Seasonal Watering Plan

2026-27

VICTORIAN ENVIRONMENTAL WATER HOLDER

VICTORIA State Government

Acknowledgement of Traditional Owners

The Victorian Environmental Water Holder (VEWH) proudly acknowledges Victoria's Traditional Owners and their rich culture and pays our respect to Elders past and present, whose knowledge and wisdom have ensured the continuation of culture and traditional practices.

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and their deep spiritual connection to it.

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

The VEWH sees the meaningful intersection between the aims of the environmental watering program—healthy waterways, healthy communities—and the deep and enduring obligations Traditional Owners have to Country and Aboriginal people. We deeply value the ongoing contribution that Traditional Owners and Aboriginal traditional knowledge make to planning and managing water for the environment. We recognise that this contribution is largely through frameworks and processes that Traditional Owners have not determined, and their contribution does not imply endorsement of those frameworks and processes. More can be done to increase Traditional Owners' power and agency and enable progress towards self-determination within the environmental watering program.

Adequately recognising and strengthening the rights of Traditional Owners in water management is essential for achieving self-determination and healthy waterways in the future. The VEWH is committed to actively supporting and enabling this within its power and capability.

Cover image: Tahbilk Billabong, Nagambie, by Martine Hooper.

Acknowledgement of program partners

The VEWH acknowledges that the seasonal watering plan is based on the significant contributions and hard work of Victoria's catchment management authorities, Melbourne Water and Traditional Owner corporations in consultation with their communities.

Our program partners who contributed to the plan this year are shown below.

Between 2023 and 2025, the VEWH worked closely with five Traditional Owner Nations and together developed new guidelines for Traditional Owners making seasonal watering proposals for the use of environmental water in Victoria to heal Country. Work continues through reflection and the refinement of guidance. We acknowledge:

- Barapa Barapa Wamba Wemba Water for Country Steering Committee
- DJAARA (Dja Dja Wurrung Clans Aboriginal Corporation)
- First People of the Millewa-Mallee Aboriginal Corporation
- Taungurung Land and Waters Council
- Tati Tati Kaiejin.

Foreword

I am pleased to present the Victorian Environmental Water Holder's (VEWH's) *Seasonal Watering Plan 2026-27*, which sets out how water for the environment may be delivered across Victoria to improve the health and environmental values of our waterways.

The increasing variability of Victoria's climate has led to recent conditions that have been markedly drier with reduced rainfall, lower storage levels and declining inflows across many regions. In 2025-26, parts of western and central Victoria experienced their driest start to the water year in decades. This occurred alongside significant fire impacts in western landscapes and bushfires across central and northern regions. These changing and often extreme conditions reinforce the critical role of the Victorian environmental watering program in supporting the health and resilience of rivers, wetlands and floodplains, and the importance of practising adaptive management, forward planning and flexibility as the season unfolds.

This plan reflects the collective work of program partners who contribute their expertise, local knowledge and operational capability each year. Victoria's catchment management authorities (CMAs) and Melbourne Water, Traditional Owners, storage managers, land managers, and many stakeholders all play crucial roles in identifying environmental priorities, planning water deliveries and supporting on-ground outcomes. Their commitment ensures that environmental water is used efficiently, transparently and to best effect for the state's waterways.

Traditional Owner leadership and cultural authority continue to strengthen the environmental watering program. Under the Victorian Government's ***Water is Life: Traditional Owner Access to Water Roadmap***, we are progressing pathways for increased influence and decision-making by Traditional Owners. In 2026-27, we continue to evolve our operational practices to provide opportunities for self-determined planning and delivery of water for the environment on Country. Understanding and responding to Traditional Owner objectives, and watering sites of ecological and cultural significance are essential to supporting healthy waterways and healthy Country into the future.

The VEWH's long-term strategic direction continues to guide our approach. Our focus on optimising environmental and community benefits, adapting to climate change, enhancing landscape-scale planning, demonstrating outcomes, and supporting Traditional Owner self-determination is reflected throughout this plan. As climate change places increasing pressure on water availability and ecological systems, these interlinked priorities become even more important.

