

Catchment Protection Work Program 2025



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Executive Summary

Water NSW must manage and protect the Declared Catchment Areas, maintain a program of research for each Declared Catchment Area and undertake an educative role in the community on its activities and functions. It must also respond to the recommendations or findings of the Catchment Audit (Appendix A), Operational Audit (Appendix B), and carry on research or monitoring programs to meet Water NSW's research objectives.

Under its Operating Licence WaterNSW must report by 30 November each year on the above. This report provides details of WaterNSW's catchment management and protection activities, including its community education and catchment research activities, relevant to the Declared Catchment Areas carried out each year.

Introduction

Purpose of this Report

Under, Clause 2.2.1 of its Operating Licence (Licence), Water NSW must manage and protect the Declared Catchment Areas. Under clause 2.7.1 of the Licence, Water NSW must maintain a program of research for each Declared Catchment Area, in accordance with the requirements of the Licence. Further, under Clause 6.11.1 of the Licence, Water NSW must undertake an educative role in the community on its activities and functions in Declared Catchment Areas consistent with its objectives under section 6(1)(c) of the Act, and report on its activities in accordance with the Reporting Manual.

Water NSW must submit an annual compliance and performance report to IPART (for each financial year) on its catchment management and protection activities (Annual Report on Catchment Management). The report must cover Water NSW's catchment management and protection activities, relevant to the Declared Catchment Areas only.

Water NSW must submit the Annual Report on Catchment Management to IPART by 30 November after the end of the financial year. Water NSW must also publish this report on the internet.

This document provides details on WaterNSW's planned catchment management and protection activities, including its community education and catchment research activities, relevant to the Declared Catchment Areas for the 2025 financial year.

Vision

Our vision is:

A healthy catchment that can continue to deliver safe, clean water through world-class source water protection and shared responsibility across the community.

The Australian Drinking Water Quality Guidelines recognise that source water protection is an essential part of the multi-barrier approach to providing drinking water.

Source water protection is also firmly established in the regulatory framework governing Sydney's drinking water catchment (the Catchment). WaterNSW is legislatively required "to protect and enhance the quality and quantity of water in declared catchment areas" under the *WaterNSW Act 2014*.

The Source Water Protection Strategy (SWPS) sets the vision, the priorities, and the goals for source water protection in the Catchment over the next 20 years (Table 1). These will be delivered through annual programs of work outlined in the Catchment Protection Work Program. The included activities and outcomes in the Catchment Protection Work Program 2024-2025 were arranged around the priorities for source water protection outlined in the strategy. The report is arranged in chapters that mirror the SWPS.

The program also identifies where actions are addressing recommendations of Catchment Audits, Operating Licence Audits, or research and monitoring.

The proposed program fulfils WaterNSW's responsibilities for water quality protection and management.

Figure 1 shows the relationship between WaterNSW activities that help manage water quality risk.

Priority	Goal
Leveraging the best available Science	Undertake scientific research into water quality risks and emerging issues in the catchment
Creating water sensitive towns	Improve the urban water practices of 5 major councils to a 'water sensitive city' score of 70%
Ensuring water quality compatible development	All new developments have a neutral or beneficial effect on water quality
Integrating water quality policy and practice	Planning instruments, policies and guidelines protect water quality and water supply infrastructure
Increasing regenerative agriculture	1000 landholders managing healthy waterways and regenerative grazing practices
Fulfilling land management responsibilities	Maintain the long-term ecological values of the Special Areas consistent with water quality protection
Enforcing catchment protection laws	Maintain an active presence and use strategic intelligence to mitigate illegal and unauthorised actions
Educating and Engaging Communities	Educate the community about WaterNSW activities and functions in the Sydney Catchment area

Table 1: Source Water Protection Strategy Priorities and Goals

Multi-barrier approach to protect Greater Sydney drinking water quality: Catchment to tap

