

# Implementation of the Murray-Darling Basin Plan 2023: Information request, Victoria

*Information and documents subject to confidentiality requirements are not included in this document and have been provided separately to the Productivity Commission.*

## Information request 1: Implementation challenges

***1(a) What are the three biggest challenges the Victorian government will face in implementing the Basin Plan over the next five years? How does the Victorian government intend to address these challenges?***

Response:

The Basin Plan is a rightfully ambitious Plan to deliver positive environmental outcomes in a highly modified system with urban and agricultural systems built on the floodplain. The main long standing challenge Victoria and other Basin governments face is to get water to where it is needed and for the duration it is needed. We are working to address this through delivering our Sustainable Diversion Limit Adjustment Mechanism (SDLAM) projects, as well as continuous improvement to water management beyond the Basin Plan.

Unfortunately, the (legislative) Basin Plan's 30 June 2024 deadline for delivery of the SDLAM projects is inflexible. Since 2017 when projects were formally notified, funding negotiations, extensive planning approvals processes, challenges from record floods, supply chain issues and the COVID-19 pandemic have impacted the delivery timelines of these projects.

Genuinely partnering with Traditional Owners requires time and two-way knowledge building to enable free prior and informed consent and government processes are often not flexible enough for this. This is an area the Victorian Government is making efforts to address. In some cases, this has extended the originally proposed timeline for Basin Plan work.

Social licence and maintaining the support of Basin communities to implement the Basin Plan is a priority for the Victorian government. Large scale transformations to water management, delivery systems, and to Basin landscapes in general, need community support to succeed. Challenges in this area include the extreme events such as recent flooding and bushfire, and a forecast El Nino cycle have led to community concern and fatigue. It is understandable that communities have a lower capacity to consider further change when faced with this uncertain environment.

The Victorian Government will address these challenges by maintaining certainty and continuity, focussing on actions developed from a strong evidence base. This includes pursuing our outstanding Basin Plan commitments, including the Victorian Murray Floodplain Restoration Project (VMFRP) that is part of the SDLAM package. The VMFRP incorporates knowledge gained through The Living Murray program with further modelling, adaptive management, and monitoring of environmental watering programs, as well as working with appropriate Traditional Owners to support respectful implementation of projects on Country.

More time is needed to support the delivery of these important projects. The Productivity Commission's first five-year assessment of the Basin Plan from 2018 stated that the 2024 deadline for several SDLAM projects 'is highly ambitious, if not unrealistic.' Key reasons for this include the

projects being ‘highly complex and interdependent’ and requiring ‘extensive consultation to implement.’

While a resolution to this issue is sought, work is continuing at the central VMFRP sites to finalise primary approvals. Costs to complete Stage 1 activities are being finalised with the Commonwealth Government, which will enable Victoria to finalise planning and approvals for all nine sites and enable further negotiations towards construction.

For Constraints and Enhanced Environmental Water Delivery (EEWD), substantially longer timeframes are required and cannot be confirmed with precision until feasibility studies have been completed at the end of 2023. Further information about delivery of these projects is provided under *Information Request 5: Sustainable Diversion Limit Adjustment Mechanism (SDLAM): supply measures*.

Despite the inflexibility regarding the June 2024 deadline, Victoria remains committed to delivering all its SDLAM projects with support from local communities so that the environmental outcomes can be achieved. If allowed to continue to completion, the VMFRP, Constraints and EEWD will make a step change in the delivery of environmental water to ecologically valuable sites throughout northern Victoria. These projects maximise the use of recovered water and, as a result, achieve greater environmental benefits than through water recovery alone.

#### **1(a) - Supporting Documents and Weblinks**

<https://www.mdba.gov.au/news-and-events/newsroom/murray-darling-basin-ministerial-council-communiqué-24-february-2023> ‘New South Wales and Victoria are seeking 2 more years to deliver some supply measure projects, that are well advanced.’

<https://www.pc.gov.au/inquiries/completed/basin-plan/report/basin-plan.pdf> 2018 PC first five-year assessment – pre-COVID and pre-2022 northern VIC flood impacts, providing support for Basin Governments being ‘open to the possibility of extending the 30 June 2024 deadline and... being open to legitimate extensions of time’

<https://www.mdba.gov.au/publications-and-data/publications/sustainable-diversion-limit-adjustment-mechanism-program> MDBA’s SDLAM quarterly update (Oct-Dec 2022): The VMFRP ‘was severely impacted by the October 2022 floods with all nine sites inundated stopping finalising of geotechnical and cultural heritage surveys. The community was also severely impacted and it was deemed inappropriate to undertake public consultation as part of the Environment Report public exhibition process.’

<https://www.mdba.gov.au/sites/default/files/publications/sdlam-independent-indec-status-assessment-report-april-2021.pdf> (INDEC) Status Assessment Sustainable Diversion Limit Adjustment Mechanism Program (29 April 2021)

[Protecting the future of our great floodplains | North Central Catchment Management Authority \(nccma.vic.gov.au\)](https://www.nccma.vic.gov.au)

## Information request 2: Water Resource Plans (WRPs)

**2(a) Please describe the experience of getting the Victorian WRPs accredited. What worked, what didn’t and what improvements could be made? How could the assessment and accreditation process have been more efficient?**

Response:

The Murray-Darling Basin Authority (MDBA)’s process for accreditation was extremely resource intensive for the MDBA and for Victoria. Of note was that the intensive effort was not directed towards the areas of largest risk or opportunity, and appropriate effort was not anticipated or

resourced within the MDBA, leading to long delays and backlogs. In Victoria’s case, while WRPs were lodged on time, there was an extended period without feedback which seemed to be caused by inadequate MDBA resourcing to review the plans after lodgement.

The MDBA appeared to be developing policy during the development and accreditation phase with guidance being finalised and reviewed during the whole process, with implications for WRPs that were already well progressed when new or revised guidance was made available. It did not appear that the MDBA held a clear understanding of how the Basin Plan legislative framework and its requirements would be applicable to each jurisdiction’s legislative and regulatory water management framework, particularly in the early stages of the process, therefore the drafting and review period was extended as MDBA staff needed to familiarise themselves with jurisdictional frameworks in parallel to assessing their relevance to WRPs. The MDBA often sought policy solutions to legal issues which delayed resolution of issues relating to accreditation. The assessment process was often based on the MDBA’s view of what the intention of the Basin Plan legislation was, rather than the legislative requirements themselves, leading to inappropriate requests such as for risk management measures to be included for areas with no identified risks. This created increased uncertainty on the objectives for WRPs and delayed finalisation of plans.

The process would have been more efficient and effective if it was targeted towards

- provisions that have a material impact on SDLs and/or the achievement of environmental outcomes rather than just ticking a box
- outcomes rather than a content focus. The MDBA appeared to be more focused on what staff thought should be included rather than what needed to be included to meet outcomes for the particular jurisdiction
- developing a clear and objective assessment framework that Basin States could identify when preparing content to avoid the shifting of expectations during the preparation and assessment phase

<b>Supporting Documents and Weblinks</b>
<a href="#">Water Resource Plans</a>
<a href="#">Guide to Victoria's Water Resource Plans (PDF, 19.2 MB)</a>
<a href="#">Victoria-North-and-Murray-WRP-Comprehensive Report-AppendixB-ACCREDITED.pdf (water.vic.gov.au)</a>
MDBA’s Assessment of the proposed Goulburn–Murray WRP <a href="#">Water Resource Plan assessment report (mdba.gov.au)</a>
MDBA’s Recommendation on the proposed Goulburn–Murray WRP <a href="#">Published 8/11/2017 (mdba.gov.au)</a>
KMPG assessment review letter Goulburn–Murray WRP <a href="#">independent-review-of-wrp-assessment-process1.pdf (mdba.gov.au)</a>
MDBA’s Assessment of the proposed Northern Victoria WRP <a href="#">Water Resource Plan assessment report (mdba.gov.au)</a> <a href="#">Water Resource Plan assessment report (mdba.gov.au)</a>
MDBA’s Recommendation on the proposed Northern Victoria WRP <a href="#">Published 8/11/2017 (mdba.gov.au)</a>
KMPG assessment review letter Northern Victoria WRP <a href="#">independent-review-of-wrp-assessment-process-northern-victoria.pdf (mdba.gov.au)</a>
MDBA’s Assessment of the proposed Victorian Murray WRP <a href="#">Water Resource Plan assessment report (mdba.gov.au)</a>

The MDBA's Recommendation on the proposed Victorian Murray WRP <a href="#">Published 8/11/2017 (mdba.gov.au)</a>
KMPG assessment review letter Victorian Murray <a href="#">independent-review-of-wrp-assessment-process-victorian-murray.pdf (mdba.gov.au)</a>
MDBA's Assessment of the proposed Victoria Wimmera–Mallee (groundwater) WRP <a href="#">attachment-c-assessment-report-proposed-water-resource-plan.pdf (mdba.gov.au)</a>
The MDBA's Recommendation on the proposed Victoria Wimmera–Mallee (groundwater) WRP <a href="#">Published 8/11/2017 (mdba.gov.au)</a>
KMPG assessment review letter Victoria Wimmera–Mallee (groundwater) <a href="#">independent-review-of-wrp-assessment-process_2.pdf (mdba.gov.au)</a>
MDBA's Assessment of the proposed Victoria Wimmera–Mallee (surface water) WRP <a href="#">attachment-c-assessment-report-wimmera-mallee-surface-water-resource-plan0.pdf (mdba.gov.au)</a>
The MDBA's Recommendation on the proposed Victoria Wimmera–Mallee (surface water) WRP <a href="#">Published 8/11/2017 (mdba.gov.au)</a>
KMPG assessment review letter Victoria Wimmera–Mallee (surface water) <a href="#">independent-review-of-wrp-assessment-process_1.pdf (mdba.gov.au)</a>

**2(b) Please describe how the Victorian government's water planning and management practices have changed as a result of WRPs being implemented.**

Response:

Victoria was largely compliant with the Basin Plan prior to the completion of its WRPs so while there was minimal immediate changes to water planning and management in Victoria as a result of the WRPs, they have 'locked in' SDLs at a specific level of development which means that Victoria now has to monitor water take and action as necessary (including to manage any growth in interception activities) to ensure we remain compliant with the SDLs over the long-term.

#### **Supporting Documents and Weblinks**

[Water resource plan quarterly reports | Murray–Darling Basin Authority \(mdba.gov.au\)](#)

**2(c) Please describe how WRPs interact with the sustainable and urban water strategies for regions in the MDB, as well as Water for Victoria?**

Response:

Under Victorian legislation and subordinate regulations, all urban water corporations must develop Urban Water Strategies (to manage urban water security risks) and DEECA must develop Sustainable Water Strategies to manage water security risks for all uses and values of water across a region over the long term. The Urban Water Strategies and Sustainable Water Strategies in the Victorian MDB contribute towards meeting obligations under our WRPs, largely for how we manage supply of critical human water needs and how we manage impacts of climate change and other water security risks. Neither planning document changes entitlement volumes or impacts on water allocation rules or SDLs.

Sustainable Water Strategies are a key instrument for addressing the risks identified in response to Part 9 of Chapter 10 of the Basin Plan.

Supporting Documents and Weblinks
<a href="#">Water for Victoria (accessible) (DOCX, 15.1 MB)</a>
<a href="#">Summary (accessible) (DOCX, 1.5 MB)</a>
<a href="#">Feedback report (accessible) (DOCX, 1.7 MB)</a>
<a href="#">Victoria-North-and-Murray-WRP-Comprehensive_Report-AppendixB-ACCREDITED.pdf (water.vic.gov.au)</a>

### Information request 3: Water quality

**3(a) Have there been any fish kill events in Victoria related to the most recent flooding, other than the 2023 event at Kangaroo Lake? Please provide any reports on these events (including the 2023 Kangaroo Lake fish kill).**

Response:

There have been a number fish death events in the Victorian Murray Darling Basin between 13 September 2022 and 19 December which have been linked to the October flooding events.