I thank the waterway managers and Traditional Owner organisations who developed the proposals that form the basis of this plan, as well as the community members, stakeholders and scientific partners who contributed their insight and expertise. Your contributions have helped shape a plan that is grounded in local knowledge, partnership and shared commitment.

On behalf of the Victorian Environmental Water Holder, I look forward to working together over the coming year to deliver this plan to support the health of rivers and wetlands, landscapes and communities across Victoria.

Julie Miller Markoff
Chairperson, Victorian Environmental Water Holder

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SECTION 1:
Introduction

The Victorian environmental watering program is the ongoing, collaborative management of water for the environment to improve the health of Victoria's rivers and wetlands and of the native plants and animals that depend on them.

Where can I find more information about the Victorian environmental watering program?

There is information about the Victorian environmental watering program on the Victorian Environmental Water Holder's (VEWH's) website at **vewh.vic.gov.au**. Information is also available directly from the VEWH on (03) 9637 8951 or by email to **general.enquiries@vewh.vic.gov.au**.

General information available includes:

- what water for the environment is
- why water for the environment is important
- what the environmental watering program aims to achieve
- what delivery of water for the environment involves
- how we know if water for the environment is successful
- what environmental water trading is.

You can get more detailed information about water for the environment in your region by contacting your local catchment management authority or Melbourne Water (waterway manager): the contact details are in **section 6.3**.

1.1 The seasonal watering plan

The seasonal watering plan is a statewide plan that guides decisions about delivering water for the environment in Victoria. It outlines how water for the environment may be used across the state under different climate scenarios and tells our program partners, stakeholders and communities what to expect during the water year.

In this section...

This seasonal watering plan publicly describes all the potential watering actions that may be carried out using water available under environmental water entitlements held in Victoria. This includes water available under the VEWH's environmental water entitlements and water held by other environmental water holders for use in Victoria. Decisions about watering actions are finalised throughout the year after the VEWH approves seasonal watering statements, watering authorisations and associated costs, based on water availability, climate, risk and other inputs.

The VEWH releases the seasonal watering plan for the upcoming water year by 30 June each year.

1.1.1 What 'seasonal' means

The *Water Act 1989* (the Water Act) defines a 'water season' as any period of 12 calendar months beginning on 1 July in any year and ending on 30 June in the following year. This is often more informally referred to as the water year. The use of 'seasonal' in this plan's name refers to the annual cycle of environmental water planning under the Act.

'Seasonal' is also used in the plan when referencing the various climate conditions observed each year, including differences between summer, autumn, winter and spring within the four-season framework and whether a year is estimated to be drier or wetter than average.

Victorian First Peoples recognise seasons and their changes as broader than fixed, linear parts of the calendar. Instead, seasonal change is understood as a dynamic, environmental cycle dictated by ecological indicators. Seasons are defined by observing changes in plants, animals, weather and celestial patterns (for example, star positions), resulting in multiple, specific seasons (such as the Wurundjeri's six-season calendar) that accurately guide food gathering and cultural practices. Irrespective of how seasons are defined, their influence is seen in plants, animals, water quality and water availability, as well as the environmental watering actions that may be required to support desired outcomes.

When we plan for water for the environment, we consider a range of potential conditions, including the consequent possible availability of water, by developing planning scenarios that range from drought to wet. We also incorporate observed changes in other factors, including plants and animals, into the planning of potential watering actions by including trigger-based actions in planning. These are not always tied directly to the season or calendar dates, but are triggered by observations of environmental events.

Planning this way enables the VEWH and our program partners to describe potential environmental flows before the start of the water year and adapt to conditions as they occur. There is more about how conditions influence environmental flows planning and delivery in **subsection 1.2.4**.

Sections 2 to 5 of the seasonal watering plan provide more details about potential watering actions that may be delivered in each river and wetland system during the year under different conditions.

1.1.2 Developing the seasonal watering plan

Seasonal watering proposals setting out the scope of potential watering actions for the year ahead are submitted to the VEWH for consideration each year. A proposal can be developed and submitted by a waterway manager (a catchment management authority or Melbourne Water), a Traditional Owner group or a partnership between the two.