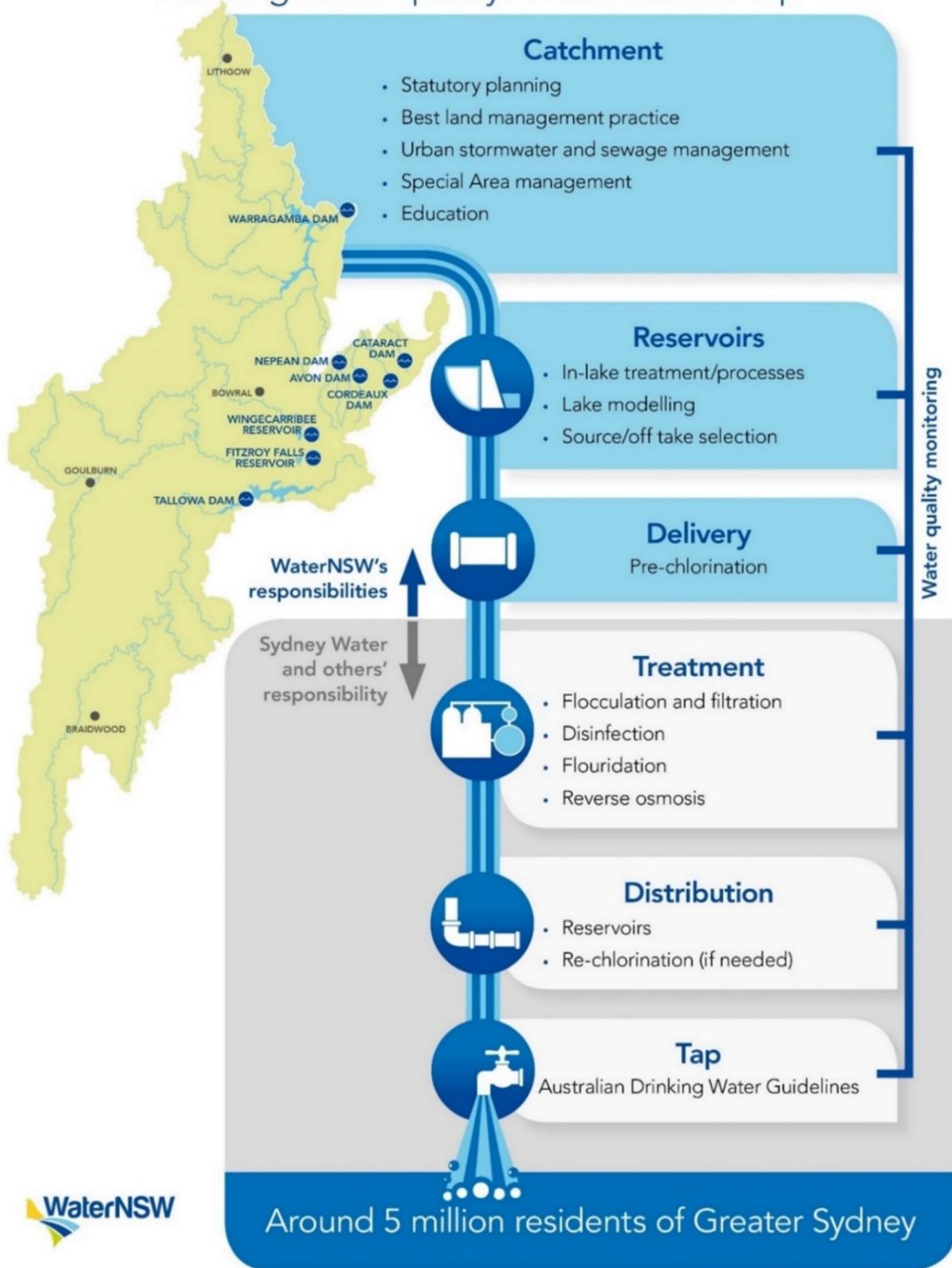


Figure 1: Activities to manage water quality in the Catchment

1. Scientific approach

WaterNSW collects a wide range of scientific and spatial information to undertake risk assessments and investigations, increase understanding and insight about pollutants and their behaviour, improve monitoring and analysis, and prioritise actions to promote catchment health and water quality. The Science Program is an adaptable program of research that is aligned with business priorities and objectives, comprising of long term and short-term projects tackling complex research questions. Ongoing development of new projects that addresses business needs and take advantage of collaborative opportunities is critical to providing an agile program. We work with the customers, water industry, government agencies, research partners, and the community, to ensure that we use the best scientific evidence available. The current 2021-2025 Science Program focuses on priority research themes of catchment resilience and integrated water management.

Planned Outcomes

- WaterNSW is a recognised for excellence in key areas of science impacting on its core business, aligned with the 2021-2025 Science Program priorities
- WaterNSW has participated in research partnerships that provide access to new science to inform its business, and incorporated relevant learnings to improve business outcomes
- WaterNSW has strong, evidence-based science to support the positions it takes on land management practices and regarding existing and proposed mining developments in the declared catchment

Activities

Strategy and Communication

The research undertaken as part of the science program is only successful when it is adopted by the business or communicated properly to customers and stakeholders who need the knowledge generated by the research. As such, working with customers and stakeholders, industry leaders and research experts ensures that the outcomes of the science program are relevant to business and avail the business of the best available science and expertise to develop sound evidence-based improvements in water quality and catchment management. Extensive customer consultation, good peer relationships within industry and collaborative research engagement are the foundations of our success.

