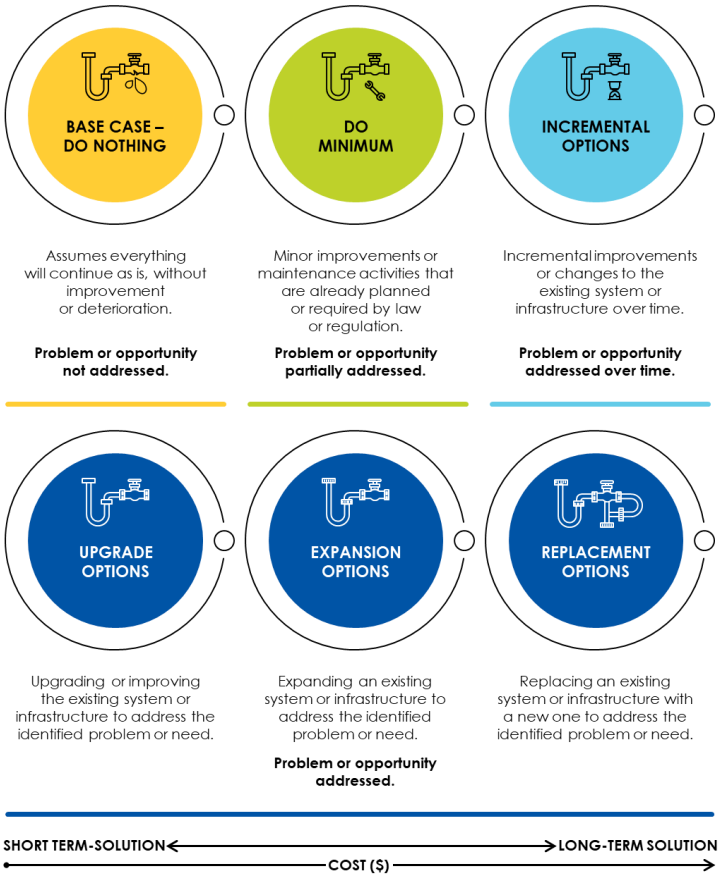
Options assessment and cost forecasts

As infrastructure projects are validated and prioritised, WaterNSW commences development of projects that will form the capital works program. WaterNSW works with engineering partners and other specialist consultants to collect requirements from project stakeholders, confirm approval requirements and investigate technical solutions.

In developing projects, WaterNSW uses the Options Assessment Guideline as a standardised methodology for developing, analysing, and evaluating different options for WaterNSW capital works projects. The guideline seeks to drive the most cost effective solutions for generating the intended project benefits.

The guideline requires projects to be classified as basic or complex, and for complex projects, multiple options need to be developed and compared via multi-criteria analysis, lifecycle cost analysis or cost benefit analysis. Options include a do nothing base case and incrementally larger solutions for comparison as shown in **Figure 4**.

Figure 4 – Options Assessment Guideline (Infrastructure)



Alignment to customer outcomes

WaterNSW relied on customer feedback to drive the strategic focus for the 2026-2030 capital program for infrastructure. Our pricing proposal is focused on delivering on the outcomes that customers value. We are guided by six strategic, customer focused pillars that are embedded in our engagement and throughout our proposal. These six pillars, including how they interact with our corporate priorities, and how we have embedded them into our proposal, are summarised below. WaterNSW commits to:

1. **WaterNSW will provide secure and reliable water delivery** (aligned to our Delivering Operational Excellence corporate priority)
2. **WaterNSW will be efficient and keep its costs as low as practical** (aligned to our Delivering Operational Excellence corporate priority)
3. **WaterNSW will provide easy customer and community access to data and information** (aligned to our Respected by the Customers and Communities we Serve corporate priority)
4. **WaterNSW will provide good customer experiences (enabling our customers to run their businesses)** (aligned to our Respected by the Customers and Communities we Serve corporate priority)
5. **Sustainable water and land management** (aligned to our Building a Sustainable Future corporate priority)
6. **WaterNSW will be open and transparent (about customer charges and WaterNSW expenditure)** (aligned to our Working Together in Partnership corporate priority)

Program efficiencies

Consistent with our commitment to provide improved value to our customers, WaterNSW has a range of measures to improve the efficiency of capital projects delivered. WaterNSW expects to generate efficiencies when delivering the capital program through:

1. Robust needs and options assessment, ensuring that non-capital solutions are considered;
2. Value engineering during design development;
3. Procurement efficiencies through intelligent project packaging that may enhance competition or generate economies of scale or geographic synergies for construction contractors; and
4. WaterNSW project management efficiencies via allocation of low complexity projects to Regional Delivery teams.

