



Australian Government

Department of Climate Change, Energy,
the Environment and Water

Improving the health of the Upper Murrumbidgee: Draft Strategy



© Commonwealth of Australia 2024

Ownership of intellectual property rights

Unless otherwise noted, copyright (and any other intellectual property rights) in this publication is owned by the Commonwealth of Australia (referred to as the Commonwealth).

Creative Commons licence

All material in this publication is licensed under a [Creative Commons Attribution 4.0 International Licence](#) except content supplied by third parties, logos and the Commonwealth Coat of Arms.

Inquiries about the licence and any use of this document should be emailed to copyright@dcceew.gov.au.



Cataloguing data

This publication (and any material sourced from it) should be attributed as: DCCEEW 2024, *Improving the health of the Upper Murrumbidgee: Draft Strategy*, Department of Climate Change, Energy, the Environment and Water, Canberra, June 2024. CC BY 4.0.

This publication is available at dcceew.gov.au

Department of Climate Change, Energy, the Environment and Water

GPO Box 3090 Canberra ACT 2601

Telephone 1800 900 090

Web dcceew.gov.au

Disclaimer

The Australian Government acting through the Department of Climate Change, Energy, the Environment and Water has exercised due care and skill in preparing and compiling the information and data in this publication. Notwithstanding, the Department of Climate Change, Energy, the Environment and Water, its employees and advisers disclaim all liability, including liability for negligence and for any loss, damage, injury, expense or cost incurred by any person as a result of accessing, using or relying on any of the information or data in this publication to the maximum extent permitted by law.

Front Cover image: DCCEEW (2024), *Upper Murrumbidgee River (downstream of Tantangara Dam)*

Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their Culture, and their Elders past and present.

Introduction

The 'Improving the health of the Upper Murrumbidgee: Draft Strategy' has been developed to guide Australian Government investments in the upper Murrumbidgee River. Up to \$55.6 million has been committed across 5 core areas to make a difference to river health in the short and long term.

The draft strategy proposes principles to guide the design and implementation of actions within these core areas. It is important the actions and investments work alongside existing initiatives to support all values of the river we care about.

The draft strategy has been developed in collaboration with Australian Capital Territory, New South Wales and Victorian governments, as well as through consultation and early planning conversations with First Nations, community stakeholders and the ACT and Region Catchment Management Coordination Group.

The final strategy will be informed by public feedback [through online consultation](#) and further discussions with key stakeholders.

The draft strategy is accompanied by the 'Improving the health of the Upper Murrumbidgee: Background and Context' which provides further detail on how the water resources are managed and why additional action is needed to improve the health of the upper Murrumbidgee River.

Upper Murrumbidgee – why we are investing

The upper Murrumbidgee River is home to a range of important native species including the Macquarie Perch. Listed as *Endangered* under the *Environment Protection and Biodiversity Conservation Act 1999* and the *NSW Fisheries Management Act 1994*, the small population in the Upper Murrumbidgee is one of the few remaining populations of Macquarie Perch now found across the Murray–Darling Basin.

With the health of the river declining, this is putting the survival of native species such as the Macquarie Perch at greater risk. The poor health of the river also threatens critical human water needs, First Nations' cultural values and recreational uses.

Many factors are driving the decline in river health. On average, less than 10% of the headwater inflows at Tantangara Dam have been released downstream into the upper Murrumbidgee River. This limits

natural flushing flows downstream of the dam, which are important for river health. Instream river habitat is being smothered due to sedimentation driven by lack of flows and historical land management practices including land clearing and unmanaged riparian grazing. Water quality remains an issue with combinations of point and diffuse sources of water pollutants.

A multi-pronged approach is needed to improve the health of the river. This is why we are working with ACT, NSW and Victorian governments, First Nations, catchment groups and the community. It is important these new measures build on the work already underway along the river, so we get the improvement in health we are looking for.

