

Update on the Snowy Water Licence Review Implementation Program

The NSW Government is making progress on implementing the actions arising from the 10-Year Snowy Water Licence Review. The information below relates to progress as of November 2022.

The Department of Planning and Environment is making improvements to Snowy water management in response to outcomes from the 10-year Snowy Water Licence Review, completed in 2018. This fact sheet provides an update on progress to date.

There were 23 proposed actions arising from the review. The department is overseeing the implementation of the actions with the support of Snowy Hydro Limited and other state and federal agencies with a direct interest in water regulated and released from the Snowy Hydro Scheme.

In 2020 the department completed 10 of the actions as part of the first-round of its administrative licence amendments. We are continuing to progress the remaining 13 actions. Table 1 summarises the progress to date.

Table 1: Summary of progress implementing actions from the 10-year Snowy Licence Review

Category	Actions	Status	Due
Administrative licence amendments	1(a), 2, 4, 5, 6, 9, 10, 14(a), 15(a), 17	Complete The department amended the licence to increase transparency, simplify provisions, secure current practice and fix known errors. The amended licence was published on 16 December 2020. First public AWOP published.	Complete
Best practice licence management	21	In progress Expert review recommendations endorsed. Best practice tools and resources being developed by Alluvium Consulting and reviewed by department Steering Group.	Mid 2023

Category	Actions	Status	Due
Environmental water delivery investigations	7, 8	In progress Stakeholders and ecological experts have provided recommendations on options. The department and key stakeholders are working to investigate the feasibility of these options for improving delivery of environmental flows.	Mid 2023
Water release investigations	12, 13, 14(b), 15(b), 16, 18, 19, 20, 22	In progress The department and key stakeholders have completed a detailed review of issues and are investigating options to address the issues, using integrated modelling where possible.	Mid 2023
Final licence amendments	N/A	Not started Due for implementation once outcome of actions known. This will include public consultation.	December 2023

Extended timeframe

Table 1 highlights that the Snowy Licence Review Implementation Program (the Snowy Program) is anticipated to be completed by December 2023 – 6 months later than originally planned. This is due to an extension to the timeframe of the NSW Regional Water Strategy (RWS) integrating modelling, which is a key tool for the Snowy Program’s Water Release Investigations. Further details are provided later.

Administrative amendments and Snowy Hydro Annual Water Operating Plan

A significant amendment to the Snowy Water Licence in 2020 resulted in the public availability of the Snowy Hydro Annual Water Operating Plan (AWOP) for the first time for the 2021/22 Snowy water year. Publishing the AWOP increases transparency around the management of the Snowy Mountains Scheme and provides information that helps downstream water authorities and water users plan their water use for the upcoming year.

The [Annual Water Operating Plan](#) is available on the Snowy Hydro website.

Best practice licence review

Action 21 of the Snowy Licence Review called for a ‘review of the department’s regulatory policies and procedures used to administer the Snowy Water Licence’, and to provide recommendations to improve regulatory best practice for administering the licence moving forward.

In 2020 an independent panel, led by Alluvium Consulting, reviewed the department’s policies and procedures. The review made five recommendations to improve best practice management of the licence which were endorsed by the NSW, Victorian and Australian governments in 2021:

1. Publish a Snowy Water Licence Regulatory Policy
2. Develop and adopt internal Regulatory Procedures
3. Develop and adopt an internal Regulatory Plan
4. Publish a Regulator’s Annual Report
5. Review and water accounting and governance systems relating to Snowy water savings (scope is outside the Snowy Licence Review)

The department engaged Alluvium Consulting to develop the deliverables relating to recommendations 1 to 4. The department has established a ‘Best Practice Management Steering Group’, which is currently reviewing the policies, procedures and plans, with the aim of adopting the new practices in 2023.

Water release investigations

The Snowy Technical Working Group (TWG) is working to progress actions relating to water releases into the Murray and Murrumbidgee rivers. The TWG comprises representatives from the department’s Water and Environment and Heritage groups; the Commonwealth, South Australian and Victorian governments; WaterNSW; the Murray–Darling Basin Authority; and Snowy Hydro.

Because of the complexity of investigations relating to water releases, the TWG endorsed a staged approach (see Figure 1) and the department engaged Paul Simpson Consulting to provide technical leadership.

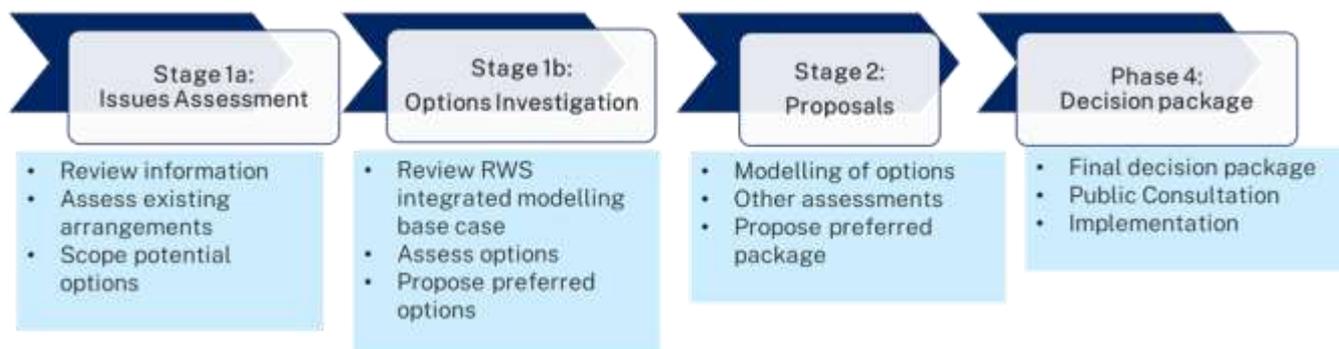


Figure 1: Staged approach of the water release investigations

Issues assessment

The Issues Assessment phase examined the issues that were raised in public submissions, to fully understand the validity, extent and potential impact of the issue. In March 2022, the TWG endorsed Issues Papers which defined the problem and identified potential options for consideration. The department intends to publish summary issues papers in due course.