These efficiencies are expected to reduce costs across the program generally. Accordingly, cost estimates for new candidate projects and fishway projects, for FY26-30, were reduced by the following efficiency factors to reflect these program-level efficiency opportunities.

- 2.5% for small rural valleys, being those with FY26-30 capital expenditure <$5m (Border, Lowbidgee, North Coast, Peel, South Coast).
- 3.0% for large rural valleys, being those with FY26-30 capital expenditure >$5m (Fish River, Gwydir, Hunter, Lachlan, Macquarie, Murray, Murrumbidgee, Namoi).
- 4.0% for Greater Sydney.

1.4 Capital Program Development – Digital

With regards to Digital, there has been an uplift in Information and Communications Technology (ICT) investments both in the current determination period and the next period. This is driven by:

- Renewal of end-of-life systems and maintenance of existing systems predominantly in water monitoring and customer facing systems areas.
- Security initiatives such as the ongoing renewal and upgrade of our cybersecurity measures to combat the ever-increasing cyber threat landscape. This will enable the secure delivery of our other initiatives in a secure-by-design embedded approach, as well as continuing to meet legislative and licence obligations such as Security of Critical Infrastructure legislation, continued improvement of cyber resilience, information risk management and privacy and identity and access management.

- Initiatives to improve operational efficiency to reduce the cost of delivery, improve level and quality of services and improved data capabilities.
- Building of a shared technology ecosystem to enhance not just the WaterNSW technological capability but also targeting four initiatives which will work across and benefit the NSW Water sector as a whole;
- Water Market System - Redesigns each water user transaction process to be quicker, more efficient, and online through an increasingly connected system available to all 3 water agencies. Customers are able to submit, track and access their information via a secure portal.
- Shared Technology Ecosystem Data Strategy - Transforms data information systems to a higher standard and delivers a central point of truth for the NSW Water Sector data platform, while fixing current systemic access and data quality issues. Increases information quality and automation, so that self-service platforms will be possible, thereby lowering costs for all.
- Water Compliance - Further development of interfaces between NRAR's water compliance management system and various WaterNSW systems to ingest all customer data, water licensing and approval information and metering data for compliance purposes.
- Customer Metering Solution - Builds modern ICT that links on farm and back-office technology to make this information available on a users' device to compliance officers and resource managers.

Our capital forecast

Our proposed capital expenditure programs for our Greater Sydney, Rural Valleys and WAMC (WaterNSW only) services is **$2.2 billion ($2,154 million)** as shown below. We are proposing a targeted investment program that is the lowest cost to deliver on our regulatory and legislative obligations, meets our customers' requirements, is at an acceptable level of risk and considers our ability to deliver.

We are confident that the proposed capital program has been optimised and refined to represent the lowest cost. The process for preparing the infrastructure capital program is detailed in Attachment 18. Attachment 18 describes how more candidate projects were identified than could be delivered whilst adequately balancing impacts to pricing in the 2025 Determination period. It describes how we consulted with our customers and modelled bill impacts associated with varying levels of capital expenditure in each valley. This feedback helped guide our prioritisation process to establish a prudent level of capital investment in each valley. The prioritisation process provided a rigorous and structured process for selecting projects for delivery in the 2025 Determination period, and deferring projects for delivery in later determination periods.

From a Digital perspective;

- A posture has been adopted to ensure regulatory and legislative compliance without any additional or non-critical technology components being included;
- We have closely followed the input provided by our customer review groups as to where focus should be placed and what magnitude of investment should be applied, and
- Each investment component has been subject to external review and in certain cases reduced from the original estimate.

Table 1 – WaterNSW proposed capital expenditure ($millions, $2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total FY26-FY30	Draft Proposal - Annual Average
Total Capital Expenditure	**$308.9**	**$495.5**	**$533.0**	**$463.6**	**$352.8**	**$2,153.8**	**$430.8**
Greater Sydney	$164.3	$300.9	$370.8	$367.9	$281.9	$1,485.8	$297.2
Rural Valleys	$113.8	$164.7	$136.1	$78.9	$59.6	$553.1	$110.6
WAMC	$30.8	$30.0	$26.0	$16.8	$11.4	$114.9	$23.0