Our core areas of investment

The Australian Government is investing in five core areas to support short and long term improvements in the health in the upper Murrumbidgee River. These areas are:



Investing in **science and monitoring** so we have a better picture of the health of the river and can monitor how our actions are making a difference.



Restoring key areas of the river system through **on-ground river works** that improve riverine habitat and address erosion and other threats.



Reviewing the **water management settings** in the Snowy Water Inquiry Outcomes Implementation Deed (SWIOID), including but not limited to releases from Tantangara Dam, to look for opportunities to improve flows into the upper Murrumbidgee River.



Maintaining river flows over the next three years by providing contingency funding to secure additional flows in drought-like conditions, avoiding a repeat of the extremely low to zero flow conditions that occurred in the upper Murrumbidgee River in 2019.



Investing in **First Nations participation** in water management and river health activities.

More information on these areas is provided under the relevant programs.

Guiding principles for implementation

This strategy proposes four principles to guide how we invest across the five core areas.

1. Coordinated delivery

The state of the river is a shared problem and a shared responsibility. This principle recognises there are many stakeholders and decision makers that affect the health of the upper Murrumbidgee River. It is important that we all work together for effective delivery of program activities.

ACT and NSW play a key role in the management of water resources of the Upper Murrumbidgee region. This includes setting the rules on how the water resources are to be shared in each jurisdiction and issuing licences to enable the water to be extracted for a range of uses.

Snowy Hydro Limited (Snowy Hydro) operates the Snowy Mountains Scheme (Snowy Scheme). To generate renewable energy from its hydro-electric assets in the Snowy Scheme, Snowy Hydro captures, stores and diverts the headwaters of the Upper Murrumbidgee. The Snowy Scheme is operated in accordance with the NSW Snowy Water Licence, which gives effect to the SWIOID.

The Australian, NSW and Victorian governments are the signatories and decision-making parties for the SWIOID.

Local governments, First Nations Peoples, landholders and communities along the river are all beneficiaries of improvements to the health of the river and central to delivering enduring outcomes.

We will work collaboratively with participating governments of ACT, NSW and Victoria to deliver the strategy including the design of programs to support coordinated delivery.

Through the design and delivery of the programs, we will champion opportunities for partnerships. This includes between government, non-government organisations, Snowy Hydro, First Nations Peoples and community.

We will respect the different roles and responsibilities of our partners.

2. Build on existing initiatives in a strategic way

This principle recognises there are existing initiatives underway that are and can help to improve the health of the river. These initiatives include but are not limited to:

- State and territory water strategies and water management plans
- State and territory catchment management strategies and plans
- Commonwealth investments in Landcare and threatened species
- Basin Plan [implementation](#) including opportunities to recover water for enhanced environmental outcomes
- Basin Plan Evaluation and [Basin Plan Review](#), including investments in science and monitoring such as the Sustainable Yields and Sustainable Rivers Audit, and Basin Condition Assessment and Outlook
- Past investments in native fish action under the [Native Fish Recovery Strategy](#)
- Snowy Montane Rivers Increased Flow program
- The Aboriginal Water Entitlements Program (AWEP)
- Murray–Darling Basin First Nations Water Holding Arrangement.

We will invest in priority areas, avoid duplication of effort, and look for opportunities to link to relevant initiatives. We will seek expert advice when required to confirm priorities for investment to improve the health of the river.

Paul Doyle (2022), Alpine Tree Frog



3. Being transparent and accountable

We will openly share data and knowledge obtained through these investments. We will provide regular updates on progress and publish funding agreements with jurisdictions.

We will support activities in relevant programs that help deliver priority reform for the National Agreement on Closing the Gap – *Shared Access to Data and Information at the Regional Level*. This includes supporting access and use of locally relevant data for First Nations outcomes.