Planned Activities

Engage and consult with internal stakeholders, industry peers, professional bodies and research providers to keep abreast of the latest scientific advancements that could provide valuable business improvements at WaterNSW.

Represent WaterNSW at conferences and events, presenting scientific research outcomes from the WaterNSW science program.

Engage and consult with internal and external stakeholders to identify opportunities to align research with ongoing strategic planning (Source Water Protection Strategy, Climate Change Risk and Adaptation Plan, water quality objectives, Greater Sydney Water Strategy).

Engage in internal and external communications activities to disseminate new knowledge generated from science program projects to WaterNSW teams, external stakeholders, and the public.

Provide student research scholarships for the delivery of components of our catchment health research to support capacity building and training of next generation of scientists.

Develop research goals for the 2026-2030 Science Program, considering emerging industry trends and engaging across the business to identify strategic needs and potential future risks and opportunities across the WaterNSW area of operations.

Catchment Resilience

The science program theme of catchment resilience focuses on scientific research towards the following outcomes:

- Review and develop WaterNSW specific catchment health indicators, to understand how the catchment is changing under different climatic and anthropogenic pressures (CR1)
 - Catchment health future state, to identify top risks (that meet a threshold for action) to catchment health due to changing climate and anthropogenic pressures (CR2)
 - Develop an understanding of the impacts of wildfire on water quality and what is effective fire remediation to protect water quality (CR3)
 - Understand the impacts of extended drought on catchment health and water quality (CR4)
 - Understand the impacts of mining on catchment health and water quality (CR5)
-

Planned Activities

Contribute to the development of a water industry framework to assess catchment health condition for source catchment planning and management.

Expand the application of Bayesian statistical models to assess long-term water quality trends at catchment, reservoir and filtration plant supply points, and quantify the contribution of climatic variability to those trends.

Translate updated catchment health metrics into existing operational reports.

Identify options to improve understanding and management of diffuse pollutants in the catchment through tailoring existing water quality monitoring methods and program design. (autosampler review/passive samplers/surrogates).

Investigate causes of poor water quality at priority sites identified in the Sydney Drinking Water Catchment Audit 2019-2022¹.

Continue to improve our capability to quantify the relative water quality risk from different landscape fuel attributes and fire management practices.

Continue monitoring and assessing available data to develop/refine water balance model for Swamps 7, 14 and Leech to assess the impacts of mining on swamps.

Integrated Water Management

The science program theme of integrated water management focuses on scientific research towards the following outcomes:

- Understand the relationship between lake ecology and water quality and the impact of supply security strategies (IWM1)
- Develop and improve inputs required for the WaterNSW Water Quality model, supporting decision making and reducing uncertainty (IWM2)
- Improved understanding of cyanobacteria bloom formation and strain dominance to increase ability to predict blooms (CY1)
- Improve the efficiency of cyanobacteria monitoring (CY2)

Planned Activities

- Continue development of an integrated water quality model to quantify the source water influences on reservoir and supply water quality under changing conditions and current operating conditions.
- Translate research findings from ecological studies on water quality, macrophytes and cyanobacteria at Lake Prospect into strategic planning and risk assessment.
- Continue to investigate the types of planktonic species responsible for unusual taste and odour issues in lakes and the chemicals they produce to develop a chemical analysis screening test beyond geosmin and MIB. PhD students at UNSW through a WaterNSW/Sydney Water WaterRA scholarshipⁱⁱ.
- Operationalise corrected fDOM fluorescent data from in lake vertical profilers into water quality management visualisation system (SCARMS) to improve early warning and event monitoring for water supply from Lake Nepean.
- Continue to work with RMIT on the WaterRA managed project; augmenting water bodies with highly treated recycled water to develop guidance for assessing environmental thresholds and a framework of management for recycled water discharges into the environment (WaterRA).
- Share guidance with the business on the selected cyanobacteria toxin gene assay and costing criteria-based matrix. Assess the opportunity to integrate with cyanobacteria risk monitoring.
- Continue to develop a satellite remote sensing approach for calibration of the WaterNSW hydrodynamic water quality model. Testing algorithms for estimating total suspended solids, coloured dissolved organic matter and chlorophyll-a from remotely sensed data, a method to calibrate the Integrated Water Quality model, focusing on water temperature and then applying it to chlorophyll-a data. (UNSW/WaterRA).