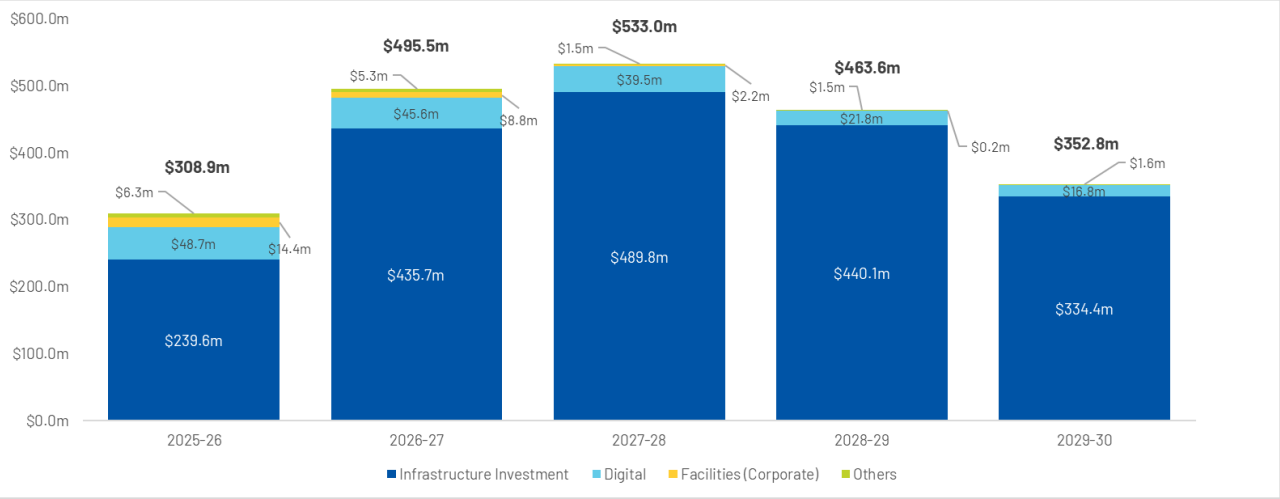
* Including capitalised overhead

Table 2 – WaterNSW proposed capital expenditure by Category ($millions, $2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total FY26-FY30	Draft Proposal - Annual Average
Total Capital Expenditure	**$308.9**	**$495.5**	**$533.0**	**$463.6**	**$352.8**	**$2,153.8**	**$430.8**
Infrastructure assets	$239.6	$435.7	$489.8	$440.1	$334.4	$1,939.7	$387.9
Digital (WaterNSW Only)	$48.7	$45.6	$39.5	$21.8	$16.8	$172.5	$34.5
Facilities (Corporate)	$14.4	$8.8	$2.2	$0.2	$0.0	$25.5	$5.1
Others	$6.3	$5.3	$1.5	$1.5	$1.6	$16.2	$3.2

The above table shows our proposed capital investment broken down by broad category. We have developed targeted attachments to better cover off the largest components of our proposed capital investment, please see Attachment 18 (Capital expenditure for infrastructure assets), and Attachment 11 (Digital expenditure) for further detail.

Figure 5 – WaterNSW proposed capital expenditure by ($millions, $2024-25)



1.5 Our performance against prior regulatory allowances

Actual and forecast capital expenditure over the current determinations is expected to be **$186 million, or 19% below** IPART's allowances inflated to $2024-25 terms for the period from 2020-21 to 2024-25.

Greater Sydney

For Greater Sydney, IPART allowed $572.3 million of capital expenditures in its 2020 Determination (assuming 2024-25 equals 2023-24), with actual / forecast expenditure expected to be $483.5 million, or an underspend of $89 million (16%).

The main variances between the proposed and actual capital expenditures for the current determination period are due to the following factors:

Lower than budgeted expenditure in Greater Sydney can largely be attributed to the strategic deferral of Warragamba E-Flows ($77.6 million) and delays ($85.9 million). This is partially offset by higher-than-expected expenditure due to flood resilience and recovery ($14.5 million) as a result of the March 2022 storm event and cost increases ($9.6 million).

Part of the driver for increased capital expenditure in the 2025 Determination period is the completion of deferred and delayed works from the current determination period.

Strategic deferrals and cancellations

The Warragamba Dam Raising Project, which was introduced as part of the Hawkesbury-Nepean flood management proposition was cancelled because of the government direction in 2023. The Warragamba E-Flow project was initially bundled as part of the Dam Raising project from a delivery efficiencies perspective. However, the E-Flow project is currently being delivered as a standalone project. Strategic deferrals and cancellations like this lowered actual/forecast capital expenditure by $90.3 million. In addition, Greater Sydney drought response projects were strategically cancelled due to rationalisation of scope following the onset of wetter weather conditions and storage volumes recovering.

Delays

Delays lowered actual/forecasted capital expenditure by $85.9 million.