Victoria is supporting the Comprehensive Review of Blackwater being conducted by the MDBA. This report will include information on fish death events and analysis of water quality data at the time.

Supporting Documents and Weblinks
<a href="#">Flooding creates water quality issues in rivers and creeks - GB CMA - Goulburn Broken CMA</a>
<a href="#">Media Releases   Page 3   North Central Catchment Management Authority (nccma.vic.gov.au)</a>

**3(b) Have there been any incidents where water quality standards have not been met (for example, were water quality standards unable to be met during the recent periods of low dissolved oxygen at Broken Creek or Avoca Creek?). If so, please provide any reports pertaining to these incidents.**

Response:

Dissolved Oxygen (DO) data has recently been analysed as part of the 5 year water quality review. This report is expected to be released in October 2023. This analysis has shown that there were cases of dissolved oxygen dropping to low and critical levels. During the flood period, Victoria provided daily updates of where continuous dissolved oxygen measures dropped below 'low' (defined as 4 mg/L) and 'critical' (defined as 2 mg/L) levels.

Victoria is supporting the MDBA's 'Comprehensive review of the 2022-23 blackwater event.' This review is anticipated to examine water quality impacts from the event.

Victoria is developing its 5 yearly analysis of surface water quality. This is due for release in October 2023. It analyses Blue Green Algae events and Dissolved Oxygen events up to 2021.

**3(c) Please explain how water quality targets and indicators are used in relation to river management in Victoria. What types of operational decisions (such as storage and movement) are made in trying to meet water quality targets or in responding to indicators?**

Response:

Victoria has regard to relevant Murray Darling Basin Plan Targets for Managing Flows when performing functions relating to the management of water flows, and when making decisions about the use of environmental water.

Victoria reports on how it has regard to the Targets for Managing Flows annually under Matter 14, Schedule 12 of the Basin Plan.

Supporting Documents and Weblinks
Matter 14, Schedule 12 Report 2021-2022: <a href="https://mdba.gov.au/sites/default/files/publications/victoria-schedule-12-and-basin-plan-implementation-agreement-report-2021-2022.pdf">mdba.gov.au/sites/default/files/publications/victoria-schedule-12-and-basin-plan-implementation-agreement-report-2021-2022.pdf</a>
Matter 14, Schedule 12 Report 2020-2021: <a href="https://mdba.gov.au/sites/default/files/publications/victoria-2020-21-basin-plan-annual-report-schedule-12-victoria_0.pdf">2020-21-basin-plan-annual-report-schedule-12-victoria_0.pdf (mdba.gov.au)</a>
Matter 14, Schedule 12 Report 2019-2020: <a href="https://mdba.gov.au/sites/default/files/publications/victoria-microsoft-word-information-collection-template-for-water-year-2019-20.docx">Microsoft Word - Information collection template for water year 2019-20.docx (mdba.gov.au)</a>
Matter 14, Schedule 12 Report 2018-2019: <a href="https://mdba.gov.au/sites/default/files/publications/victoria-8NS12AA-20190828161634.pdf">8NS12AA-20190828161634 (mdba.gov.au)</a>
Matter 14, Schedule 12 Report 2017-2018: <a href="https://mdba.gov.au/sites/default/files/publications/victoria-summary-feedback-and-cw-response-annual-reporting-template-2017-18.pdf">Summary feedback and Cw response annual reporting template 2017-18 (mdba.gov.au)</a>

**3(d) How do the targets in Water Quality Management Strategies interact with those in the Basin Plan? In managing for water quality, how does the Victorian government have regard to WQMS and Basin Plan targets?**

Response:

Note: In answering this question, Victoria has interpreted 'Water Quality Management Strategies' to mean Victoria's Water Quality Management Plans developed as appendices to our Water Resource Plans as required under Chapter 10 of the Basin Plan. Focus is provided on surface water.

Victoria has identified alternative Water Resource Plan Targets for its Water Quality Management Plans. These targets were endorsed as part of the accreditation process for the Water Resource Plans.

These are:

- Targets for freshwater ecosystems were applied from Victoria's own instrument, the *State Environment Protection Policy (Waters)*. These targets are similar in structure and nature to those in the Basin Plan, though more specific to Victoria's ecosystems. These targets inform long-term assessment of water quality and development of planning instruments such as the Victorian Waterway Management Strategy, and regional equivalents.
- Target for Irrigation: That the quality of water distributed by Rural Water Corporations for the primary purpose of irrigation is representative of the quality of source water which is managed for quality through intergovernmental agreements, and Victoria's water quality management framework. Note: No targets are applied to the Wimmera-Mallee as there are no applicable irrigation systems in this Water Resource Plan Area.
- Target for Recreation: The microbial targets of Victoria's SEPP (waters) were applied.

Victoria has salinity management obligations under the Murray Darling Basin Agreement. This work is undertaken through the Basin Salinity Management 2030 (BSM2030). Victoria has no specific salinity targets under the Basin Plan.

BSM2030 provides the guiding policy for how basin state governments will work individually and collectively to meet the obligations of Schedule B of the Murray-Darling Basin Agreement and the Basin Plan.

Regional delivery of BSM 2030 is largely delegated to Catchment Management Authorities.

### Supporting Documents and Weblinks

Victoria's Wimmera-Mallee Water Quality Management Plan (Appendix A of the Wimmera-Mallee Water Resource Plan). [vic-wimmera-mallee-water-resource-plan-resubmission-comprehensive-report-part-2-2019.pdf \(mdba.gov.au\)](https://www.mdba.gov.au/sites/default/files/publications/vic-wimmera-mallee-water-resource-plan-resubmission-comprehensive-report-part-2-2019.pdf)

Victoria's North and Murray Water Quality Management Plan (this is Appendix A of the Wimmera-Mallee Water Resources Plan. [vic-north-and-murray-water-resource-plan-appendices-26-november-2019.pdf \(mdba.gov.au\)](https://www.mdba.gov.au/sites/default/files/publications/vic-north-and-murray-water-resource-plan-appendices-26-november-2019.pdf)

[Managing and monitoring water quality | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/our-work/our-approach/managing-and-monitoring-water-quality)

[Basin Salinity Management 2030 – strategies and reports | Murray–Darling Basin Authority \(mdba.gov.au\)](https://www.mdba.gov.au/our-work/our-approach/basin-salinity-management-2030)

## Information request 4: Environmental water planning and management

### **4(a) What have been the developments and changes in planned environmental water management (including cultural flows) since 2018?**

#### Response:

The long-term Environmental Water Management Plans (EWMPs) at Victoria's priority waterways are updated as new information is discovered or understanding improves. The guidelines for developing or updating EWMPs were updated in 2022 to provide more guidance on:

- stakeholder consultation
- partnering requirements, with Victorian Traditional Owner groups
- describing ecological objectives and linking them clearly to relevant legislation and policy, such as the Murray-Darling Basin Plan, Regional Waterway Strategies and Long-Term Watering Plans
- how to update existing or introduce new environmental objectives and targets
- how to align more closely with the Victorian Environmental Water Holder (VEWH) seasonal watering proposal guidelines, including use of consistent terminology and definitions, and introducing expected watering effects.

EWMPs guide the annual seasonal watering proposals that Catchment Management Authorities submit annually to the VEWH.

#### *Changes related to cultural flows*

Cultural flows, defined in the Echuca Declaration, are water entitlements that are legally and beneficially owned by Nations of a sufficient and adequate quantity to improve the spiritual, cultural, natural, environmental, social and economic conditions of those Nations. Victoria's approach to changing cultural flows is to return water to Traditional Owners (see response to 8f). The VEWH and CMAs are also undertaking complementary actions by using environmental water in a way that also meets cultural values.

The VEWH has made a commitment to support Traditional Owner self-determination, agency and decision-making around water management and rights on Country within the environmental watering program.

In practice this occurs by collaborating with Traditional Owners to support cultural objectives from potential water deliveries, either directly between the VEWH and Traditional Owner groups or via waterway managers.

For example, in 2021-22, waterway managers planned 30 deliveries of water for the environment in partnership with Traditional Owners to support aligned cultural values in 12 river systems. Of these planned deliveries, 27 were fully or partially achieved, and each of them will help further develop more culturally-informed water planning and practices.

Supporting Documents and Weblinks
Environmental Water Management Plan Guidelines for Rivers and Wetlands, Version 6.0, June 2022. <a href="#">Microsoft Word - EWMP Guidelines 2022.docx (water.vic.gov.au)</a>
VEWH annual reflections report 2021-2022: <a href="#">VEWH-Annual-Report-2021-22.pdf</a> ;
VEWH annual reflections reports 2020-2021: <a href="#">VEWH-Annual-Report-2020-21.pdf</a>
VEWH annual reflections reports 2019-2020: <a href="#">VEWH-annual-report-2019-20_correction.pdf</a>

**4(b) What outcomes have been achieved via the provision of planned and held environmental water over the last 5 years? Please provide case studies.**

Response:

Outcomes from environmental watering are reported on every five years under the Basin Plan, Schedule 12, Matter 8. Water for the environment addresses several key threats to biodiversity such as changes to watering regimes, habitat loss and weeds.

Across northern Victoria more than 120 waterways are watered at the required frequency and duration to support our native plants and animals. The first 5-yearly report in 2020 showed the following outcomes:

- Breeding of threatened fish species in rivers
- Increased numbers and distribution of rare and threatened fish in rivers
- Habitat provided for critically endangered Murray hardyhead at four wetlands
- Support for 30% of the known population of the endangered Australasian bittern at (Ramsar-listed) Barmah-Millewa Forest
- Habitat for waterbirds protected or restored at 80% of sites
- Improved breeding of native birds at over 70% of sites, including many threatened species
- Fewer weeds in and around waterways
- Germination and survival of native plant species, including trees
- Improved extent and condition of important habitat types, including black box woodland and lignum shrubland.

Case studies are provided in the Matter 8 report (see weblink).

Additional monitoring since the 5-yearly reporting continues under the state-wide Victorian Environmental Flows Monitoring and Assessment Program, the Wetland Monitoring and Assessment Program, and monitoring for the Living Murray Program at Victoria's icon sites.

Recent case study: At Hattah Lakes, a Living Murray icon site, environmental outcomes observed since 2021 have been numerous, due to a combination of environmental water delivery and natural flooding. These include a reversal of the large declines seen in black box and river redgum forests surrounding the lakes. Following the 2022 environmental watering and extensive floods over summer, significant responses were also observed in floodplain understory plants, with many rare and threatened species detected. Some species had not recorded in the region for decades.

After environmental watering in late 2021, almost 2000 nests supporting many more thousands of chicks of colonial nesting waterbird species were observed, as well as hundreds of chicks of other waterbird species (incl. grebe and duck). Three threatened species were also recorded breeding, including blue-billed duck, musk duck and white-bellied sea-eagle.

During the floods in late 2022, monitoring detected 10 species of colonial nesting waterbird species and 18 waterbird species using thousands of nests and producing tens of thousands of chicks. Environmental water has since been used to support feeding areas for young waterbirds.

<b>Supporting Documents and Weblinks</b>
Matter 8 report (2020) <a href="#">Achievement of environmental outcomes in northern Victoria's waterways</a>
BP report card 2020 <a href="#">Basin Plan Report Card publications   Murray–Darling Basin Authority (mdba.gov.au)</a>
<a href="#">Victoria's Basin Plan Report Card 2020 (water.vic.gov.au)</a>
<a href="#">Assessing benefits of water for the environment (ari.vic.gov.au)</a>
<a href="#">Assessing wetland response to water for the environment (ari.vic.gov.au)</a>

***4(c) Have there been any circumstances where planned environmental water has not been provided in line with a WRP? If so, how was that justified?***

***If planned environmental water is reduced, is there a mechanism to compensate the environment?***

***What mechanisms are in place to ensure that held environmental water is not substituting for planned environmental water or other rules-based water management?***

Response:

In Victoria, there are three places where Planned Environmental Water (PEW) is provided. The relevant bulk entitlements (see supporting weblinks) set out several reasons where delivery of PEW may not align with WRPs. If this occurs, this is detailed in annual Basin Plan reporting.