The government also agreed to actions that will improve transparency and accountability:

- Updating the Snowy Hydro Statement of Expectations to consider the principles of social and environmental sustainability and adaptive management through its environmental water releases, having regard to Snowy Hydro's operations in the National Electricity Market and within Snowy Hydro's regulatory and policy frameworks.
- Requiring the Australian Government Department of Climate Change, Energy, the Environment and Water to report annually on the environmental water releases from the Snowy Scheme area (for further information see section 85ABA of the *Water Act 2007*).
- The Murray–Darling Basin Authority to include a new hydrological indicator site for the Upper Murrumbidgee in its Basin Plan reporting.

Communication of implementation progress, achievements and the sharing of new science and knowledge will be regular and coordinated. This will ensure we can collectively share in the success of this program and deliver enduring outcomes.

4. Working with First Nations and Communities

The upper Murrumbidgee River flows through the lands of the Ngunnawal, Ngambri, Wolgalu, Ngarigo and Yuin nations. The river has significance for these communities. Participation of First Nations in water management activities in the Upper Murrumbidgee has been limited. Their ability to discharge their cultural obligations as First Nations Peoples has been hindered by the lack of access to the river and limited opportunities for involvement in water management.

We will seek opportunities for First Nations Peoples to tell their story and create avenues for two-way learning. We will support First Nations Peoples participation in the review of the SWIOID. We will work with the ACT and NSW governments to provide opportunities for First Nations Peoples to be involved in the on-ground river works and the monitoring.

The river also supports a range of communities, providing social value as an important ecological asset as well as recreational opportunities, town water needs and irrigation. It will be important that interested parties are afforded the opportunity to advise the governments and participate in project activities.

Consultation on this draft strategy is one of the first avenues for First Nations Peoples and community to provide advice.

Paul Doyle (2022), Eastern long neck turtle at Kissops Flat



Programs

Restoring the Upper Murrumbidgee River Program

We are providing \$20.3 million over the next 5 years for **on-ground river works, science and monitoring**. This includes:

- \$15.3 million over 3 years from 2024–25 for on-ground river works.
- \$5.0 million over 5 years from 2024–25 for science and monitoring projects.

The funding for the program will be delivered through the ACT and NSW governments.

We are working with the ACT and NSW governments on the design of the program to ensure delivery is coordinated across jurisdictions. This includes targeting priority activities that are most effective at addressing the core stresses impacting the river system.

We are seeking advice from First Nations Peoples on the types of activities that would provide opportunities for their participation in the program.

The program design will be reflected in a funding agreement between the Commonwealth, NSW and ACT governments.

The terms of the funding agreement will require the jurisdictional governments to submit workplans that demonstrate alignment with the objectives of the program, and that workplans have been developed in consultation with First Nations Peoples and community stakeholders. Workplans will be assessed by the Commonwealth against criteria outlined in the final strategy including demonstrating how activities

are integrated and coordinated across the region over the life of the investment.

Implementation of the agreed workplan activities will be subject to annual reporting by jurisdictions. Annual reports will be published.

Coordination of public communication, science and monitoring, and providing opportunities for engagement with community stakeholders are expected to be features of the program.

To support transparency, program guidelines will be published on the Australian Government Department of Climate Change, Energy, the Environment and Water's website along with regular updates on progress. Data and knowledge gained through these investments will be shared openly via data.gov.au.

The program will look to fund on-ground river works and science and monitoring that relate to Murrumbidgee River and riparian lands upstream of Burrinjuck Dam and downstream of Tantangara Dam. The extent of riparian land included in the program area shall be assessed for each project case-by-case as part of investment prioritisation, including the project's impact toward achieving the desired outcomes.

Activities being explored with the ACT and NSW as potentially eligible under this program include, but are not limited to:

- On-ground river health works such as:
 - Erosion and fencing works, planting and revegetation activities, off-stream stock water, weed and willow control and extraction, pasture improvement, soil conservation works, sediment extraction investigations, grazing management, feral animal control and relevant First Nations land management practices.
 - Installing fish hotels, restocking, and other fish, aquatic biota and habitat projects, re-snagging.

For these activities, prioritisation should be given to threatened native species (such as Macquarie Perch) and key species that are critical to the health of the river.