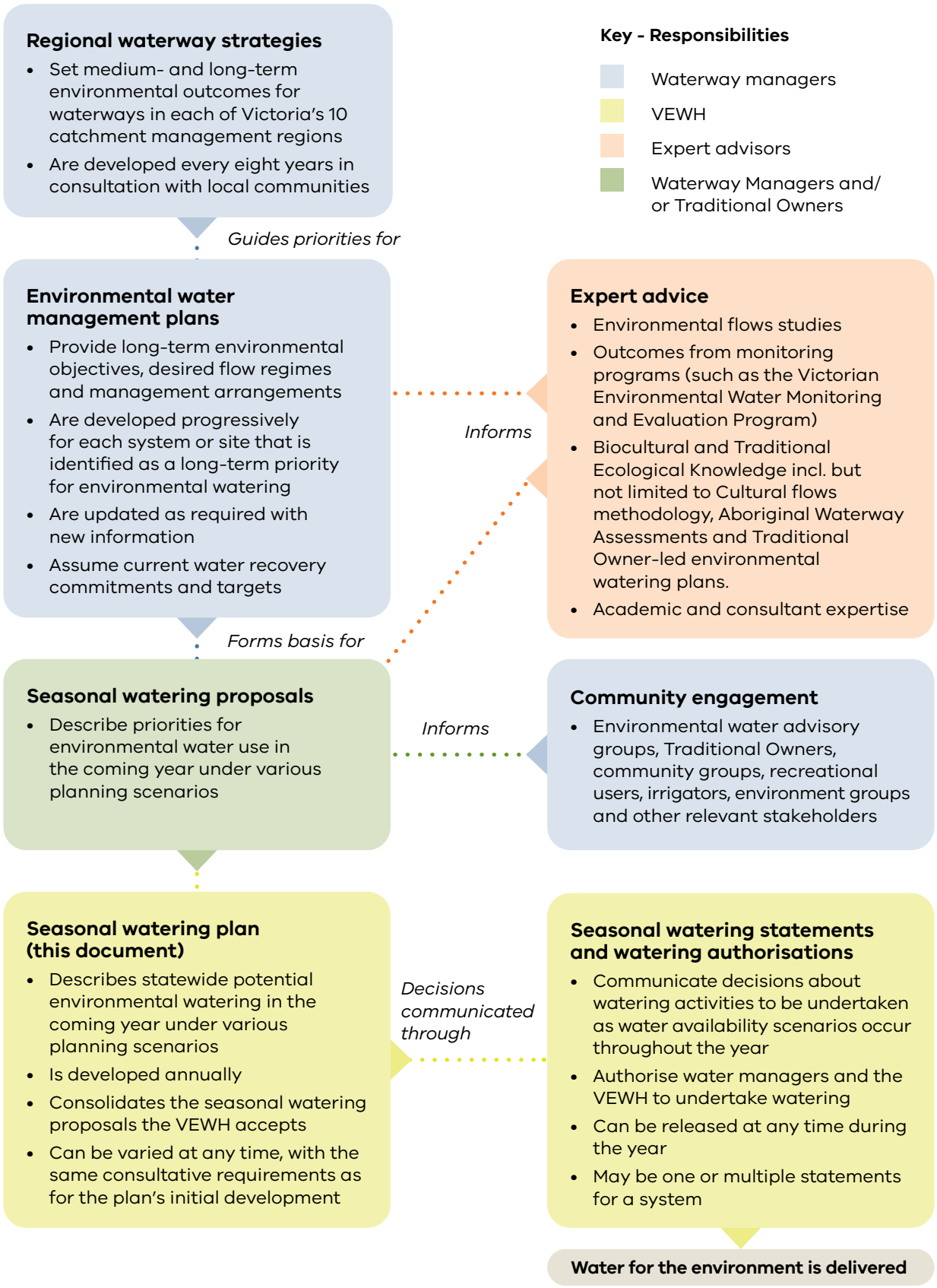
Proposals led by waterway managers look at the priorities and values in regional waterway strategies and draw on environmental water management plans, environmental flows studies, monitoring outcomes and the environmental knowledge of Traditional Owners. Waterway managers also seek further information and advice from Traditional Owners, technical experts, stakeholders and local communities when preparing proposals.