If PEW is reduced for these allowed reasons, this is compensated for by banking the flows that were not provided, which are then released later, for environmental outcomes, by agreement between the storage manager and the waterway manager.

For example: In 2019-20, in accordance with Clause 12.4 of Goulburn Murray Water's (GMW) Broken System Bulk Entitlement, GMW and the Goulburn Broken CMA agreed to temporarily reduce Broken River minimum passing flows between May and October 2019. This increased the volume available to maintain the minimum environmental baseflow rate of 15 ML/day in all reaches of the Broken River downstream of Lake Nillahcootie under the extended dry conditions leading into the 2019-20 water season.

Passing flows were reduced from 30 ML/day or natural to 15 ML/day or natural; any flows into Lake Nillahcootie above 15 ML/d were added to the passing flow account (referred to as banked passing flows). Between May and October 2019, 1,425 ML of passing flows were banked. The banked water was used to supplement operational releases and tributary inflows to maintain the minimum environmental baseflow in the Broken River and upper Broken Creek between 2019 and 2021. In addition, after passing through the upper Broken Creek the banked flows discharge into the lower Broken Creek downstream of Katamatite contributing to its recommended environmental baseflow targets.

PEW in Victoria is not defined as set annual volumes, but as required flow rates or restrictions that are managed by the storage manager without using held environmental water.

Victoria provides Planned Environmental Water Use (Matter 9.2 data) to the MDBA annually which is separate to the Schedule 12 BP Annual Reporting requirements. The MDBA holds this data which is **currently not** published on the Authority's website.

Supporting Documents and Weblinks
Bulk Entitlement (Ovens System – Goulburn-Murray Water) Order 2004. <a href="http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements#bulkEntDiv">http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements#bulkEntDiv</a>
Bulk Entitlement (Broken System-Goulburn-Murray Water) Conversion Order 2004 <a href="http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements#bulkEntDiv">http://waterregister.vic.gov.au/water-entitlements/bulk-entitlements#bulkEntDiv</a>
Upper Ovens River Water Supply Protection Area Management Plan <a href="http://www.g-mwater.com.au/TATDOC-#3346214-v1-FINAL_PLAN...AGEMENT_PLAN_JANUARY_2012.PDF">TATDOC-#3346214-v1-FINAL_PLAN...AGEMENT_PLAN_JANUARY_2012.PDF (g-mwater.com.au)</a>

**4(d) How helpful is MDBA guidance on preparing and revising long-term watering plans? How could it be improved?**

Response:

Victoria's long-term watering plans (LTWPs) were updated in 2020 and 2021, triggered by accreditation of Victoria's WRPs. MDBA guidance was primarily elicited via bilateral discussions during update development wherein Victoria initially presented a list of proposed improvements based on several sources, including (1) feedback from MDBA on the earlier LTWPs, (2) an independent review commissioned by Victoria in 2019 that included elicitation of suggested improvements from Victorian agencies such as catchment management authorities and VEWH, and (3) the content of the recently published WRPs. The bilateral discussions were helpful in identifying the priority and practical updates to be included.

The next revision of the LTWPs will be triggered by MDBA's update of the Basin-wide Watering Strategy (BWS) due late 2024, so it is likely that LTWP revisions will be primarily focused on aligning with that update. The MDBA has convened an interjurisdictional working group to support that update which deliberately intersects with those responsible for updating LTWPs in each Basin state. The intent is that discussions therein will assist in providing timely direction for alignment and scope of changes needed.

Supporting Documents and Weblinks
<a href="#">Environmental water</a>

**4(e) What key changes have been made to the Victorian government's long-term watering plans and annual environmental watering priorities since 2018 to improve the effectiveness of environmental water, including during drought?**

**How does the Victorian government consider climate change and variability in planning and prioritising environmental water?**

Response:

Victoria's long-term watering plans (LTWPs) were updated in 2020 (Wimmera-Mallee) and 2021 (Northern Victoria and Victorian Murray) based on discussions with MDBA and others as described in 4(d). Key changes included:

- new sections on representativeness of watered sites
- new sections on Ramsar listed priority environmental assets
- updated lists of priority environmental assets (waterways) and functions
- better alignment with Basin Plan including cross-reference of objectives with the Basin-wide environmental watering strategy, and Basin Plan environmental watering plan including Division 6 principles
- more information included from site-specific environmental water management plans (watering requirements and objectives) and about relevant environmental water entitlements
- information about groundwater dependency of priority environmental assets (waterways)
- updates about Traditional Owner involvement in water planning
- updates to describe progress on constraints measures to reflect progress since 2015
- updates on complementary actions to reflect recent work in this area; and
- revised information from Victoria's Water Resource Plans, including definition of planned environmental water, and an updated risks section.

Victorian **annual environmental watering priorities** are published in the VEWH's Seasonal Watering Plan each year.

Since 2018, the key changes include:

- Continuing refinement of watering actions for environmental assets in partnership with Catchment Management Authorities, key delivery partners and stakeholders. *Case Study/example*: see 2019 Southern Spring flow event on timing of releases (*refer page 58, VEWH Reflections 2019-20*).
- Improved assessment and recognition of First Nations priorities and outcomes, and social benefits (recreation, etc) documented in the VEWHs Seasonal Watering Plan.
- Commencement in 2022-23 of increased First Nation self determination under Victoria's Water is Life: Traditional Owner Access to Water Roadmap.

The VEWH considers Climate change and variability by:

- assessing the risk of climate change to our water holdings under a range of different scenarios and managing those risks
- inputting to the update of existing government policy for environmental watering objective setting to consider climate change
- preparing for and inputting to dry inflow contingency plans (for high-risk systems)
- contributing to the development and implementation of government policy and projects that address climate change challenges, such as Sustainable Water Strategies, the renewal of the Victorian Waterway Management Strategy and the Victorian Murray Floodplain Restoration Project.

The VEWH plans for seasonal variability in the following ways:

- Objectives for water for the environment and water availability differs depending on seasonal conditions – drought, dry, average or wet to very wet seasons.
- The scenarios are a guide for us and waterway managers throughout the year to decide what environmental watering to go ahead with.
- The potential environmental watering under each scenario is captured in the scenario planning section of the relevant system.

Supporting Documents and Weblinks
Case Study: page 58 of <a href="#">VEWH-reflections-booklet_2020.-LR-20.01.21.pdf</a>
<a href="https://www.vewh.vic.gov.au/watering-program/seasonal-watering-plan">https://www.vewh.vic.gov.au/watering-program/seasonal-watering-plan</a>
<a href="https://www.water.vic.gov.au/aboriginal-values/the-aboriginal-water-program">https://www.water.vic.gov.au/aboriginal-values/the-aboriginal-water-program</a>

**4(f) How do state annual watering priorities interconnect with Basin wide annual environmental watering priorities? Is there unnecessary overlap or duplication?**

**Should Basin Annual Environmental Watering Priorities be retained? If so, what role do they play and how could they be improved?**

Response:

At the moment, state annual watering priorities generally inform the Basin wide annual priorities rather than the other way around. This is largely due to two factors.

At the moment, state annual watering priorities generally inform the Basin wide annual priorities rather than the other way around. This is largely due to two factors.

1. The basin annual watering priorities are determined and publicised after the states have completed the bulk of their annual planning, which means there is little opportunity for the basin wide assessment to inform the state based assessments. The timing of the state and basin scale planning processes means that in the past, the basin-wide annual watering priorities have largely been a collation of the state-based watering priorities.
2. There has not been a clear approach for objectively assessing annual watering priorities at the basin scale.

There is a great opportunity to strengthen the annual basin wide priorities in two ways. First, by reviewing the extent to which environmental watering in the preceding 1-2 years have met expected requirements for Basin Wide outcomes and highlighting areas and watering actions that have not been delivered as required and therefore may need additional attention in the coming year. Second, by using an objective assessment of condition and risk across the basin to identify specific watering actions and issues that need to be addressed in particular parts of the basin.

This objective assessment may be informed by things like the MDBA Vulnerability Assessment Project and some of the models and metrics being developed through the MDBA Ecosystem Functions project. Both of these projects specifically aim to assess patterns across the whole basin in a consistent way and therefore should highlight the relative importance of key actions in key areas in particular years.

The annual basin wide priority assessment could also consider recent climatic conditions and known ecological responses. For example, a priority across much of the basin in 2023-24 is to provide sufficient food for the large number of sub-adult waterbirds that were produced on the back of the recent floods. All of these assessments and recommendations probably need to be done in the first half of each water year and be available for use by February, to feed into annual planning processes at the state level

Supporting Documents and Weblinks
<a href="#">Basin Annual Environmental Watering Priorities   Murray–Darling Basin Authority (mdba.gov.au)</a>
The <a href="#">VEWH - Seasonal watering plan</a> identifies the annual environmental watering priorities (AEWPs) for all Victorian rivers, wetlands and floodplains

**4(g) Where are the opportunities to simplify the Environmental Watering Plan (chapter 8 of the Murray-Darling Basin Plan) and its implementation such as the environmental management framework, methods for identifying environmental assets and ecosystem functions, principles for prioritisation of environmental water and monitoring progress?**

Response:

Chapter 8 sets out the overall environmental objectives and the environmental management framework. There are several areas in the Chapter that would benefit from increased specificity, as described below (refer to VEWH text). Opportunities to simplify and/or refine Chapter 8 are likely to emerge as delivery of the EEWD project progresses.

The EEWD project aims to improve environmental water delivery outcomes in the Southern Connected Basin (SCB) through a suite of measures that enable more efficient and effective use of environmental water portfolios.

EEWD is making progress to improve the forecasting, planning and coordination of environmental water releases across the River Murray and its key tributaries for system-wide benefits. A key objective of EEWD is the development of a multi-year, multi-location framework, which includes development of a prioritisation framework to support environmental water holders and managers in decision-making to maximise system-wide outcomes. (refer to 5a for further detail on the EEWD project).

Chapter 8 of the Basin Plan is conceptually sound i.e. Basin Plan specifies overall objectives, these are more specific in the BWS, which then inform the LTWPs, and then annual watering priorities.

More work is needed to make the objectives and targets in the BWS more specific and to also point to the combination of sites or assets that need to be managed to achieve the overarching objectives. Moreover, there should be a frequent review of watering actions across sites to consider whether the sum of watering actions at those sites is sufficient to achieve the intended objectives and to also monitor those responses at appropriate scales to test whether the target outcomes are being achieved. These changes will help give implementation activities a broader landscape scale focus and increase the likelihood they will achieve significant environmental outcomes.

Recent work done through the MDBA Vulnerability Assessment Project and Ecosystem functions project, which both aim to look at patterns across the whole basin (rather than collate info from a small number of sites) should be used to help identify key locations for intervention and also point to the types of watering actions needed at those locations to achieve overall basin objectives.

There is also a need to better understand and incorporate First Nations cultural outcomes and recreational outcomes where they align with environmental outcomes, noting that environmental outcomes remain the primary focus.

Supporting Documents and Weblinks
<a href="#">EEWD Business Case 2017.pdf (sharepoint.com)</a>

**4(h) What is the process for reviewing the effectiveness of Prerequisite Policy Measures (PPMs)?**

**What changes have been made to PPMs, since their introduction (or are in train), to improve their effectiveness?**

Response:

Victoria's water entitlement framework provides the legislative arrangements that enable environmental water holders and water system managers (or river operators) to implement PPMs in Victoria. PPM arrangements are now well-established in the large regulated systems of northern Victoria.

VEWH and GMW may agree to vary the operating arrangements at any time. Continuous improvement of processes is part of 'business as usual' environmental water management in Victoria. VEWH and GMW are expected to ensure the arrangements remain contemporary and effective by updating the arrangements in consultation with delivery partners on an as needs basis. Arrangements for in-stream deliveries in the River Murray (including, both in-channel and floodplain deliveries), will be reviewed in coordination with the MDBA and other River Murray states to make sure continued alignment.