Science Advice

The expertise within the science program can get drawn upon for advice and support for operational activities, monitoring and evaluation support, incident response, and addressing audit recommendations. Areas of advice include mining impacts, drought impacts on aquatic organisms, monitoring and evaluation of interventions, special monitoring methodology during water quality events, advice on emerging contaminants, investigation and review to address audit recommendations, and supporting fire, heavy rainfall, and contaminant event response.

Planned Activities

Provide ad hoc advice and investigations to support the business to make management decisions and assess catchment health and water quality impacts in response to events and operational needs.

Risks and Opportunities

Along with the core research themes of catchment resilience and integrated water management, the science program is responsive to emerging risks and business improvement opportunities that new research and technology advancement provides. WaterNSW scans for risks and opportunities, and undertakes scientific research that identifies emerging technologies, management techniques, and mitigation options for these potential risks to catchment health and water quality. Horizon scanning is a function of the science program. Emerging risks and new technologies are investigated and where relevant scientific research is undertaken to ensure WaterNSW has the best available science to assess new risks and can take advantage of innovative methods for managing catchment health and water quality.

Planned Activities

Continue to increase data science capability within WaterNSW and develop data science solutions for water management through calibration with our partners from the Industrial Transformation and Training Centre for Data Analytics and Environment.

Investigate opportunities for fugitive greenhouse gas emission quantification and mitigation within water storage reservoir.

Investigate opportunities to apply innovative methods to track feral pigs' incursion into Special Areas to support mitigation management of impacts to catchment condition and water quality.

Continue to collaborate on the cyanotoxin uptake by food crops project. Stage 2; laboratory and field studies testing cyanobacterial toxins in food crops and soils irrigated by recycled water containing cyanotoxin from multiple states in Australia (WaterRA).

2. Creating water sensitive towns

Issues

Over 125,000 people live in urban areas in the Sydney catchment. Risk analysis has identified that the key pollutant loads come from the largest urban centres located across five local government areas.

Goal

Improve the urban water practices of the five major local councils to a 'water sensitive city' score of 70%.

Planned Outcomes

- Priority councils in the declared catchments have improved their water sensitivity ratings by 10 percent for 2030 (from 2020 baseline)

Activities

Catchment Program - Urban

After heavy and intense rainfall, runoff can wash pollutants from industrial and urban areas including overflowing Sewage Treatment Plants and septic tanks into storm water drains and waterways. The pollutants of most concern are phosphorus and nitrogen (from animal excreta and industrial, business, and residential waste), protozoan pathogens (in overflows of untreated sewage and malfunctioning on-site sewerage systems), and sediment (erosion of natural waterways from high velocity runoff).

WaterNSW is partnering with local government to identify sources of stormwater pollution in high-risk areas, to support and encourage councils to integrate water sensitive design into policy, and to co-fund the implementation of water sensitive projects in target areas.

Planned Activities

Work in partnership with five priority councils on water sensitive projects to support their transitions to water sensitive townsⁱⁱⁱ

Support delivery and development of education programs to improve urban water literacy and celebrate implementation of water sensitive practices^{iv}

Collaborate with priority councils to identify location and audit stormwater treatment systems and embed maintenance schedules into council asset management systems.

Strategic and business planning for program delivery in 2026-2030

Renewing partnerships agreements with priority Councils to 2030

Measuring progress

1. The WaterNSW Rapid Water Sensitive Cities (WSC) Benchmarking Tool will be applied biannually to benchmark the progress of each of the councils.

3. Ensuring water quality compatible development

Issues

New residential, commercial, and industrial developments can potentially impact water quality in local waterways and groundwater if not designed and managed to contemporary standards and practices.

Goal

All new developments have a neutral or beneficial effect (NorBE) on water quality.

Planned Outcomes

- Councils in the declared catchments improve their use of NorBE Tool in their assessment process
- WaterNSW advocacy regarding potential risks to our values (water quantity, water quality and ecological impacts) has influenced decisions and consent conditions on mining developments in the declared catchment

Activities

Development Application (DA) Assessment

Consent authorities (local councils, planning panels and the Minister for Planning and Public Spaces and their delegates) cannot approve development unless satisfied the development under Part 4 of *Environmental Planning and Assessment Act 1979* (EP&A Act) would have a neutral or beneficial effect (NorBE) on water quality.