- Community engagement, communication and awareness activities, cross border collaboration, and stewardship, including opportunities for First Nations stewardship.
- Science and monitoring activities such as:
 - Monitoring of water quality, waterway health, riparian and instream vegetation, invertebrates, native aquatic species including platypus, rakali and fish, sediment and streambank dynamics.
 - Assessments such as environmental water studies, climate change adaptation studies, and other science and monitoring projects subject to agreement by the Australian Government.
 - Activities that recognise, share and build First Nations Peoples' cultural knowledge and science on river health and monitoring, including Aboriginal Waterway Assessments.

Consultation approach

We are working with ACT and NSW on the design of the program and funding agreements. We are consulting with First Nations Peoples, environmental and community-based groups with experience in the Upper Murrumbidgee. We are seeking feedback on our approach early through [public consultation online](#).

Once the program has been established, ACT and NSW will consult locally on potential projects.

IMPLEMENTATION TIMELINE

2024

NOW

We are working with the ACT and NSW governments to design the program funding arrangements and are seeking advice from First Nations Peoples and the ACT and Region Catchment Coordination Group on key parts of the program design.

Program governance arrangements are being established to support ongoing coordination of activities, prioritisation and review throughout the life of the program.

NEXT

Program expected to commence in early 2024–25.

ACT and NSW to develop workplans to deliver priority on-ground work, science and community engagement activities, for agreement by the Commonwealth.

We will seek advice from ACT and NSW, First Nations Peoples and the community along with selected experts before agreeing the workplans for investment.

Program implementation.

Beyond 2024

LATER

Ongoing implementation to 2028–29 with annual reporting.

Program evaluation in 2028–29 to inform future activities.



Paul Doyle (2022) eDNA sampling in Upper Murrumbidgee close to Tantangara Dam (Kosciuszko Nat Park).

Contingency funding for additional river flows

We have set aside \$30 million in the Commonwealth's Contingency Reserve to support additional water releases from Tantangara Dam by Snowy Hydro. Up to \$10 million per year will be available for 3 years from 2024–25 and can be drawn on in drought-like conditions to address low flows in the Upper Murrumbidgee.

The Australian Government is considering preliminary triggers for drought-like conditions such as when:

- the volume of water allocation to the Snowy Montane Rivers Increased Flows at the start of the water year is less than or equal to a 50% allocation
- river flows are expected to fall to a level representing extreme low flows within the water year downstream of Tantangara Dam.

We will work with NSW and the ACT, with technical input from Snowy Hydro, to further refine the triggers for drought-like conditions and develop a framework to support the negotiation for additional water releases.

The delivery of additional water from Tantangara Dam into the Upper Murrumbidgee can be agreed between the NSW Government and Snowy Hydro, as a variation to the Snowy Water Licence. This recognises

there may be impacts to Snowy Hydro's operations, including energy generation and possible impacts to downstream water users.

The framework will consider how to balance the need for water in the Upper Murrumbidgee with water in the regulated Murrumbidgee and the needs of the National Electricity Market during drought-like conditions.

Drought-like conditions are not expected in 2024-25. An estimated 35 GL of environmental water is allocated for release to the Upper Murrumbidgee during this period which is over 50% allocation of Snowy Montane Rivers Increased Flows.

The May 2024 Bureau of Meteorology *El Nino-Southern Oscillation (ENSO) outlook*¹ has shifted to La Niña Watch, which is typically associated with a likelihood of increased rainfall in south-eastern Australia.

Accordingly, the Bureau of Meteorology's Seasonal Streamflow Outlook for the upper Murrumbidgee River at Mittagang Crossing also shows an increased likelihood of above average streamflow in the upper Murrumbidgee River.²

These forecasts indicate that flows sourced from a Drought Contingency reserve are unlikely to be required in 2024–25.

We will review these conditions regularly and continue development of the drought triggers so we are ready to deploy this measure when the conditions require.