Recent improvements in operability include:

- Amendments to the return flow provisions in the Living Murray environmental entitlements in the Goulburn and Campaspe systems to ensure consistency with the provisions in other VEWH entitlements.
- Confirmation that existing legislation enables return flows credited to the VEWH to be transferred to NSW and vice versa, and identification of a high-level process to facilitate this if and when it is requested by environmental water holders
- Streamlined processes for determining and authorising re-credits for eligible return flows to improve the timeliness and efficiency of verifying return flow volumes and where necessary trading associated allocation.

Formal reviews of the operating arrangements are also required to be undertaken periodically, ideally at least every 5 years, and when there is a significant change to operations due to a bulk or environmental entitlement amendment or the implementation of a Sustainable Diversion Limit Adjustment Mechanisms project.

Supporting Documents and Weblinks
Overview of pre-requisite policy measures in Victoria. (DELWP, 2019) <a href="#">Microsoft Word - Overview of PPMs in Victoria.docx (mdba.gov.au)</a>

***4(i) What progress has been made since 2018 to increase First Nations' participation in decision-making, planning and delivery of environmental water?***

***Please provide examples of partnerships or other case studies.***

Response:

Please also refer to the response to 4(a) with (1) description of the update to Victoria's Guidelines for Environmental Water Management Plans, with additional guidance on partnering with Victorian Traditional Owner groups, including to identify where environmental watering may contribute to cultural objectives and outcomes, and (2) VEWH's commitment and practices that support Traditional Owner self-determination and partnering in environmental water delivery.

Supporting Traditional Owner self-determination is one of the 5 key priorities of the VEWHS 10-year strategic plan 2023-2033.

In *Water is Life: Traditional Owner Access to Water Roadmap (2022)*, the Victorian Government committed to increasing the role of Traditional Owners have in determining how environmental water is used for the purpose of healing Country. Actions to deliver this include developing new guidelines for Traditional Owners to submit seasonal watering proposals to the VEWH; undertaking localised pilot environmental watering projects; and to develop a framework for agreements for transfer of environmental water allocation to Traditional Owners for dual environmental and cultural benefit in accordance with environmental water requirements. In the longer-term Victoria will work towards recognition of Traditional Owners as environmental water holders.

*Case Study – Horseshoe Lagoon: an environmental water partnership with Taungurung*

TLaWAC have approved the use of this case study and ask that there is also a consideration of the broader context as provided in the TLaWAC Nation Statement from Section B of Water is Life.

Taungurung Land and Water Council (TLaWC) is leading the way at Horseshoe Lagoon demonstrating how cultural values, environmental objectives and on-Country knowledge sharing are critical to long term water management, Healing Country and meaningful collaboration. Culturally significant to Taungurung Traditional Owners, Horseshoe Lagoon near Seymour continues to show promising response to environmental flow deliveries. Since the water has returned, it is again a living wetland full of birds, frogs and turtles.

Watering activities at Horseshoe Lagoon provide an opportunity to heal knowledge through developing TLaWC capacity and confidence in water management. In 2019, Taungurung women held a Welcome to Country at the site, marking and celebrating the return of water through environmental flows. Water was again delivered to the lagoon in 2020 and 2021, with TLaWC responsible for managing the pumping and delivery. Taungurung rangers also carried out aquatic plantings at the site in 2022.

“We work in collaboration and with the support of our partners. We have taken on more and more responsibilities with time and the support of our partners is essential. Goulburn Broken CMA, Parks Victoria and the VEWH have shown true support for this purpose,” said TLaWC’s Water Management Officer.

Source: Victorian Environmental Water Holder website

Supporting Documents and Weblinks
Environmental Water Management Plan Guidelines for Rivers and Wetlands (Version 6) (DELWP 2022) <a href="#">Microsoft Word - EWMP Guidelines 2022.docx (water.vic.gov.au)</a>
Water is Life: Traditional Owner Access to Water Roadmap (DELWP 2022) <a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section A (PDF, 16.9 MB)</a> <a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section B (PDF, 17.4 MB)</a>
VEWH 10-year strategy <a href="#">VEWH - A clear vision for the future - the VEWH releases its 10-year strategy</a>
<a href="#">Environmental water management plans</a>
<a href="#">The Aboriginal Water Program</a>

**4(j) Are social and cultural outcomes considered in planned and held environmental watering decisions? If so, how?**

**What is the process to understand, achieve and report on cultural and social outcomes from environmental water use?**

**How are decisions of water prioritisation and use (including trade-offs) communicated to stakeholders?**

Response:

In Victoria, consideration of recreational and Aboriginal cultural values into the planning and operations of water resource managers, including environmental water managers, was embedded in legislation with the amendment of the Victorian Water Act in 2019. This provides:

- greater consideration of the recreational values of water and waterways for communities; and
- greater recognition and involvement of Traditional Owners and Aboriginal Victorians in the management and planning of waterways and catchments.

CMAs engage with Traditional Owners, key stakeholders and the local community to provide local knowledge, views and solutions to inform annual environmental watering priorities during the preparation of their seasonal watering proposals and throughout the year. These proposals form the basis of the Victorian Environmental Water Holder’s (VEWH) Seasonal Watering Plan, which sets the scope of potential environmental watering across Victoria for the water year. Watering actions that are developed in partnership with Traditional Owners and for other shared benefits are highlighted in the Plan.

Under the Victorian Waterway Management Strategy (2013), VEWH has a list of criteria to prioritise water use to ‘maximise environmental outcomes with the available resources’ (Policy 8.6). One of these criteria directs VEWH to consider whether it can contribute to social and cultural benefits through environmental watering.

Traditional Owner groups across northern Victoria were also involved in developing the update to the guidelines for Environmental Water Management Plans (EWMP). The update guides partnership of Traditional Owners and Aboriginal Victorians in the EWMP development process.

Basin Plan annual reporting is one place Victoria reports on shared benefits. Matter 6b specifically reports on how engagement and local knowledge influence planning and delivery of environmental water, including maximising opportunities for shared social and cultural benefits.

<b>Supporting Documents and Weblinks</b>
Victorian Waterway Management Strategy (2013) – refer to policy 8.6 for VEWH’s prioritisation criteria <a href="#">VWMS Part3.pdf (water.vic.gov.au)</a>
Victoria’s <i>Water and Catchment Legislation Amendment Act 2019</i> <a href="https://content.legislation.vic.gov.au/sites/default/files/2dd0230e-7f04-3924-bd01-cf1f23f67bf8_19-023aa%20authorised.pdf">https://content.legislation.vic.gov.au/sites/default/files/2dd0230e-7f04-3924-bd01-cf1f23f67bf8_19-023aa%20authorised.pdf</a>
<a href="#">Basin Plan Annual Reports   Murray–Darling Basin Authority (mdba.gov.au)</a>
<a href="#">Basin Plan Annual Report 2018–19   Murray–Darling Basin Authority (mdba.gov.au)</a>
<a href="#">Victorian Waterway Management Strategy</a>

**4(k) What actions is the Victoria government taking to integrate environmental water planning and management with natural resource management?**

Response:

Victoria’s long-standing approach has been to make sure that water for the environment is managed efficiently and effectively. Guiding principles for environmental water management in Victoria are set out in the VWMS (2013) and aim to preserve the environmental values and health of aquatic ecosystems. The principles support:

- an integrated approach to waterway management
- efficient use, including opportunities for multiple benefits
- transparent and sound decision-making
- planning for future conditions

DEECA and the VEWH work closely with CMAs to ensure that environmental water is managed with other complementary works like protecting drought refuges, improving habitat connectivity for fish, improving landholder management practices and stronger integrated catchment management.

Since 2016 significant investment by the Victorian Government across the north of the state has seen:

- Pest plant and animals controlled over 99,625 ha
- Revegetation of 2456 ha
- Fishways built on key barriers (e.g. Koondrook Weir, Tea Garden Weir)
- More than 610 snags returned to support native fish
- Over 670 km of riparian fencing.

Other complementary measures undertaken include:

- construction of regulators to manage water more effectively and efficiently for the environment in wetlands and floodplains,
- breeding of native fish in nurseries and their release into the wild, and
- implementation of sustainable irrigation programs that manage nutrient inputs to waterways and enlist the support of irrigators and the community.

<b>Supporting Documents and Weblinks</b>
<b>Victorian Waterway Management Strategy (2013) – 4 part document</b>
<a href="#">VWMS Part1.pdf (water.vic.gov.au)</a>
<a href="#">VWMS Part2.pdf (water.vic.gov.au)</a>
<a href="#">VWMS Part3.pdf (water.vic.gov.au)</a>
<a href="#">VWMS Part4.pdf (water.vic.gov.au)</a>
<a href="#">Microsoft Word - EWMP Guidelines 2022.docx (water.vic.gov.au)</a>
<a href="#">Victorian Waterway Management Strategy</a>
<a href="#">Environmental water management plans</a>

**4(I) What is the Victorian government’s environmental water trading policy? Is this public? If so, please provide a weblink.**

**What trades in environmental water entitlements and allocations have been undertaken in the MDB since December 2018 (by date, catchment, volume and price)? What were the proceeds from any water sales used for?**

Response:

The VEWH has the statutory right to trade its water entitlements and allocations; this is a critical tool to manage seasonal and spatial variability in meeting priority environmental water demands. The VEWH also uses carryover to meet early season (winter/spring) water demands when water allocations are at their lowest and to set water aside to maintain key refuge areas and avoid catastrophic events in drought periods. The VEWH is also able to trade water on the temporary water market. This generally means selling water in wetter times when it is not required to meet priority watering actions. The VEWH publishes its annual trade strategy on its website each year.

*From the VEWH:*

Allocation trades undertaken by the VEWH in since December 2018:

- 6,385 ML of Murray trading zone 6 allocation sold between Mar-Apr 2019 for net revenue of \$3.06 million
- 3,615 ML of Murray trading zone 7 allocation sold between Mar-Apr 2019 for net revenue of \$1.75 million
- 12,000 ML of Murray trading zone 7 allocation sold between Apr-May 2022 for net revenue of \$0.69 million
- 4,617.5 ML of Murray trading zone 6 allocation sold between Jan-June 2023 for net revenue of \$0.04 million
- 27,612.5 ML of Murray trading zone 7 allocation sold between Jan-June 2023 for net revenue of \$0.41 million
- 12,770 ML of Goulburn trading zone 1a allocation sold between Jan-June 2023 for net revenue of \$0.18 million
- 600 ML of Broken trading zone 2B allocation purchased in between Apr-May 2023 for \$16,000

VEWH has not undertaken any entitlement purchase.