Proposals led by Traditional Owners may draw on a wide range of inputs, including those in the paragraph above, as well as Traditional Owner Country Plans, Aboriginal Water Assessments, Cultural mapping, Cultural water plans, ***Water is Life: Traditional Owner Access to Water Roadmap - Section B: Traditional Owner Nation statements*** and other sources of traditional knowledge.

The VEWH reviews the proposed watering actions in each seasonal watering proposal and consolidates accepted watering actions into the annual seasonal watering plan.

The different stages of environmental flows planning are shown in **Figure 1.1.1**. There is more information about environmental flows studies and environmental water management plans at **www.water.vic.gov.au/waterways**.

Figure 1.1.1 Victorian environmental watering program planning framework



1.1.3 Who contributes to the seasonal watering plan

Many people, groups and organisations contribute to the seasonal watering plan. The main contributors are the VEWH's program partners in the environmental watering program; these are organisations with some implementation responsibility. Other stakeholders (such as organisations or individuals with an interest in the environmental watering program) also contribute to the plan through various engagement opportunities.

The VEWH's program partners include Victoria's waterway managers, Traditional Owners, the Department of Energy, Environment and Climate Action (DEECA), other environmental water holders, storage managers and land managers.

Waterway managers consult and engage locally about potential actions to deliver water for the environment as seasonal watering proposals are being developed. Levels and methods of engagement vary, depending on different water systems, watering actions and stakeholders across Victoria and regional preferences. Traditional Owners[1] may be asked to share their advice about proposals, including the values that proposed watering supports. Irrigators, farmers, people living near or interested in a specific waterway, and members of recreational and environmental groups are examples of stakeholders who get involved.

Victoria's First Nations contribute in many ways. They advise waterway managers directly on proposals and broader waterway management activities. In 2025-26 this contribution was extended with the VEWH receiving the first proposals directly from Traditional Owners. Two of the five Traditional Owner groups that were involved in developing new guidelines for Traditional Owners to submit seasonal watering proposals to heal Country submitted proposals.

This year's plan includes actions proposed this way for the lower Murray wetlands from First People of the Millewa-Mallee and the Goulburn wetlands from Taungurung Land and Waters Council, as well as the receipt of a proposal jointly developed by DJAARA and North Central CMA for the Coliban system.

Some waterway manager regions have formal environmental watering advisory groups for waterway managers and stakeholders to discuss potential environmental flows for the coming year. There can also be one-on-one engagement between waterway managers and interested stakeholders.

Stakeholder engagement can help inform environmental objectives and community priorities and provide advice about cultural, social, recreational and economic values and uses.

Land managers and water storage managers endorse the seasonal watering proposals. Their endorsement ensures that releases of water for the environment align with land and storage management objectives, can be feasibly delivered through planned system operations and that risks can be adequately managed.

1.1.4 Changes to the seasonal watering plan

Under the Water Act, the VEWH can only authorise the use of water for the environment if it is consistent with the seasonal watering plan. This provides transparency about the planning and management of environmental flows.

The Water Act allows the VEWH to vary the seasonal watering plan to incorporate new knowledge or address circumstances not identified before the start of the water year. Any variations are publicly available at **vewh.vic.gov.au** as separate attachments to the current seasonal watering plan.

1 In the context of the Victorian Government's commitment to self-determination for First Nations, partners in the environmental watering program are committed to strengthening the role of Traditional Owners as program partners into the future and supporting self-determination within the program.

1.1.5 When a formal variation to the seasonal watering plan is not required

There may sometimes be an unforeseen circumstance that calls for using water for the environment, but does not require a variation to the seasonal watering plan. This includes:

- making a minor operational adjustment to a specific water delivery action
- using water for the environment for environmental emergency management purposes
- using a small volume of water for the environment for a technical investigation or to maintain infrastructure
- helping to deliver water for the environment held by other water holders for downstream, non-Victorian objectives.

The VEWH cannot anticipate such circumstances or include details about them in this plan. Waterway managers consult the VEWH in all situations where releases of water for the environment do not align with the seasonal watering plan.