Options investigation

The Options Investigation phase has included targeted workshops with various TWG members to consider and confirm which of the potential options should be taken forward for further investigation, considering factors such as the benefits and impacts of the change to downstream water users, the environment and Snowy Hydro; as well as the feasibility of implementation.

As part of this phase the department intended to use the NSW Regional Water Strategy integrated modelling to undertake a base case modelling analysis of the options to investigate factors such as:

- water availability for licence holders (announced allocations), including the severity of drought periods
- effects on below-target water and above-target water in the Snowy scheme
- timing and volume of spills from downstream storages
- cost impacts to Snowy Hydro Limited
- potential ecological benefits, where relevant.

Status of NSW Regional Water Strategy integrated modelling

Integrated modelling of the Snowy Scheme, the Murray system, the Murrumbidgee regulated system and the unregulated Upper Murrumbidgee system, is being developed as of the part of the NSW RWS program. It is a highly complex system involving 7 different system models that have iterative feedbacks between them. The scale and complexity of the integrated model development has required the RWS modelling timeframes to be extended. The model results for the base case scenario are currently undergoing final review between participating organisations, with a peer review process to be undertaken in the first half of 2023.

Implications for the Licence Review options assessment

The delay to the modelling has subsequently caused delays to the Snowy Program. The department considers the RWS integrated modelling to be an important tool to inform the Snowy Program. It has the potential to provide modelling insights for many of the provisions of the licence for which there is no contemporary modelling available.

The department is currently analysing the base case integrated modelling to determine its suitability for the purposes of the Snowy program. Initial information on the results of the RWS base case modelling analysis were presented to the TWG in October 2022. Further information will be presented to the TWG in December 2022.

To allow for this process and fully consider the results from the new integrated modelling, where possible, the timeframes for each stage have been reassessed, and the department anticipates that the program will be extended to December 2023.

Environmental water investigations

The department and the Snowy Advisory Committee (SAC) are investigating options for actions relating to the delivery of environmental water for the Snowy River and the Snowy Montane Rivers:

- Action 7 is to investigate the delivery of environmental water via the Mowamba River to the Snowy River. Currently the Mowamba River has its flows diverted to Lake Jindabyne.
- Action 8A is to investigate more flexible delivery options for Snowy River Increased Flows to achieve better environmental outcomes. All Snowy River Increased Flows are currently delivered from Jindabyne Dam. The delivery plan for these flows is determined at the start of the water year with no current ability to alter delivery timing and rates in response to changing conditions.

Recommendations of the Snowy Independent Scientific Expert Panel

In 2021 the department engaged three independent experts in ecology and geomorphology to investigate the environmental effects of alternative Mowamba release options and more flexible delivery options for Snowy River Increased Flows.

For Action 7 - Mowamba River, the Panel recommended:

- Mowamba River flows be allowed to pass Mowamba Weir to the Lower Mowamba River and the Snowy River, with removal of Mowamba weir being the preferred method to achieve this.

For Action 8A - flexibility options for the delivery of Snowy River Increased Flows, the Panel recommended:

- Allowing Jindabyne Dam releases to be synchronised with flow in the Thredbo River or another naturally flowing reference river.
- Allowing changes in flows within the year to respond to environmental conditions.
- Allowing intra-day variability (changing release rates during the day so flows are not held constant for 24 hours).
- Allowing the carryover of Snow River Increased Flow allocations between years.

These recommendations were based on the expected environmental outcomes from each option.

Recommendations of the Snowy Advisory Committee

The department commissioned Professor Richard Baker to facilitate a workshop with the SAC to report on the social and community values relating to the above action. The SAC¹ comprises eight representatives from diverse backgrounds including Aboriginal community, local community, environmental interests and the NSW and Victorian governments. The SAC fully supported

¹ Further details on the Snowy Advisory Committee are available here: www.environment.nsw.gov.au/topics/water/water-for-the-environment/snowy-and-montane/snowy-advisory-committee

removing Mowamba Weir and all flexibility options for the release of Snowy River Increased Flows, which could increase the 'naturalness' in the river system.

Further work

The department will now work with the TWG to assess the feasibility and costs of releasing water via the Mowamba River (including the removal of Mowamba Weir) and of the recommended increase in flexibility options for the delivery of Snowy River Increased Flows.

Stakeholder engagement strategy

The department has developed and endorsed a stakeholder engagement plan for the Snowy Licence Review Implementation Program to communicate the progress of the program and measure response to proposed licence amendments as outcomes of the review investigations.

Over the past 6 months the department has been working with government and community stakeholders through the TWG and the SAC for Snowy River Increased Flows. Direct updates on the program have been provided to existing stakeholder forums.

Over the next months the department intends to provide:

- **Updates** – we will publish information on the progress of the licence review on the [Snowy Water Licence](#) page of the department's website².
- **Targeted stakeholder consultation**, if required, to seek the views of interested parties on specific issues.

To register your interest in the engagement opportunities, please visit the [Snowy Water Licence](#) page of the department's website and follow the link to the registration form.

Where can I get more information?

More information can be found at [Snowy Water Licence](#) page of the department's website.

If you would like more information or updates, please email:
snowylicencemanagement@dpie.nsw.gov.au

² www.industry.nsw.gov.au/water/basins-catchments/snowy-river/corporate-licence