Since 2018 the VEWH has used revenue raised from the sale of water allocation in the following ways, with examples:

Purchase of allocation to meet shortfalls

- 300 ML to 600 ML annual purchased in the Maribyrnong system in 2018-19, 2021-22 and 2022-23 to support Jacksons Creek, a tributary of the Maribyrnong River.
- 1,000 ML purchased in the Moorabool system in 2018-19 to support the Moorabool River.
- 600 ML of allocations in the Broken system trading zone 2B was purchased in between Apr-May 2023 to meet environmental watering shortfall in Broken River and upper Broken Creek

Invest in monitoring or technical studies to improve management of the Water Holdings

- Preparing watering and monitoring plan for weir pools in the mid-Murray River (weirs 7 and 8 and Victorian anabranch waterways)
- Researching socio-economic benefits associated with environmental watering
- Developing new flows study and prioritisation model for the Goulburn River
- Undertaking a review of the VEWHs commercial trading activities, focusing on assessing market impact and alignment with trading rules
- Investigating supply options to maintain refuge pools in the Wimmera River

Invest in on-ground activities to improve the performance of the environmental watering program

- Construction of the Koondrook Weir fishway (Gunbower Creek, Torrumbarry system)
- Construction of the Warrock rock fishway on the Glenelg River
- Connecting Kinnaird's wetland (Broken system) with environmental watering infrastructure
- Connecting supply to four refuge pools in the Wimmera River

<b>Supporting Documents and Weblinks</b>
<a href="#">VEWH-water-allocation-trade-strategy-2022-23.pdf</a>
<a href="#">VEWH-water-allocation-trade-strategy-2021-22.pdf</a>
<a href="#">VEWH-water-allocation-trade-strategy-2020-21 final.pdf</a>

<a href="#">VEWH-water-allocation-trade-strategy-2019-20 final web.pdf</a>
<a href="#">VEWH-water-allocation-trade-strategy-2018-19 final.pdf</a>
<a href="#">VEWH - Trading</a>
<a href="#">VEWH - Water Trading Strategy 2022-23</a>
<a href="#">VEWH - Water trading strategy 2021-22</a>
<a href="#">VEWH - Water trading strategy 2020-21</a>
<a href="#">VEWH - Water trading strategy 2019-20</a>
<a href="#">VEWH - Water trading strategy 2018-19</a>
<a href="#">VEWH - Water Trading Strategy 2023-24</a>

**4(m) What processes are in place to coordinate watering activities with the Commonwealth Environmental Water Holder and other agencies and river operators to maximise environmental outcomes?**

**Where are the opportunities to improve coordination?**

Response:

**From the VEWH:**

Collaboration is a key part of the environmental watering program in Victoria.

Working with the CEWH in Victoria:

- The CEWH-VEWH Partnership Agreement 2019-2024 guides the partnership, is reviewed every 5 years and enables system scale alignment of environmental watering actions under 'Watering Schedules'.
- DEECA and the VEWH are members of the Southern Connected Basin Environmental Watering Committee, which plays a key role in both governing the joint programs Living Murray Program and also coordinating environmental water across the connected southern Basin. The CEWH, along with MDBA, NSW and SA representatives support the SCBEWC operational sub-group, which leads the collaborative annual planning processes, including preparation of the Murray Delivery Plan and oversight of adaptive delivery during the year.
- DEECA, VEWH and GMW are members of the Environmental Water Committee, along with MDBA, CEWH, NSW, SA, QLD and ACT representatives. The EWC delivers solutions to BOC on complex matters relating to environmental water under both the MDB Agreement and Basin Plan. The EWC is tasked with progressing well-developed multi-lateral solutions to shared risks, while supporting BOC to undertake its coordination role across strategic environmental water issues.
- The VEWH contributes to the Environmental Water Improvement Group facilitated by MDBA, that brings together environmental water managers (SCBEWC) and river operators (Water Liaison Working Group members) to collaborative work through improvements in the Murray system
- The VEWH leads the Victorian Shared Risk Management Framework, which ensures shared risks for the environmental watering program are collaboratively identified, assessed and mitigated across program partners, including both environmental water managers, river operators, land managers, etc.
- The CEWH and other delivery partners review and input into the development of Victorian seasonal watering proposals prepared by CMAs.

- The VEWH, CMAs or MDBA (depending on site) facilitate Operational Advisory Groups for many rivers and floodplain sites, focussed on collaborative adaptive and risk management to delivery environmental watering events. The include environmental water managers and river operators, and may also include land managers, Traditional Owners and other delivery partners.

CMAs facilitate Environmental Water Advisory Groups for some sites, to bring environmental water managers, river operators and other agency partners together with community representatives

## EEWD

Improving coordination of environmental watering is one of the notified outcomes of the EEWD project. EEWD aims to improve environmental water delivery outcomes in the Southern Connected Basin (SCB) through a suite of measures that enable more efficient and effective use of environmental water portfolios to maximise downstream and system-wide connectivity outcomes (refer to 5a for further detail on the EWD project).

### **4(n) How is the role of the Victorian government in environmental water planning and management communicated to communities (including during recent flood events)?**

#### Response:

The role of the various Victorian government agencies involved in environmental water planning and management is set out in the Victorian Waterway Management Strategy (2013), refer to Chapters 8 and 18, and also communicated via the VEWH and DEECA websites (see supporting weblink).

Victoria’s CMAs have an established network of stakeholders from local communities and peak bodies that are engaged on a range of issues, including the development and implementation of regional waterway strategies, environmental water management plans and annual seasonal watering proposals. These networks have been established for many years and continue to be an effective mechanism to engage with local communities. In more recent years, as the environmental water portfolio has expanded, some CMAs have established Environmental Water Advisory Groups (known as EWAGs) through public advertisements, nominations and/or recommendations. CMAs also carry out direct engagement with interested individuals and private landholders.

As an example, North Central CMA with VEWH and the community-based Enhancing Northern Waterways Advisory Group recently planned winter-spring watering to support waterbirds chicks that hatched over a very successful breeding season due to the natural floods in Gunbower in 2022.

The CMA announced this planned watering via a media release in April this year. When natural flows in the Murray River this winter were high enough to enter Gunbower Forest and support feeding habitat for juvenile waterbirds, environmental water deliveries were reduced accordingly. This change to watering was also announced with a media release, to assure the public that there is no increase in flood risk to the community.

<b>Supporting Documents and Weblinks</b>
<a href="#">Victorian Waterway Management Strategy</a> (2013), refer to Chapters 8 and 18
<a href="#">VWMS Part2.pdf (water.vic.gov.au)</a> – contains Chapter 4 Regional waterway management
<a href="#">VWMS Part4.pdf (water.vic.gov.au)</a> – contains Chapter 18 Management arrangements
<a href="#">VWMS-Summary FINAL WEB-ready.pdf (water.vic.gov.au)</a>
<a href="#">VEWH - Managing water for the environment</a>
<a href="#">Environmental water</a>
NCCMA media releases: April 2023: Planned environmental flow releases for winter and spring

**4(o) Please provide the latest (point in time) data (or a link) on the Victorian government’s held water volume entitlements (GL LTDLE).**

**Do you report on the volume of held water used in a season and environmental outcomes of events? If so, please provide links.**

Response:

The VEWH reports each year on water used each season in its annual report and annual publication *Reflections*. *Reflections* also includes a review of environmental watering outcomes. Links to each document are provided. VEWH also reports operational delivery data bi-monthly on its *Rivers and wetlands – northern region website page*

LTDLE in GL: 559.0 GL in northern Victoria, with an additional 40 GL in the Wimmera-Mallee headworks system.

Supporting Documents and Weblinks
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Calculation of LTDLE based on factors published on DEECA website <a href="#">here</a>
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VEWH annual reports and Reflections can be found on the publications page of the VEWH website <a href="#">here</a>
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Rivers and wetlands – northern region website page <a href="#">here</a>
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### Information request 5: Sustainable Diversion Limit Adjustment Mechanism (SDLAM): supply measures

**5(a) SDL adjustment mechanism project delivery has been limited. A shortfall of 190-315 GL/y is expected against the supply measure offset, only one constraints project is expected to be completed by 2024, and efficiency projects under contract are expected to provide 26 GL/y of the 450 GL/y target.**

- **What are the reasons for this?**
- **What is the Victorian government doing, or planning to do, to address this?**

Response:

The SDLAM projects notified by Victoria were proposed because they are critical to providing the best possible environmental outcomes in the face of climate change and in heavily regulated and modified river systems. The infrastructure and operational changes they deliver will enable environmental water holders to reach a greater diversity of floodplain environments and hold water on sites for the time needed to ensure benefits such as bird breeding.

A large number of projects under the SDLAM have already been completed or are forecast to be complete by 30 June 2024. These completed infrastructure and rules projects are already operable and delivering outcomes, and when their offsets are confirmed at reconciliation Victoria anticipates reaching approximately 88% of the state’s water recovery target, up from 77% currently. Specific details of project delays are provided below to explain the evidence for the requested extension which will bring Victoria to approximately 95% of the state’s target. Meeting the commitment to this last few per cent should include ensuring the Constraints projects are appropriately credited, and consideration of new viable SDLAM projects.

Victoria has worked constructively towards the additional 450 GL, working with the Commonwealth and other jurisdictions to deliver water recovery projects that meet the legislated socio-economic requirement, and as a result 76% of the contracted recovery towards the additional 450 GL is coming from Victoria.

### **VMFRP**

The Victorian Murray Floodplain Restoration Project is a program of nine SDL adjustment measures (9 projects) that are well underway through the planning and approvals process.

Since 2017 when projects were formally notified, funding negotiations, extensive planning approvals processes, challenges from record floods in 2022, supply chain issues and the COVID-19 pandemic have impacted the delivery timelines of these projects.

Due to time and cost impacts from these challenges, the VMFRP was required to refocus its work program in March 2023 as it did not have Australian Government commitment for a time extension or further funding. This was to mitigate any State financial risk and stem any perceptions of being disingenuous in undertaking cultural heritage surveys with no intent to construct.

Negotiations with the Australian Government continue, for further funding and time. Work is progressing for central sites to finalise primary approvals. A cost to complete Stage 1 activities is being finalised to enable Victoria to progress planning and approvals for all nine sites; and enable further negotiations to go to construction.

### **EEWD**

The EEWD project is a tri-state project being delivered jointly by South Australia and New South Wales, with the MDBA as the project delivery partner. The project will improve planning, forecasting, accounting, inter-valley coordination, and delivery processes for environmental water across the southern connected Basin, including up to any new regulated flow limits made possible under the Constraints Measures Program.

The notified outcomes of the EEWD project are:

1. Aligning releases of held environmental water with unregulated flows to shape the peak and/or duration of a flow event, to create a stronger biological stimulus in synch with natural climate signals;
2. Making efficient use of channel capacity enabled through the implementation of the notified constraints measures to allow increased managed flows up to higher regulated limits to improve in-channel, floodplain and wetland outcomes, and end-of-system outcomes; and
3. Coordinating environmental water releases across tributaries of the southern basin to maximise downstream and system-wide connectivity outcomes.

EEWD is being delivered in stages:

Stage 1A: Scoping (2021-22 - **Complete**): this stage involved project establishment and early planning to refine project scope, define how the project will work and cost of implementation;

Stage 1B: Detailed planning and design (2022-2024): this stage is currently underway and involves detailed planning and design, along with acceleration of operational tool prototyping and activities to progress measures aimed at addressing environmental water accounting and legal/operational impediments to delivering flows up to relaxed constraints flow-rates; and

Stage 2: Full implementation (post 2024)

Achieving alignment between regulated releases and unregulated flow events requires significant changes in river management, including better flow predictions under unregulated flow management, understanding which events to target under what conditions, understanding river flow behaviour across floodplains and timing of release from multiple sources over large distances with differing travel times. Alignment of flow release decisions with unregulated flows across the systems requires much faster and clearer decision-making structures and processes than are currently in place.

EEWD is a collaborative project involving agencies with roles in planning and delivery of environmental water across four jurisdictions.

During the For Stage 1A, the project procured external assistance to facilitate the involvement of end-users to complete scoping work. Stage 1B marked a shift to a delivery model that invests in end-users themselves. This shift better promotes end-user involvement and ownership to ensure the required design and prototyping work is fit for purpose and likely to be adopted. This creates complexity in project delivery to develop river management tools, systems and frameworks that are required to confidently navigate more complex flow opportunities and align new environmental water coordination practices into operational frameworks.

The 2023 Independent Assurance Panel assessment found that there is good governance in place, effective inter-jurisdictional relationships have been formed, and there are no obvious technical issues that would prevent the realisation of notified outcomes in due course.

The IAP also noted the enthusiasm and expertise of the people dedicated to EEWD outcomes, particularly across the technical measures, which comprises a range of forward-thinking, disciplined technical studies, all aimed at enhancing and increasing the delivery of environmental water.

Stage 1B commenced in October 2022 prior to formal funding arrangements being in place to maintain project momentum and progress the project as much as possible by June 2024 in readiness for implementation (Stage 2), subject to an extension of the legislated timeline for completion of projects under the Sustainable Diversion Limit Adjustment Mechanism.