Part 6.5 of the *Biodiversity and Conservation State Environmental Planning Policy 2021* (the SEPP) states that development consent must not be granted to development on land in the Sydney Drinking Water Catchment unless the consent authority is satisfied the development is consistent with the NorBE Guideline. The NorBE Guideline in turn requires that all proposed development and activities should incorporate WaterNSW's current recommended practices or equivalents. In April 2023 there are 38 practices addressing a range of land uses and phases including stormwater and wastewater management.

Planned Activities

Support councils with development assessment tools and guidelines including the Neutral or Beneficial Effect tool

Audit council use of the NorBE tool and institute actions to improve compliance with requirements

Provide advice to proponents, councils and determining authorities on high risk and state significant development to ensure WaterNSW interests are protected

Mining Assessment

WaterNSW review mining proposals and provide comments and advice to regulators, agencies and mining companies as the partial owner and joint manager of the Special Areas. We seek to influence the planning decisions, ensuring mining operators are accountable for all impacts that may significantly harm our values (principally water quantity, water quality and ecological integrity). WaterNSW has no legal powers to control or stop mining in the declared catchments.

WaterNSW's Mining Principles underpin WaterNSW's decision making in relation to managing mining impacts in the declared Sydney catchment area and on catchment infrastructure.

Planned Activities

Advocate WaterNSW's mining principles in relevant written advice and submissions

Provide advice to the Department of Planning, Housing and Infrastructure (DPHI) on post mining impact assessments and applications, including subsidence management plans, extraction plans, impact reports, environmental monitoring and management plans

Review Mining Research Roadmap and re-prioritise research needs to obtain definitive estimates of mining impacts

Measuring progress

1. Percentage of DAs using the NorBE online assessment tool
2. Percentage of DAs completed correctly in the NorBE online assessment tool
3. Percentage of activities and developments complying with conditions of consent
4. Mining matters where WaterNSW has influenced DPHI decisions to reduce impacts
5. Assessments that were informed by research or where research outcomes been implemented

4. Integrating water quality policy and practice

Issues

The health of a drinking water catchment is dependent on ensuring new land uses are compatible with the condition and capability of the land to sustain those uses. Poor strategic urban and land use planning can compromise the long-term protection of water quality by inappropriate uses being allowed in areas of greatest water quality risk.

Goal

Planning instruments, policies and guidelines protect water quality and water supply infrastructure.

Planned Outcomes

Water quality and key infrastructure assets are protected in strategic land use planning decisions.

Activities

Policy - Catchments

WaterNSW works with DPHI and local councils to provide advice on land use zoning and strategic land use planning for urban and regional development under the *Environmental Planning and Assessment Act, 1979*. This guidance ensures that the plans, policies and frameworks guiding new developments and activities have specific provisions to maintain and protect the drinking water catchment and water supply infrastructure.

Planned Activities

Advise local councils on planning proposals (including rezoning), local growth strategies, rural land strategies and housing strategies, and Development Control Plans/Local Environment Plans

Influence DPHI to seek to improve the regulation of developments in the vicinity of the Upper Canal and Warragamba Pipelines

Hold regular meetings with councils:

- assessing development applications adjacent to Controlled Areas and key WaterNSW infrastructure
- developing strategic planning documents affecting the declared catchments and controlled areas

Influence DPHI on key changes to planning law, policies, planning instruments, regional growth plans and tools that affect the catchments and water supply infrastructure

Work with Sydney Water and the Department of Health to give effect to the Joint Policy - Recreational Access to Water Supply Storages, Special and Controlled Areas in the Sydney Catchment

Measuring progress

1. Extent of statutory planning and policy documents that contain positive improvements for water quality and water resource protection.

5. Increasing regenerative agriculture

Issues

Agricultural land use encompasses 38% of Sydney's drinking water catchments. There is a direct relationship between the health of the landscape, managements practices, and the quality of water in rivers and reservoirs.

Stock access to waterways and continuous grazing have led to vegetation decline and accelerated erosion. Resilience to droughts and floods has been diminished and waterways are vulnerable to climate extremes. The agricultural landscape is the largest source of sediment, nutrients, and pathogens in the catchments.

Many individuals, groups, and organisations (government and not-for-profit) are endeavouring to repair and regenerate waterways and landscapes and need support. Regenerative agriculture is a term increasingly used to describe an assemblage of practices that support healthy, productive agriculture and a healthy environment.

Goal

1000 landholders managing healthy waterways and regenerative grazing practices.