Consultation approach

We will work with NSW, ACT, Snowy Hydro and Snowy Hydro Shareholder Portfolios (Energy and Finance).

We will seek advice from the ACT and Region Catchment Management Group, First Nations Peoples and the Bureau of Meteorology.

¹ BoM (2024), [El Nino-Southern Oscillation \(ENSO\) outlook](#), updated 14 May 2024.

² oM (2024), [Seasonal Streamflow Forecasts: Murrumbidgee River at Mittagang Crossing \(ID:410033\)](#), updated 6 May 2024.

IMPLEMENTATION TIMELINE

2024

NOW

Review forecast catchment conditions and advise if triggers for additional flows are expected to be met over the next 6 months.

NEXT

Analyse river flow data and the events in 2019 to understand the factors that led to the extreme low flows.

Develop triggers representing drought-like conditions in consultation with NSW, ACT and Snowy Hydro.

Develop a framework in collaboration with NSW, ACT and Snowy Hydro to support negotiations for additional water flows into the Upper Murrumbidgee should drought-like conditions occur.

Beyond 2024

LATER

If and when triggers are met, begin negotiations with Snowy Hydro and NSW for additional releases.

Program evaluation in 2028–29 to inform future activities.

Snowy Water Inquiry Outcomes Implementation Deed review

The Snowy Water Inquiry Outcomes Implementation Deed (SWIOID) sets the framework for environmental flows in the Snowy Scheme, including the upper Murrumbidgee River. The Australian Government has committed to reviewing the **water management settings** in the SWIOID, including but not limited to releases from Tantangara Dam, to look for opportunities to improve flows into the upper Murrumbidgee River.

The SWIOID water management settings apply across a range of rivers, supporting environmental outcomes, irrigation entitlements and energy generation. The current settings were the result of decades of joint effort across governments, which have ongoing benefits.

The SWIOID is the central feature of a complex policy framework with ownership, regulation and management spread across 3 governments (Commonwealth, NSW and Victoria) with many stakeholders. The implementation of the SWIOID occurs through the NSW Snowy Water Licence. Snowy Hydro must comply with the Snowy Water Licence.

The Australian Government is engaging with NSW and Victoria on the scope, process and governance for a review. This draft strategy describes the Australian Government's perspective on these topics. Agreement between the Commonwealth, NSW and Victorian governments, as the signatories and decision-making parties for the SWIOID, is ideal for the review to proceed.

Should all the parties agree to review the SWIOID, it will be the first review since its inception in 2002. The review may explore where changes to the SWIOID could deliver better outcomes for the environment and downstream water users while balancing the role that Snowy Hydro plays in supporting the National Electricity Market and the transition to a low carbon economy. Supporting affordable and secure energy is a key commitment of the Australian Government.

The provision of energy generation by Snowy Hydro to the National Electricity Market is complex and subject to a range of obligations and regulations. The challenges facing the Upper Murrumbidgee are equally complex, including environmental impacts, critical human water needs, water quality and regional development.

Any review of the SWIOID will have to navigate these complexities and explore trade-offs between competing values and interests. While decision-making responsibility rests with the parties to the SWIOID, stakeholder participation and advice in this process will be important to capture the range of perspectives and foster a shared understanding of the trade-offs, using an evidence-based approach.

A staged approach to the review is being explored. Some of the proposed items to be fast-tracked include:

- Considering and, where appropriate, proposing solutions to update the

arrangements of releases from Tantangara Dam to maintain adequate flow of the Murrumbidgee River at Mittagang Crossing and adequate end of system flows at Lobbs Hole in the ACT.

- Parties to the SWIOID, working with Snowy Hydro, identifying opportunities to manage short-term drought risks, including the potential for carryover and other arrangements.

The terms of reference for the review, once agreed between the Australian, NSW and Victorian governments will be published on the department's website. Recommendations and reports from the review will also be published. Having the review conclude ahead of the next planned review of the Snowy Water Licence, due in 2027, will assist with implementation of agreed actions from the review.