The funding variation to provide the necessary funds to support resources for Stage 1B has recently been endorsed by partner government treasuries and is being considered for approval by the Commonwealth Minister for Water.

### **Constraints**

Victoria offset in Constraints is share of 40GL for Hume to Yarrawonga project (co-proponent with NSW)

Goulburn = 0 GL offset as 17ML day flow (as per notified Business Case) is within channel

Victoria remains committed to assessing what is feasible to deliver but requires more time to enable project delivery due to complex engagement and regulatory processes required. Independent reviews have shown that the MDBA's modelling used to conceptualise constraints, whilst best available at its time, is inappropriate for negotiating with landholders about impacts. A feasibility study was required to reset the project, undertake fit-for-purpose modelling and to bring key stakeholders in to help oversee its development. We now have much more accurate information on the estimated impacts to public and private land, calibrated with aerial photography and satellite imagery.

The Ministerial Council directive to adopt community co-design in developing these projects has been beneficial in establishing a scope that is tested by a diverse range of regional views and experiences. This is a key component of Victoria’s feasibility study development and has been well supported by the Committee.

COVID, flooding across northern Victoria, a lack of header agreement until 2019 and an inefficient approach to Ministerial signatures (Back in 2019, Commonwealth wished to be the final signatory) have all contributed to the length of time taken to get to this point.

The advice provided in the feasibility study to the Victorian Minister for Water will enable all Basin Water Ministers to have productive discussions about what is needed to ensure cooperation and coordination across jurisdictions.

<b>Supporting Documents and Weblinks</b>
Current Schedule B with DCCEEW – see website Federal Financial Relations
DCCEEW Schedule B – proposed variation 4 LMW Deed of Variation 4
Multiple milestone reports since 2019 to DCCEEW <a href="#">Milestone1_Bi-annualProgressReport160519.pdf</a> <a href="#">Milestone2_Bi-annualProgressReport.pdf</a>
<a href="#">Commonwealth VMFRP Milestone 03 report 021020.docx</a>
<a href="#">Commonwealth VMFRP Milestone 4 report 021020.docx</a>
<a href="#">Commonwealth VMFRP Milestone 5 Report 160221.docx</a>
<a href="#">Commonwealth VMFRP Milestone 05.5 Report Aug2021.pdf</a>
<a href="#">Commonwealth VMFRP Milestone 06 Report MBR047151R.pdf</a>
<a href="#">Commonwealth VMFRP Milestone 07 and 8A Report Oct2022.pdf</a>
<a href="#">EEWD Business Case 2017.pdf (sharepoint.com)</a>
<b>EEWD</b> <a href="#">31-Enhanced-Environmental-Water-Delivery-EEWD-Current-notification-Amendment-2-Redactions-applied.pdf</a>
<b>VMFRP</b> Proposed Schedule B with DCCEEW July 2023 - <a href="#">Schedule B - VMFRP - draft V4 updated 11072023.docx (sharepoint.com)</a>
<a href="#">Projects (water.vic.gov.au)</a>

**5(b) Please provide the business cases that the Victorian government prepared for the SDLAM projects.**

Response:

For the Constraints projects, Victoria leads the Goulburn and is co-proponent with NSW on the Hume to Yarrawonga

The Victorian Murray Floodplain Restoration project consists of nine SDLAM environmental measures (I.e. nine projects)

<b>Supporting Documents and Weblinks</b>
<a href="#">Microsoft Word - Goulburn BC_FINAL 20170905 .docx (water.vic.gov.au)</a>
<a href="#">9-Hume-to-Yarrawonga-Constraint-Phase-11-Business-Case-Final-18-April-2016.pdf (water.vic.gov.au)</a>
<a href="#">31-Enhanced-Environmental-Water-Delivery-EEWD-Current-notification-Amendment-2-Redactions-applied.pdf</a>

<a href="#">SDL VMFRP business cases x9</a>
<a href="#">EEWD Business Case 2017.pdf</a>
<a href="http://water.vic.gov.au">The Victorian Constraints Measures Program (water.vic.gov.au)</a>
<a href="http://mdba.gov.au">Managing constraints   Murray–Darling Basin Authority (mdba.gov.au)</a>

## Information request 6: SDLAM: constraints easing

### **6(a) Please provide any data available on the progress of constraints easement landholder negotiations.**

#### Response:

To date there has been no one-on-one negotiation with landholders regarding easements during this stage (Stage 1A) of the project. The feasibility study has identified four different flow scenarios the inundation footprint (across private and public estate), including the number of properties and area potentially impacted. This will form the basis for future landholder engagement.

Negotiating easements to enable higher flows has occurred in the Hume to Yarrawonga reach since 2001. The easements were to enable operational deliveries up to 25,000ML/d as at Doctors Point. To date, the uptake is approx 80% of agreements have been secured. The easements were negotiated by GMW for Victoria.

<b>Supporting Documents and Weblinks</b>
<a href="http://water.vic.gov.au">The Sustainable Diversion Limit Adjustment Mechanism (SDLAM): Murray-Darling Basin Plan (water.vic.gov.au)</a>
<a href="http://water.vic.gov.au">The Victorian Constraints Measures Program (water.vic.gov.au)</a>

### **6(b) What are the key lessons from the constraints negotiations undertaken to date? What's worked well, and have negotiations been more successful in particular reaches or areas than in other locations? If so, why?**

#### Response:

The feasibility study has indicated that inundation of private and public land occurs at all flow scenarios, with the upper Murray and upper Goulburn systems showing the highest private to public inundation ratio along with increase in number of private property impacted. Adoption of higher flow scenarios will lead to a greater duration and extent of upstream impacts to private property. Without these agreements, large scale watering of largely public land further downstream cannot be achieved. Key lessons gained from the Consultative Committee and 'kitchen table' meetings with a subset of community indicate the need to ensure accurate modelling and property information is available for future negotiations.

<b>Supporting Documents and Weblinks</b>
<a href="http://water.vic.gov.au">The Victorian Constraints Measures Program (water.vic.gov.au)</a>

### **6(c) Describe the community engagement process for constraints easement landholder negotiations, and provide any examples of community response to the projects.**

#### Response:

To date Stage 1A has utilised a Consultative Committee comprising landholders across each river system, with long term experience along with agency groups directly impacted by the project. 3 Registered Aboriginal Parties have directly participated on the Consultive Committee, whilst 17 non-

RAP groups have been engaged in discussion ‘on country’ to support the participation of all interested groups. Additionally, a limited number of ‘kitchen table’ meetings along with a number of targeted interest group conversations have also been held and documented (for the Feasibility Study) to expand discussion on the project. Stage 1B is identified as the key to engagement with one on one landholder discussion.

<b>Supporting Documents and Weblinks</b>
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<a href="http://water.vic.gov.au">The Victorian Constraints Measures Program (water.vic.gov.au)</a>
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## Information request 7: Climate change

**7(a) How has the Victorian government factored climate change into the development and implementation of its WRPs? In your response, please address:**

- ***whether climate risks are assessed, and management responses developed, at a local or WRP area level***
- ***how consistent and comparable are climate models and risk assessment methods across different WRPs, and***
- ***how climate change is considered in setting rules for planned environmental water.***

Response:

As stated in Victoria’s WRPs, the development of Victoria’s water resource plans included a risk assessment that considered risks including climate change. Strategies to address the identified risks, including climate change, are incorporated into Victoria’s water resources plan (see for example Appendix B of the comprehensive reports).

Climate change risks are addressed through a combination of state-based policy and programs, collaboration with regional water managers and engagement with regional stakeholders and interstate water planning agencies.

Examples of planning and policy development that help to address climate change risks include:

- Victoria’s Water Cycle Climate Change Adaptation Action Plan, Victoria’s Climate Change Strategy, and other actions undertaken under Victoria’s Climate Change Act
- Actions within *Water for Victoria*
- Incorporating climate change assessments and considerations into water resource management, planning and policy, for example through research, guidance and regional planning activities. Examples include the Victorian Water and Climate Initiative, Guidance for Assessing the Impact of Climate Change on Water Availability, and planning activities undertaken by water corporations and Catchment Management Authorities.

These strategies combine the policy directions contained and reinforced through *Water for Victoria* (DELWP, 2016) and existing regulations and guidelines.

Climate change risk assessment methods specifically for water availability are undertaken in a consistent way, using consistent climate change information, across Victoria through the development and application of the Victorian Guidelines for Assessing the Impact of Climate Change on Water Availability.

In Victoria, there are three places where PEW is provided under bulk entitlements. PEW in Victoria is not defined as set annual volumes, but as required flow rates or restrictions that are managed by the

storage manager without using held environmental water. The VEWH considers Climate change and variability as discussed in 4(e).

Supporting Documents and Weblinks
<a href="#">Water Resource Plans</a>
<a href="#">List of state water resource plans   Murray–Darling Basin Authority (mdba.gov.au)</a>
<a href="#">Victorian Water and Climate Initiative</a>
Victorian Guidelines for Assessing the Impact of Climate Change on Water Availability <a href="https://www.water.vic.gov.au/climate-change">https://www.water.vic.gov.au/climate-change</a>
Victorian Water Cycle Adaptation Action Plan <a href="https://www.water.vic.gov.au/climate-change">https://www.water.vic.gov.au/climate-change</a>
Victorian Climate Change Strategy <a href="#">Climate Change - Climate Change</a>

## Information request 8: First Nations water interests

### ***8(a) How does the Victorian government engage with First Nations people in managing water resources in the Basin?***

#### Response:

In Water for Victoria in 2016 the Victorian Government outlined commitments to better recognise Aboriginal values, uses and right to access water. In 2019, these commitments were further embedded in amendments to the Water Act 1989, to give greater recognition and involvement of Traditional Owners and Aboriginal Victorians in the management and planning of waterways and catchments.

Specifically, DEECA must– depending on the project they are working on – engage and/or consult with any and all relevant Traditional Owners formally recognised under the Aboriginal Heritage Act 2006, Traditional Owner Settlement Act 2010 or the Native Title Act 1993.

Through the Aboriginal Water Program, Victoria currently funds 24 Aboriginal Water Officers (AWOs) across the state, of which 17 are in the Basin. AWOs deliver projects in partnership with Traditional Owner Corporations, Aboriginal communities, Catchment Management Authorities and water corporations. The AWO positions provide a dedicated water expert on Country who supports Traditional Owners to self-determine how they partner with the water sector.

DEECA is increasingly engaging with Traditional Owners as part of policy and project work. An example is the collaboration with Traditional Owners in the Goulburn to Murray Trade Rule Review and continuing monitoring of flows in the lower Goulburn River.

Traditional Owners are already participating in environmental water planning and management with CMAs and the VEWH, and Victoria is working towards them taking on a greater role through implementation of Water is Life. In the longer term, this will enable Traditional Owners to be recognised as waterway managers for specific locations and environmental water holders (where this aligns with the aspirations of Traditional Owners).

Victoria’s water corporations are progressively increasing their engagement with Traditional Owners. Since 2017, the Minister’s Letters of Expectations to water corporations have identified delivering water for Aboriginal cultural, spiritual and economic values as a key policy priority. Going forward, the Statement of Obligations will be amended to support formal partnerships between the water sector and Traditional Owners.

Victoria is also opening up opportunities to emerging Traditional Owner talent and encouraging Traditional Owners to take up leadership roles across the water sector. There has been increased representation on the boards of Catchment Management Authorities and water corporations.

The boards of Water Corporations and Catchment Management Authorities are also encouraged to appoint an independent Aboriginal delegate – employed by the entity to provide independent advice to the board and actively participate in board meetings (without voting). This helps to improve board decision making and build a pathway for, and pipeline of, future First Nations board members as delegates are supported and encouraged to apply for Ministerial appointed board roles in the future.

Further examples of how the Victorian Government engages with First Nations people in managing water resources are given in *Water is Life* (i.e. Box 3 on page 28, Box 7 on page 33).