Delays can largely be attributed to changing conditions following bushfires and flood events resulting in the lack of safe access to structures and sites, as well as the imposition of restrictions during COVID-19 which led to delays in obtaining approvals, conducting inspections and undertaking works. In addition, delays have been driven by the complexity of assessments resulting in strategic options assessment and selection. Dam Instrumentation Automation Telemetry has fallen behind schedule due to delays in the outputs from portfolio risk assessments following a thorough review of technical scopes.

Changes in scope

Changes in scope lowered actual/forecasted capital expenditure by $10.4 million.

Renewal and replacement activities experienced changes in scope following strategic options assessment and selection as a result of the complexity of assessments. In particular, the Blue Mountains Electrical Monitoring and Control, Kangaroo Pipeline Renewals and Shoalhaven Control Gate Renewals packages were actualised based on revised scope.

Cost increases

Cost increases resulted in an increase to actual/forecast capital expenditure by $9.6 million.

Supply chain issues and labour shortages resulted in higher than anticipated costs for projects such as the Blue Mountains Electrical Monitoring and Control, Kangaroo Pipeline Renewals and Shoalhaven Control Gate Renewals.

Flood recovery

The March 2022 storm event resulted in unplanned expenditure for flood resilience and recovery efforts, increasing actual/forecast capital expenditure by $14.5m.

Rural Valleys

For the Rural Valleys, IPART allowed $365.4 million of capital expenditures in its 2021 Determination, with actual/forecast expenditure expected to be $260.1 million, or an underspend of $105.3 million (-29%).

Strategic deferrals and cancellations

Strategic deferral and cancellations lowered actual/forecasted capital expenditure by $132.4 million.

This is predominantly due to the transfer of three large infrastructure projects (Mole River Dam, Wyangala Dam Wall Raising and Dungowan Dam), with an allowance totaling $103.3 million, to Water Infrastructure NSW (now DCCEEW), which were subsequently cancelled. The remaining $29.1 million can be largely attributed to the strategic deferral of the construction of fishways at Wyangala Dam, Marebone Break Regulator and Gunidgera Weir.

Delays

Delays lowered actual/forecast capital expenditure by $21.8 million.

Similar to Greater Sydney, delays experienced in the Rural Valleys can largely be attributed to changing conditions following bushfires and flood events, as well as the imposition of restrictions during COVID-19 resulting in delays in obtaining approvals, conducting inspections and undertaking works. Additionally, many valleys experienced delays due to the complexity of optioneering and condition assessments, as well as reviews of technical scopes relating to portfolio risk assessment activities following initial hydrologic and seismic hazard assessments.

Changes in scope

Changes in scope increased actual/forecast capital expenditure by $11.4 million.

This is largely due to heightened embankment failure risk for the Lake Cargelligo embankment upgrade in the Lachlan Valley, in addition to revised scope for the Copeton Dam electrical renewals following optioneering in the Gwydir Valley.

Carryover from previous determination

Projects carried over from the previous determination increased actual/forecast capital expenditure by $10.1 million. This is primarily due to the Pamamaroo Inlet Regulator Long Term Works in the Murray Valley.

Cost increases

Changes in scope increased actual/forecast capital expenditure by $14.8 million, predominantly due to the Lake Cargelligo Embankment Upgrade in the Lachlan Valley.

New projects

New projects contributed to actual/forecast capital expenditure increasing by $7.3 million. This can be attributed to the manganese dosing plant in Fish River, the Burrinjuck Dam High Level Outlet Emergency Closure Gates Upgrade in the Murrumbidgee Valley and the completion of construction of the Chaffey Pipeline as an emergency drought response measure in the Peel Valley.

WAMC (Reference only)

Charges for activities provided by WaterNSW, undertaken on behalf of WAMC functions conferred on WaterNSW, are the subject of a separate joint pricing proposal prepared by DCCEEW, NRAR and WaterNSW.

We manage our costs via a 'whole of business' approach to deliver value to customers and have included WAMC services and costs in this bulk water pricing proposal only so far as they provide visibility of how we manage our overall costs and activities to deliver our services.

For WAMC, IPART allowed $42.5 million of capital expenditures in its 2021 Determination, with actual/forecast expenditure expected to be $50.4 million, or an overspend of $8 million (19%). The overspend was due to higher surface water monitoring asset renewal costs and the WAVE program.

1.6 Cost Allocation Model

WaterNSW uses a cost allocation method to allocate its costs for its separate regulated service streams. The allocation of costs increases total capex. This process is outlined in Appendix 7 – WaterNSW Cost Allocation Manual.