Minor operational adjustments

There may occasionally be minor operational adjustments to actions to deliver water for the environment. The targeted river reaches, flow rates, timings, magnitudes and durations detailed in sections 2 to 5 may need to be adjusted due to changes in predicted rainfall, other water orders, delivery infrastructure constraints, emerging environmental knowledge or the timing of specific environmental triggers (such as bird breeding).

In all cases, actions will still aim to optimise environmental outcomes to meet the seasonal watering plan's objectives.

Any changes to the timing, magnitude or length of a planned watering action must be approved by the VEWH Commission through a formal variation when the proposed action requires additional water or funding to support the delivery, or by the VEWH CEO for minor variations relating to the use of water already allocated in the seasonal watering plan.

Environmental emergency management situations

Water for the environment may be needed in an environmental emergency management situation, such as mitigating a toxic water quality event. **Subsection 1.2.8** describes how environmental watering emergencies are managed and authorised.

Minor technical investigations and maintenance

There may be situations in which a small volume of water for the environment is used for research and development, or for small-scale infrastructure testing or maintenance. These are considered on a case-by-case basis and must aim to improve knowledge and management of water for the environment. They must not compromise the potential to achieve the environmental objectives in the seasonal watering plan.

Facilitating the delivery of water held by other water holders for downstream objectives

Some water held by other water holders is stored in Victorian storages and may be required to meet downstream demands, such as for the Coorong, Lower Lakes and Murray Mouth area in South Australia. Sometimes, this water needs to be delivered at a time and flow rate not specified in section 5 of this seasonal watering plan. The VEWH authorises and makes these deliveries possible if potential harms to Victoria's rivers, wetlands and floodplains are appropriately managed.

1.2 Implementing the seasonal watering plan

The seasonal watering plan scopes the potential delivery of water for the environment for the coming year, but many factors influence decisions about what water is committed and delivered.

In this section...

Factors that influence decisions about committing and delivering water for the environment are:

- seasonal conditions, weather forecasts and catchment conditions
- river and system operations like unregulated flows, catchment inflows, storage levels, other water users' needs and potential delivery constraints
- environmental or biological factors and triggers, like plant and animal responses to natural flow and temperature
- water availability
- risks or costs associated with an action to deliver water for the environment
- opportunities to deliver cultural, social, recreational or economic shared benefits.

There must be flexibility to respond to these different factors, as they can greatly influence the environmental outcomes and shared benefits we can achieve.

1.2.1 How watering decisions are made throughout the year

Many of the uncertainties about seasonal conditions, water availability and the consequential effects of system operating rules become clearer as the water year progresses. This clarity informs decisions about which environmental flows described in the seasonal watering plan go ahead and when. Many on-ground factors do not become clear until close to the anticipated water delivery.

The VEWH takes an adaptive management approach to deciding which watering actions to include in the seasonal watering plan by listening, learning from experience and adapting to what's happening on the ground. We consult with program partners and then review and finalise decisions about watering actions for the year so that water for the environment is used efficiently for the best environmental outcomes across Victoria.

Waterway, storage and land managers advise if watering actions can be delivered in each system during the year or if there are barriers to delivery. Environmental water holders use that information to decide which actions to authorise. All program partners have a role in identifying potential watering actions and implementing the release of water for the environment, as explained in **subsection 1.2.3**.

The VEWH can ask program partners for more technical information or community perspectives if potential watering actions need to change significantly during the season to respond to unforeseen circumstances.

Updated information about recent deliveries of water for the environment is published quarterly at **vewh.vic.gov.au**.

1.2.2 When the VEWH commits and authorises the use of water for the environment

Water is committed and authorised for use through seasonal watering statements and watering authorisations that allow waterway managers and the VEWH to release water for the environment. These are made in line with an approved seasonal watering plan and can occur before or during the water year. They are published at **vewh.vic.gov.au** once approved by the VEWH Commission.

Depending on the nature of the system and the environmental water entitlement being used, the VEWH may make one or multiple statements for a system during the water year. The VEWH confirms with the waterway manager that the required delivery arrangements, including risk management measures, are in place, and that any related costs are acceptable and that funds are available, before issuing a seasonal watering statement or as a condition of it.