Supporting Documents and Weblinks
Due to its large size, <i>Water is Life</i> has been uploaded in two parts: <b>Section A (Victorian Government policy)</b> , and <b>Section B (Traditional Owner Nation Statements)</b> . <a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section A (PDF, 16.9 MB)</a>
<a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section B (PDF, 17.4 MB)</a>
<a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Full Text (DOCX, 3.2 MB)</a>
<a href="#">Water is Life: Summary (PDF, 5.5 MB)</a> . <a href="#">Accessible version (DOCX, 71.9 KB)</a>
<a href="#">Water-is-Life-Fact-Sheet-Traditional-Owners.pdf</a>
<a href="#">Goulburn to Murray trade review (waterregister.vic.gov.au)</a>
<a href="#">VEWH - How the VEWB will work with Traditional Owners</a>
<a href="#">Letter of Expectations (water.vic.gov.au)</a>
<a href="#">Increased Diversity On Victoria’s Water Sector Boards   Premier of Victoria</a>

**8(b) How does the Victorian government address the Priority Reforms under the National Agreement on Closing the Gap in implementing the Basin Plan?**

Response:

On 29 September 2022, the Victorian Government launched *Water is Life: Traditional Owner Access to Water Roadmap (Water is Life)*. *Water is Life* sets out a pathway for how the Victorian Government will return water to Traditional Owners, consistent with Target 15c, as well as increase Traditional Owner control of the care and management of water landscapes.

Victoria is continuing to work with other jurisdictions and the Coalition of the Peaks to progress work on data sources against which Target 9b (essential services including water and wastewater) may be reported against.

Supporting Documents and Weblinks
<a href="#">FINAL Victorian-Government-Aboriginal-Affairs-Report-2022.pdf (content.vic.gov.au)</a> <a href="#">2022-CTG-Annual-Reporting-Data-Tables.pdf (content.vic.gov.au)</a>
<a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section A (PDF, 16.9 MB)</a>
<a href="#">Water is Life: Traditional Owner Access to Water Roadmap, Section B (PDF, 17.4 MB)</a>
<a href="#">Water is Life: Summary (PDF, 5.5 MB)</a>

**8(c) How is First Nations’ science and knowledge used and valued in water and natural resource management in the Basin in Victoria? Do gaps in the legal frameworks governing the use of Indigenous Cultural and Intellectual Property (ICIP) inhibit partnerships with First Nations people and the sharing of Indigenous knowledges in Basin Plan implementation?**

Response:

The Department of Energy, Environment and Climate Action is committed to protecting Traditional Owners' intellectual property and data sovereignty.

Recognising and enabling Indigenous Data Sovereignty part of DEECA's Pupangarli Marnmarnepu – Aboriginal Self Determination Reform Strategy 2020-2025.

An example of how Victoria approaches this is the Data Sovereignty Statement included at the start of *Water is Life*.

The following five Regional Catchment Strategies incorporate the voice of Traditional Owners, and ongoing consideration and development of Traditional Ecological Knowledge: Mallee Regional Catchment Strategy; Wimmera Regional Catchment Strategy; North Central Regional Catchment Strategy; Goulburn Broken Regional Catchment Strategy; and North East Regional Catchment Strategy.

<b>Supporting Documents and Weblinks</b>
<a href="#">VAAF FINAL.pdf (firstpeoplesrelations.vic.gov.au)</a>
<a href="https://content.vic.gov.au/sites/default/files/2019-09/Self-Determination-Reform-Framework-August-2019.PDF">content.vic.gov.au/sites/default/files/2019-09/Self-Determination-Reform-Framework-August-2019.PDF</a>
<a href="#">Pupangarli-Marnmarnepu-Summary.pdf (deeca.vic.gov.au)</a>
<a href="#">Self-Determination Reform Framework   First Peoples - State Relations (firstpeoplesrelations.vic.gov.au)</a>
<a href="#">Home   Mallee Regional Catchment Strategy (rcs.vic.gov.au)</a>
<a href="https://wimmera.rcs.vic.gov.au">https://wimmera.rcs.vic.gov.au</a>
<a href="#">Home   North Central Regional Catchment Strategy (rcs.vic.gov.au)</a>
<a href="#">Home   Goulburn Broken Regional Catchment Strategy (rcs.vic.gov.au)</a>
<a href="#">Home   North East Regional Catchment Strategy (rcs.vic.gov.au)</a>

**8(d) How does the Victorian government support First Nations organisations to contribute to decision making in the Basin?**

Response:

Since 2016, Victoria has funded projects to reconnect communities to water for cultural, economic, customary, and spiritual purposes. Projects funded in northern Victoria include cultural mapping of waterways, Aboriginal waterway assessments, input to Seasonal Watering Plans and investigations into horticulture and aquaculture projects for native fish and bushfoods.

Through the Aboriginal Water Program, Victoria currently funds 24 Aboriginal Water Officers (AWOs) across the state, of which 17 are in the Basin. AWOs deliver projects in partnership with Traditional Owner Corporations, Aboriginal communities, CMAs and water corporations. The AWO positions provide a dedicated water expert on Country who supports Traditional Owners to self-determine how they partner with the water sector.

Traditional Owners are resourced to participate in decision making for specific programs and projects and also resourced to enter into formal partnership agreements with the water sector.

For the Victorian Murray Floodplain Restoration ) project (VMFRP), 14 Traditional Owner groups have been engaged to support Self-Determination for water and Country aspirations in project planning and delivery. Traditional Owners have been resourced, under legislated requirements for

regulatory approvals, to deliver cultural heritage management plans to ensure the VMFRP project understands both the cultural issues and potential benefits.

Since inception of the VMFRP, the project via the Mallee and North Central Catchment Management Authorities has proactively engaged Traditional Owners to better understand how to deliver outcomes for the health of Country.

Examples include, providing opportunities for Traditional Owners to reach Free, Prior and Informed consent relating to the VMFRP Project Scope including from Registered Aboriginal Party- First Peoples of the Millewa Mallee Aboriginal Corporation; modifying designs to ensure protection of culturally significant areas; Project Control Group Governance with a Traditional Owner member; Traditional Owner Engagement Strategy (21-24); Significant funding (\$1.6 M) to work with Traditional Owners to better understand their land and water aspirations through activities such as Aboriginal Waterway Assessments & identify within project opportunities; ECI Procurement Strategy with Aboriginal employment as a KPI, a Traditional Owner included on the Environment Effects Statement Standing and Inquiry Assessment Committee for all panel hearings and roundtable discussions.

The Victorian Constraints Measures Program recognises the importance of Traditional Owner representation at the start of the decision making process. The Consultative Committee has members from 3 of the Registered Aboriginal Parties whose Country could be watered. Conversations with Traditional Owners has provided the Victorian Government with a strong basis to undertake future work, should the timelines for SDLAM projects be extended.

**8(e) How are outcomes measured in relation to engagement with First Nations people?**

Response:

The number of formal partnership agreements for planning and management between Aboriginal communities and key water & catchment agencies is reported each year in the Victorian Government Aboriginal Affairs Report. The number of agreements has increased each year for the last three years.

**Supporting Documents and Weblinks**

[Victorian Government Aboriginal Affairs Report | First Peoples - State Relations](https://www.vic.gov.au/victorian-government-aboriginal-affairs-report)  
([firstpeoplesrelations.vic.gov.au](https://firstpeoplesrelations.vic.gov.au))

**8(f) What actions has the Victorian government taken to increase First Nations' water rights and access? For any relevant programs:**

- **What was the objective?**
- **What form did the action take (co-management, entitlements, funding an investment vehicle etc)**
- **What worked, and what did not?**
- **What lessons can be learnt?**

Response:

Since 2016 Victoria has funded projects to reconnect communities to water for cultural, economic, customary, and spiritual purposes. Projects funded in northern Victoria include cultural mapping of waterways, Aboriginal waterway assessments, input to Seasonal Watering Plans and investigations into horticulture and aquaculture projects for native fish and bushfoods,

In 2022, the Victorian Government committed to set aside 1.36 GL of water savings generated by the Connections Project for Traditional Owners and First Nations in northern Victoria.

Since 2016 Victoria has funded projects to reconnect communities to water for cultural, economic, customary, and spiritual purposes. Projects funded in northern Victoria include cultural mapping of waterways, Aboriginal waterway assessments, input to Seasonal Watering Plans and investigations into horticulture and aquaculture projects for native fish and bushfoods,

Water is Life sets out Victoria’s pathway to return water to Traditional Owners.

The Victorian Government is continuing to progress opportunities to return water to Traditional Owners within the existing entitlement framework, including developing opportunities as part of infrastructure projects and developing a framework to support Traditional Owners entering the water market for when no alternative pathway to water for economic development is available. Victoria is not proposing to establish a direct water entitlement purchase program.

Supporting Documents and Weblinks
<a href="#">Water-is-Life-Fact-Sheet-Traditional-Owners.pdf</a>
<a href="#">The Aboriginal Water Program</a>
<a href="#">Successful Connections Project Delivers Extra Water   Premier of Victoria</a>

### Information request 9: Helping communities adjust

***9(a) Since 2018, has the Victorian government changed how it assists Basin communities adjust to reduced water availability? Are new approaches needed, and if so, what should they look like?***

Response:

For more than 30 years the Victorian government has been supporting Basin communities to adjust to reduced water availability through implementation of water resource strategies, water market reforms and the Sustainable Irrigation Program (see supporting docs and weblinks).

Since the millennium drought, Victoria has undertaken significant water market reforms that have improved water users ability to manage changing water availability, including improvements to our allocation framework and the introduction of tools, such as carryover, which enable water users to flexibly manage their water-related needs.

Water for Victoria (2016) outlines the Victorian Government’s adaptation response to the impacts of climate change on our water resources and on the availability of water in the future. Chapter 4: Water for Agriculture sets out Victoria’s water management arrangements that enable farmers to maximise the value of agricultural production with available water, while supporting farming communities to adjust to change in a warmer and drier future.

These arrangements support the Victorian Government’s commitment to balancing its water recovery obligations under the Basin Plan with any associated impacts on Victorian industries and communities.

To achieve balanced outcomes from implementing the Basin Plan, Victoria’s approach to meeting our 1,075 GL obligation has been to prioritise water savings and environmental offsets projects, rather than further reducing the consumptive pool.

[Victoria and New South Wales criteria for additional water recovery](#), which informed the [socio-economic criteria for efficiency measures](#) all Basin Ministers agreed to adopt in 2018, set out an

approach for how additional water recovery could be achieved with neutral or improved outcomes for communities as required by the Basin Plan.

Sensible and considered approaches are needed to ensure further implementation of the Basin Plan can achieve the originally agreed environmental, social and economic outcomes, that will support a balanced, resilient and sustainable future for the Basin.

A sensible and considered approach would be well informed by the guiding principles set out in Victoria's Northern Region SWS, Water for Victoria, and the agreed socio-economic criteria for efficiency measures. Further factors to consider are whether options:

- Provide clear benefits for the environment
- Minimise impacts on water availability
- Contribute to a sustainable future for regional communities
- Proactively manage impacts of structural change within regional communities
- Support Traditional Owner values and aspirations

Victoria's approach will continue to be to prioritise options that:

- achieve environmental benefits without requiring the transfer of Victorian entitlements to the environment and do not reduce Victoria's Sustainable Diversion Limits (SDL) (i.e., 'offset' projects), or;
- proposals that can contribute to water recovery targets by transferring entitlements to the Commonwealth without impacting the consumptive pool (e.g., off-farm infrastructure projects).

In some instances, targeted entitlement purchases may be undertaken alongside decommissioning infrastructure where irrigation district rationalisation opportunities exist or an irrigation property is looking to shut down or transition to dryland, meaning demand is permanently removed.

### **Impact of buybacks as a water recovery approach**

600 GL or 52% of the more than 1,000 GL of buybacks from the consumptive pool in the southern Basin has been from Victorian high reliability water shares. Our communities living and working in the Basin have seen the impacts of the disproportionate purchase of Victorian HRWS firsthand.