Planned Outcome

Long term trends of priority pollutants have a downward trajectory. To achieve this, our Rural Program is looking for evidence of landowners excluding stock from waterways with fencing, increased riparian vegetation in protected areas, significant erosion treated, improved hydrological connections between land and water, and rotational grazing practice integrated into the broader landscape.

Activities and outcomes

Rural Program

WaterNSW partners with different government and not-for-profit organisations. The partnerships drive change by supporting landholders and graziers to improve farming practices, landscape and waterway conditions, and water quality in creeks and rivers.

Regenerative farming embraces a wide spectrum of practices and outcomes that support water quality, builds resilience at a local and sub-catchment scale, and demonstrates compatible aims between farming and environmental outcomes.

Our partnerships focus on nature repair by increasing diverse riparian vegetation, managing uncontrolled stock access to waterways, treating gully and streambank erosion, and implementing sustainable grazing practices. We are now looking to integrate landscape rehydration: focusing on works that help reconnect land and water, improving groundcover, increasing biodiversity and soil stability, and overall climate resilience.

Planned Activities

Negotiate and establish partnerships for the delivery of programs and projects in agricultural landscapes

Support partnerships and landholders to repair nature in agricultural landscapes by:

- Stock exclusion fencing along waterways to provide riparian buffers
 - Build, repair, and conserve natural and functional waterway conditions important to the local setting including hydrologic connections, vegetation structure and biodiversity, and soil stability
 - Introduce and manage rotational grazing practices adjacent to riparian land that supports improve soil conditions and groundcover^v
-

Undertake workshops, field days and events, social media, and other communication activities to engage with landholders about waterway rehabilitation and sustainable grazing

Investigate and explore the available options, costs, and pathways for delivery of programs to support nature repair of waterways in agricultural landscapes^{vi}

Commence strategic and business planning for program delivery in 2027-2030

Evaluation and improvement activities including the 'Strategic Evaluation of the Rivers of Carbon – Source Water Linkages Program'.

Measuring progress

1. Number of grazing properties implementing and integrating recommended practices.
2. Riparian and waterway length with controlled or excluded stock access.
3. Number of head cuts and stream bank erosion treated.
4. Number of hectares under rotational grazing practice.
5. Number of dairy farms with best practice effluent management.

6. Fulfilling land management responsibilities

Issues

WaterNSW has land management responsibilities across Sydney's drinking water catchment, including the Special Areas and public recreation areas. Fulfilling these responsibilities demands both high level strategic planning and complex daily operations, with an underlying focus on the ongoing protection of water quality. The key risks to water quality are from bushfire, pests and weeds, and erosion, particularly within the Special Areas, which surround the reservoirs.

Goal

Maintain the long-term ecological values of the Special Areas consistent with water quality protection.

Planned Outcomes

- Fire management has minimised risks to life and property, critical infrastructure, water quality and ecological integrity
- Biosecurity has been managed to minimise, prevent and eliminate risks to water quality and supply and ecological integrity
- Recreation Areas are managed to provide public facilities sympathetic to their location and to protect water quality, natural and heritage values.

Activities

Fire Management

Fire mitigation and suppression works are implemented to minimise the impacts of wildfire on WaterNSW land, assets, and water quality. This includes representation on key district bushfire management committees, carrying on hazard reduction burns, maintaining mechanical asset protection zones, and early detection and suppression of bushfires.

Wildfire in the Special Areas can reduce vegetation coverage and increase the risk of sediment, ash and debris being transport into streams and lakes. Every 7-10 years major fires have been experienced in the bushland areas surrounding reservoirs in Sydney's Declared Catchment. Large fires occurred in the Warragamba and Shoalhaven Catchments in 2019/20.

Fire risk is increasing under a changing climate, and rapid-fire response is a critical management tool to reduce the likelihood of catastrophic impacts from fires spreading.

Planned Activities

Implement hazard reduction program including maintaining fire breaks (240 km + estimated 140km for NPWS/ 400 ha +150Ha for NPWS) and conducting at least 5 (+ estimated 5 for NPWS) priority hazard reduction burns where environmental conditions allow

Collaborate with RFS and NPWS to ensure tenure neutral approach to fire management including active participation at Bush Fire Management Committees^{vii}

Implement Bushfire Management Plans for Sydney Catchment Area lands and maintain data sources that drive these plans

Progressively identify critical water delivery and monitoring assets that require additional bushfire protection

Identify key catchments vulnerable to water quality risks from bushfire

Maintain early detection and rapid response capability and preparedness in accordance with the Bushfire Operational Procedure

Respond to wildfires within targeted timeframes within the stand-up procedure and contain at least 80% of fires to less than 10 ha

Biosecurity

Landowners have a biosecurity duty to manage pests and weeds. WaterNSW works with the NPWS, Local Control Authorities and, Local Land Services through Regional Pest and Weed committees to plan and implement pest and weed control programs.