First Nations Peoples' participation in the review is important. This will be the first time First Nations Peoples will have the opportunity to be heard and participate in discussions related to the water management settings of the Snowy Scheme. Early discussions with First Nations Peoples have commenced and their advice will be sought throughout the review.

A structured approach to identifying the scenarios and working through the trade-offs will be critical to the success of the review.

Involving experts and grounding the review in a strong evidence base is

also important, especially to support meaningful engagement on options, scenarios and trade-offs. This includes advice from community and catchment management representatives on the issues and scenarios being explored.

In addition to seeking advice from the governments of NSW, Victoria, ACT and the Commonwealth on water and energy matters, Snowy Hydro's advice will be sought in relation to their assets and operations and the Australian Energy Market Operator's advice on impacts to the National Electricity Market.

A total of \$5.3 million is provided for the review over 5 years starting 2023–24. This includes:

- \$0.5 million to support participation of First Nations Peoples
- \$2.5 million for expert technical advice
- \$2.3 million for the Australian Government to run the review.

Consultation approach:

We are consulting broadly to inform the scope of the SWIOID review including conversations with Snowy Hydro, the ACT, catchment management and water advisory groups, First Nations and other stakeholders. We are working with the other SWIOID parties to develop an agreed scope, governance and process for the review.

Further consultation is expected when the SWIOID review is agreed.

IMPLEMENTATION TIMELINE

2024

NOW

Collaborating and consulting on the proposed scope and governance of the SWIOID review.

NEXT

Agree scope and governance of SWIOID review with parties to the SWIOID (the Australian Government, NSW and Victoria).

Establish governance for SWIOID review including appointment of review team.

Commence review (subject to agreement of the deed parties).

Beyond 2024

LATER

SWIOID review ongoing.

The final report on the review provided to deed parties and published online.

First Nations participation and outcomes

Underpinning all our measures, we will respect First Nations Peoples, their culture and their connection to the land and water of the Upper Murrumbidgee and other relevant regions and work to achieve positive outcomes through our investments.

Specifically, we have committed \$500,000 through to 2025–26 to support First Nations Peoples' participation in the SWIOID review. There will be other opportunities coordinated throughout the Restoring the Upper Murrumbidgee River Program for First Nations Peoples to contribute to work planning and on-ground project delivery.

Co-design and engagement with First Nations Peoples will be anchored by the characteristics of:

- inclusiveness
- timeliness
- partnership
- respect
- access to information
- transparency
- responsiveness
- continuous improvement.

Consultation approach

We will develop a dedicated First Nations engagement strategy in partnership with First Nations Peoples on the delivery of the Upper Murrumbidgee commitments.

We will uphold Indigenous Cultural and Intellectual Property rights to protect cultural heritage and ultimately aim to elevate First Nations Peoples' experiences, interests, and knowledge systems in decision making.

IMPLEMENTATION TIMELINE

2024

NOW

Work with First Nations representatives, ACT and NSW to explore opportunities for First Nations Peoples.

NEXT

Develop the First Nations engagement strategy in partnership with First Nations Peoples that supports their participation across the range of actions.

Implementation of the strategy.

Beyond 2024

LATER

Implementation and regular reviews of the strategy.

Emma Wilson (2024), Murrumbidgee River at Kissops Flat

Next steps and engaging

1

CONSULT ON THE DRAFT STRATEGY (June and July)

- Public consultation open for feedback on the draft strategy to Improving the health of the Upper Murrumbidgee: Draft Strategy.

2

FINALISE STRATEGY (July-October)

- Review public submissions and feedback from supporting consultation activities.
- Refine programs.
- Finalise and publish the strategy to Improving the health of the Upper Murrumbidgee: Draft Strategy.
- Finalise the governance for each program.
- Commence implementation.

3

STRATEGY IMPLEMENTATION (October onwards)

- Continue consultation with First Nations Peoples, community groups and other water users.