Less water available for agricultural purposes has reduced production on farms, led to irrigation industry job losses and farm exits – all of which have flow-on effects in regional economies and communities. Increased water prices and greater dependence on an increasingly volatile allocation market has left irrigation businesses exposed to greater risk and uncertainty.

These impacts are felt not just by the local region where buybacks occur, but flow through the Basin's communities and regional economies, connected by water markets and agricultural service industries, and onto commodity markets and consumers.

Untargeted buybacks have also undermined the viability of our irrigation districts, creating a 'swiss cheese' effect that fragments irrigation communities, reduces delivery efficiency and leaves remaining irrigators with the increased cost of operating a system of a larger scale than the water available to be delivered. On-farm efficiency projects that require transfer of farmers entitlements have also contributed to the 'swiss cheese' effect as they are an indirect way of purchasing water.

While the impacts of water recovery from the consumptive pool are already being felt in Basin communities, the true extent of these impacts will not be realised until the next drought.

- Dry conditions in 2019/20 provided insight into how these impacts might manifest, with record high allocation prices across the Southern MDB.
- Analysis from water market experts estimate that based on volumes of consumptive entitlement on issue there will not be enough water available for current levels of irrigation development in the Southern MDB to be supported under extremely dry conditions. This will result in large-scale dry offs.

Since implementation of the Basin Plan commenced, irrigated agriculture in Victoria has adapted to reduced water availability through land use transition, farm system augmentation, improved water use efficiency and utilisation of water market tools. This has been supported by implementation of Water for Victoria actions and the Sustainable Irrigation Program. Whilst many individual irrigation businesses have adapted, exit from irrigation has also occurred. In some cases, this has been coupled with decommissioning of irrigation infrastructure.

If further water recovery from the consumptive pool is pursued to address SDLAM shortfalls, and/or to fully achieve the additional 450GL for enhanced environmental outcomes, far reaching significant social and economic impacts can be expected, both direct and indirect.

Because irrigation industries that will be impacted by this have reached a point where further efficiencies are unlikely, mitigating these impacts will require transformational change to allow for irrigation industries to transition to new and innovative economic opportunities.

Major industry transitions are resource intensive. They require a place-based framework supported by deep communication and engagement with affected communities and rapid deployment of support that moves the outcomes from a deficit position towards something more positive.

Experience with significant transitions suggests that positive, long-term economic, social and environmental outcomes are more likely when transitions are well planned to ensure that the changes benefit the entire communities through a proactive and positive approach.

The guiding principles of this type of transition needs to be managed and supported by a framework that:

- builds on identified strengths and advantages
- adopts an evidence informed approach
- places people at the heart of the transition process
- ensures equity and inclusion
- captures and develops new growth opportunities
- improves resilience to future change

<b>Supporting Documents and Weblinks</b>
<p><b>Key Victorian strategy documents</b></p> <p><a href="#">Our Water Our Future</a></p> <p><a href="#">Water for Victoria (2016)</a></p> <p><a href="#">Northern Regions Sustainable Water Strategy</a></p>
<p><b>Socio-economic impacts of water recovery</b></p> <p><a href="#">Frontier Economics &amp; TCA (2017) Social and economic impacts of the Basin Plan in Victoria</a></p> <p><a href="#">Frontier Economics &amp; TCA (2022) Social and economic impacts of Basin Plan water recovery in Victoria</a></p> <p><a href="#">Fact-sheet-Socio-economic-impacts-of-Basin-Plan-water-recovery-in-Victoria.pdf</a></p> <p><a href="#">200619-Victoria-Secures-Protections-For-Basin-Communities.pdf</a></p>

<p><a href="#">Sefton (2020) Final Report Independent assessment of social and economic conditions in the Murray-Darling Basin</a></p> <p><a href="#">Gupta, M. et al. (2020) Future scenarios for the southern Murray-Darling Basin, Report to the Independent Assessment of Social and Economic Conditions in the Basin</a></p> <p><a href="#">RMCG (2016) Basin Plan – GMID socio-economic impact assessment Change in the GMID: 2007-2018</a></p>
<p><b>Impacts on jobs:</b></p> <p><a href="#">MDBA (2018) Goulburn Murray community profile</a></p> <p><a href="#">MDBA (2015) Dairy Industry - early insights</a></p> <p><a href="#">MDBA (2015) - Goulburn-Murray Socio-economic profile (Shires of Greater Shepparton, Moira, Campaspe, Gannawarra and Loddon)</a></p> <p><a href="#">NSW IC (2023) Job Impacts from Water Recovery for the Environment in the Southern Murray-Darling Basin</a></p>
<p><b>Water market impacts of water recovery:</b></p> <p><a href="#">ABARES (2020) Analysis of Economic effects of water recovery in the Murray-Darling Basin</a></p> <p><a href="#">ABARES (2020) Murray-Darling Basin water markets: trends and drivers 2002-03 to 2018-19</a></p> <p><a href="#">Aither (2020) Southern Murray-Darling Basin water market Recent and future trends and drivers</a></p> <p><a href="#">Aither (2018) Water market impacts of on-farm water use efficiency programs that require entitlement transfer</a></p>
<p><b>Analysis of consumptive water supply and horticulture demand in the sMDB:</b></p> <p><a href="#">Aither (2022) Water Supply and Demand in the southern Murray-Darling Basin (2022 update)</a></p> <p><a href="#">Aither (2019) Water supply and demand in the southern Murray-Darling Basin</a></p>
<p><b>Why on-farm programs increase water use:</b></p> <p><a href="#">Hughes, N. et al. (2020) Farm Level Effects of On-Farm Irrigation Infrastructure Programs in the Southern Murray–Darling Basin</a></p> <p><a href="#">Wheeler, S. (2020) The rebound effect on water extraction from subsidising irrigation infrastructure in Australia</a></p>
<p><b>Adaptive capacity of agricultural industries:</b></p> <p><a href="#">Margaret Alston et al. (2018) Limits to adaptation: Reducing irrigation water in the Murray-Darling Basin dairy communities</a></p> <p><a href="#">Clarke, J. (2017) Social Sustainability in Dairying Communities Impacted by the Murray-Darling Basin Plan Short Report on research findings</a></p>
<p><b>Regional resilience plans</b></p> <p><a href="#">Goulburn Murray Resilience Strategy</a></p>

## Information request 10: Community engagement

**10(a) What actions have been taken by the Victorian government since 2018 to improve engagement with Basin communities and First Nations people and incorporate feedback into decision-making?**

Response:

Victoria is committed to meaningful engagement with communities and stakeholders to inform decisions and shape policy. The Victorian Government has been actively engaging with communities and stakeholders throughout the implementation of the Murray-Darling Basin Plan as we have worked to meet Victoria’s obligations.

Victorian Basin Plan engagement is focussed on effective two-way communication to build an understanding of the issues and concerns of Victorian communities. Victoria has listened and responded in good faith to the commitment in the basin plan to balance the social, economic and

environmental needs and minimise negative impacts of the Basin Plan on Victorian communities. For DEECA, community engagement describes the planned and unplanned ways we interact and relate to our partners, stakeholders and communities.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

Traditional Owners and Aboriginal Victorians are being closely engaged in Victoria's Basin projects. For example for the VMFRP, over a 12-month period (September 2021 – September 2022), there were a total of 1928 engagements with Traditional Owners, which reached 751 individuals and engaged 173 groups. The engagement included both Registered Aboriginal Parties and Traditional Owners without formal recognition. Sites for two of the nine projects – Hattah North and Belsar-Yungera – are areas of shared interest with various Traditional Owner Groups.

In 2019, the Victorian Government passed the *Water and Catchments Amendment Act 2019*, which amended the *Water Act 1989* to include consideration of Aboriginal cultural values and uses of waterways in the way that Victoria's water resources are managed, and to increase the requirement to consult and engage with Aboriginal people in water and waterway management. The purposes of the Act now include: 'to consider Aboriginal cultural values and uses of waterways, along with social and recreational uses and values, in the management of waterways'. Further amendments now specify requirements for Sustainable Water Strategies (SWS) to consider opportunities to provide for Aboriginal cultural values and uses of waterways in the SWS region. They also require at least one Aboriginal person as a member on the consultative committee tasked with advising the Minister on the preparation of the SWS. Similarly, the committees to advise on management plans for water supply protection areas must also include at least one Aboriginal person representative of the area under consideration (where possible).

Taungurung Land and Waters Council (TLWC) and Yorta Yorta Nation Aboriginal Corporation (YYNAC) were involved in the governance arrangement of the Goulburn to Murray Trade Review, providing recommendations to the Minister.

DEECA's Traditional Owner and Aboriginal Community Engagement Framework enables meaningful engagement between departmental staff and Traditional Owners by creating the necessary mechanisms, opportunities and protocols for participation and collaboration.

Victoria is taking the time to get things right and will prioritise co-design and meaningful stakeholder engagement.

A 2024 deadline is not realistic for all projects. Multiple independent reports confirm change is needed and Victoria has been seeking more time for completion of good quality projects that will deliver real environmental outcomes for more than three years.

Victoria commenced a feasibility study for the Constraints Measures Program (CMP) and established a Consultative Committee to assess at regional and system scale what is practical to deliver, the benefits and risks under climate change, and to understand community and Traditional Owner support for implementation

We are continuing to design constraints projects in good faith, to find out what can be delivered with community support and how much time that would be needed.

Victoria’s approach is aligned with the Victorian *Public engagement Framework 2021-2025*, working with communities to make better decisions and improve the lives of all Victorians.

The Victorian Government commits to meaningful, principled and inclusive public engagement.

### **Public Engagement Definition**

Public engagement is a planned process to support decision making. It encourages people to get involved in decisions that are of interest to them. Engagement refers to a range of opportunities including:

- Educating people about a topic;
- Obtaining feedback on a project; and
- Working with stakeholders to address local issues.

### **Vision, goals and outcomes**

The public engagement vision is ‘working together to make better decisions and improve the lives of Victorians’. Alongside the vision, are two domains and a series of outcomes:

#### Domain 1: Community outcomes - Building stronger relationships and engaged communities

- People get involved
- People have choice and flexibility
- Communities are well represented

#### Domain 2: System outcomes - A public sector that engages effectively with Victorians.

- Our workforce values engagement and uses it to inform decisions
- Our systems enable engagement

### **Victorian government engagement principles**

The following principles underpin the design and delivery of Victorian Government public engagement.

1. Meaningful - the process of public engagement is genuine and informs the final decision.
2. Inclusive - the engagement is respectful, inclusive and accessible.
3. Transparent - the engagement is clear and open about what the public can/cannot influence.
4. Informed - the engagement provides relevant and timely information to the public.
5. Accountable - the engagement is high quality and responsive to the public.
6. Valuable - the engagement creates value for the community and government. social, economic and environmental value.

<b>Supporting Documents and Weblinks</b>
<a href="https://www.vic.gov.au/public-engagement-framework-2021-2025/overview">https://www.vic.gov.au/public-engagement-framework-2021-2025/overview</a>
<a href="https://www.legislation.vic.gov.au">Water Act 1989 (legislation.vic.gov.au)</a>
<a href="#">Traditional Owner and Aboriginal Community Engagement Framework (PDF, 11.4 MB)</a>
<a href="https://www.water.vic.gov.au">Aboriginal Values and the Basin Plan (water.vic.gov.au)</a>

### **10(b) How could community engagement be further improved and consistently practiced in Basin Plan implementation?**

Response:

Continued engagement with Traditional Owners in Northern Victoria and other representative bodies is occurring on progress of the Basin Plan.

Victoria supports taking the time to get things right and will prioritise co-design and meaningful stakeholder engagement.

Victoria has always been at the table working collaboratively with other Basin states. Victoria supports cross jurisdictional engagement and would welcome further opportunities for this to occur. Recent years have been incredibly challenging for Basin communities with the impacts of fires, floods and the pandemic, so governments must find solutions – Victoria is committed to this work. Our communities expect us to work together to deliver the Basin Plan.