Planned Activities

Control priority vertebrate pests including pigs, goats, cattle and horses, rabbits, dogs, deer and foxes in Special Areas and Braidwood lands

Progressively improve weed mapping to provide a better understanding of weed distribution and densities

Control priority weeds within Regional Strategic Weed Plans, including aquatic weeds in Prospect Reservoir and Lake Yarrunga

Actively participate in the relevant Regional Weed and Pest Committees

Undertake weed risk assessments with a focus on aquatic weeds

Assist LLS and NPWS to improve deer control in the Metropolitan Special Area

Prepare assessment of the population of targeted priority pest species across the Warragamba Special Area

Reserve Management

NPWS and WaterNSW work together to manage and protect the qualities of the Special Areas under the Special Areas Strategic Plan of Management, particularly those that support water quality.

Planned Activities

Monitor delivery of land management on Special Areas through the contract with NPWS including an annual average over a 4-year period to June 2024:

- Maintenance of 100 km + 80kms on NPWS lands of fire trails
 - Completion of 2,500 ha + 1500 ha on NPWS lands of prescribed burning
 - Eradication of outbreaks of aquatic weeds
 - Active suppression of priority pests particularly pigs, deer, goats, horses and cattle
-

Implement the Special Areas Strategic Plan of Management with NPWS^{viii}

Recreation Areas Management

Every year over visit recreation areas and reserves in Greater Sydney. Recreation areas are highly valued by the community. The NSW government has a social responsibility to provide a safe, clean, and welcoming environment for visitors to enjoy the dams, camping areas, and surrounds.

Planned Activities

Implement inspection program to maintain public safety and inform maintenance activities

Maintain recreation areas to provide pleasant, accessible, and safe facilities for the public, in accordance with Conservation Management Plans

Supporting Activities

There is a network of unsealed roads throughout the Special Areas. This network is important for fire management including suppression and for safe access to key infrastructure. Upgrades, repairs, and maintenance of the network is aligned with construction guidelines and achieves standards required under the Rural Fires Act 1997, helps prevent erosion, and meets the safe operational needs of all users.

Barriers, fences, and gates are required to provide a safe space and protect people, the environment and assets. They also deter unauthorised access into restricted areas.

There are many natural, historic, and Indigenous heritage places throughout the Special Areas and broader Sydney Catchment Area. WaterNSW works with landholders, the community, local and state government, and indigenous land councils and representatives to identify, protect, and manage the values of heritage owned and operated by WaterNSW or found on WaterNSW land.

Planned Activities

Implement inspection program 400km of unsealed roads and carry out repair and upgrade of prioritised works on trails and drainage features

Continue to repair trails damaged during flood events during 2021, 2022 and 2024

Treat two priority erosion sites within the Declared Catchment (if present)^{ix}

Install and maintain barriers, fences and signs with a focus on where unauthorised access is contributing to environmental damage

Progressively update Special Area enforcement signs

Maintain and protect significant heritage items^x

Support programs to monitor and protect ecological communities^{xi}

Consult and support traditional owners of the Special Areas^{xii}

Develop and implement a post fire erosion management decision support tool for the Special Areas^{xiii}.

Measuring progress

1. Range and density of priority pests and weeds
2. Asset condition profile for fire trails and fire blocks (slash breaks plus HR blocks) are consistent with desired condition
3. Number of wildfires that exceed 10 ha annually

7. Enforcing catchment protection laws

Issues

WaterNSW has responsibilities under the *Water NSW Act 2014*, the *Water NSW Regulation 2020* and the *Protection of the Environment Operations Act 1997* to protect water quality in the Sydney Catchment Area, including the Special Areas. Illegal and unauthorised activities can compromise the integrity of the Special Areas and the broader catchment area and threaten water quality and management objectives.

Goal

Maintain an active presence and use strategic intelligence to mitigate illegal and unauthorised actions.

Planned Outcomes

- Access to Special and Controlled Areas is consistent with the Regulation and access policy
- Unauthorised access is actively discouraged
- Water pollution risk is reduced by targeting key risk areas

Activities

Compliance

Planned Activities

Deliver education to members of the community using social media relating to the importance of protecting Special or Controlled Areas

Provide education and support for other regulatory bodies within the Declared catchment

Assess and determine access consent applications and grant consent with appropriate conditions, or document clear reasons for refusal

Review access consent procedures

Work collaboratively with external stakeholders to deter unauthorised activities impacting on the Special Areas

Conduct 1,500 hours of Special Area and Controlled Area surveillance

Undertake regular inspections and interactions with councils bordering Special and Controlled areas to ensure compliance with development consent conditions

Investigate reports of activities contravening the *Water NSW Act 2014* and *Regulation 2020* and the water quality provisions of the *Protection of the Environment Enforcement Act 1997* in the declared catchment

90% of PINS are finalised through Revenue NSW or Court based enforcement

Measuring progress

1. Number of unauthorised activities captured in Special and Controlled Areas.
2. Number of access consents processed in Special and Controlled Areas.
3. Status of pollution investigations under *Protection of the Environment Operations Act 1997*.
4. Outcome of community and stakeholder engagement as a part of relevant compliance actions (i.e., training/education/advisory letters).

8. Educating and engaging communities

Issues

WaterNSW is required to undertake an educative role within the community under the *Water NSW Act 2014* and the *WaterNSW Operating Licence*. WaterNSW works and engages with residents and landholders, community organisations, schools, businesses, local councils, and government to support the long-term management of drinking water in the Greater Sydney/ Declared Catchment area.

We use a range of communication and education tools including the Visitor Centre at Warragamba Dam, website, publications and media articles, targeted education programs, community engagement and interpretation resources at our dams and recreation areas. The Warragamba Dam excursion program offers primary, secondary, and tertiary students from across the catchment and Sydney area the chance to explore all aspects of modern water supply, and to learn about water through hands-on activities in the onsite Visitor Centre. The primary and secondary program is linked to the requirements of the NSW syllabus for the National Curriculum, with supporting education resources for teachers and students online.

Goal

Undertake an educative role in the community on WaterNSW activities and functions in the Declared Catchment area.

Planned Outcomes

- Surveyed participants have an increased knowledge and understanding of the role of WaterNSW, catchment management, water science and risks to water quality and quantity in the Declared Catchment.
- Communities are informed about WaterNSW projects and potential impacts.

Activities

Community and School Education

Planned Activities

Deliver the Warragamba Dam school excursion program to approximately 3,500 students

Host approximately 80,000 visitors at the Warragamba Dam Visitor Centre

Deliver temporary exhibitions and supporting educational activities including at the Warragamba Dam Visitor Centre

Support the development and delivery of community education projects in the Declared Catchment

Community Engagement

Planned Activities

WaterNSW will engage with local communities on projects and activities that impact them

9. Budget

Operational Budget

	Project Name	Budget (\$'000)
1	Scientific Approach	2,779
2	Creating water sensitive towns	1,334
3	Ensuring water quality compatible development	1,750
4	Integrating water quality policy and practice	565
5	Increasing regenerative agriculture	2,621
6	Fulfilling land management responsibilities	14,343
7	Enforcing catchment protection laws	938
8	Educating and engaging communities	964
	Total	25,298

Capital Budget

	Project Name	Budget (\$'000)
1	Catchment infrastructure asset renewals	750
2	Catchment Upgrade and Replacement of Plant and Equipment	1,244
3	Fencing - Declared Catchment	650
4	Water Quality Modelling	2,218
5	Roads and Trails	515
6	Construction of outdoor shelter for excursions and visitors at Warragamba Dam	100
	Total	5,477

Note 1: Budgets exclude overheads

Note 2: Source - Power BI Report on ACMR (budget year FY24)

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- ⁱ Addressing Catchment Audit 2022 recommendation.
 - ⁱⁱ Carried forward from FY24
 - ⁱⁱⁱ Addressing Catchment Audit 2022 recommendation.
 - ^{iv} Addressing Catchment Audit 2022 recommendation.
 - ^v Addressing Catchment Audit 2022 recommendation.
 - ^{vi} Addressing Catchment Audit 2022 recommendation.
 - ^{vii} Bushfire management framework.
 - ^{viii} Special Areas Strategic Plan of Management 2015.
 - ^{ix} Carried forward from FY24
 - ^x Carried forward from FY24
 - ^{xi} Carried forward from FY24
 - ^{xii} Carried forward from FY24
 - ^{xiii} Addressing Catchment Audit 2022 recommendation.