Decisions to commit water for the environment need to consider whether delivery of the water across different systems requires access to the same environmental or bulk entitlement. One river, wetland or flow component may be prioritised over another.

The VEWH may commit water very close to the anticipated release date. This may be necessary due to a sudden demand for water caused by environmental, operational or weather conditions. For example, a colonial waterbird nesting event in Barmah Forest may trigger a need for water to maintain shallow flooding long enough for the birds to grow and fly from the nest.

The Commonwealth Environmental Water Holder (CEWH) and the Southern Connected Basin Environmental Watering Committee (for the Living Murray program) commit water from their respective environmental water portfolios for use. The VEWH formally authorises the use of CEWH and Living Murray water through seasonal watering statements/watering authorisations. All CEWH and Living Murray water delivered in Victoria is to be used to carry out actions detailed in this seasonal watering plan, in combination with other water sources or not (see **subsection 1.1.5**).

Watering authorisations enable the VEWH to order water for delivery. For the delivery of water held in Victoria, this includes:

- to Victorian sites on behalf of Traditional Owners who have actions included in the plan following the consideration of a Traditional Owner-led seasonal watering proposal
- to non-Victorian sites without a designated Victorian waterway manager on behalf of the CEWH and/or the Living Murray program
- from a Victorian storage/account to a downstream demand on behalf of the CEWH and/or the Living Murray program
- where joint water orders occur with NSW delivery partners.

These authorisations generally include the same conditions and requirements as seasonal watering statements, but the water must be ordered and delivered by the VEWH instead of a waterway manager.

When environmental water holders, waterway managers and Traditional Owners can change their plans after a seasonal watering statement or watering authorisation has been issued

The VEWH can withdraw a seasonal watering statement or watering authorisation at any point during the year to address emerging risks, changes in operating conditions, changes in costs or water availability.

The VEWH consults with the relevant waterway manager, Traditional Owners, storage manager and any other relevant environmental water holder for that river or wetland system before withdrawing a seasonal watering statement or watering authorisation.

A waterway manager, Traditional Owner, or storage manager may decide, in consultation with the VEWH, not to proceed with delivering water for the environment after a seasonal watering statement has been issued. This could be due to environmental triggers indicating the water was no longer required, resourcing constraints or new information that the potential environmental or public risk of watering is too high.

1.2.3 How the VEWH prioritises potential watering actions

Seasonal conditions can vary greatly from year to year, affecting the demand for water for the environment at particular sites and the supply of available water.

The VEWH may use tools like carryover and trade to avoid a deficit. If a deficit can't be avoided, the VEWH works with waterway managers, Traditional Owners and other water holders to prioritise actions to deliver water for the environment. There is more information about trade in the annual VEWH allocation water trading strategy at **vewh.vic.gov.au**.

What guides prioritisation decisions

When making decisions about environmental watering actions, the VEWH is required under the Water Act and related legislative instruments to consider the matters shown in **Figure 1.2.1**. Seasonal watering proposals provide information about these matters to support decision-making.

Figure 1.2.1 Matters to which the VEWH must have regard when making decisions about watering actions

GUIDING MATTERS	TYPES OF FACTORS CONSIDERED
Extent and significance of environmental benefit	• Size of the area being watered • Expected ecological outcomes • Expected scale of response • Conservation status of the species or community that will benefit • Expected contribution to regional environmental objectives
Likelihood of success	• Evidence that the desired outcomes are likely to be achieved • External threats that may affect getting the desired results
Longer-term benefits	• Value added to previous watering undertaken at the site • Longer-term environmental benefits expected • Ability to sustain these values into the future
Urgency of watering needs	• History of watering at the site • Potential for irreversible damage if the watering does not occur • Risks associated with not delivering the water
Feasibility of the action	• Capacity of infrastructure to meet the delivery requirements • System or operational constraints • Flexibility in the timing of delivery • Likelihood that planned management actions will mitigate external threats
Environmental or third-party risks	• Adverse environmental outcomes that may arise • Third-party risks associated with the event • Effectiveness of mitigation to manage third-party and environmental risks
Cost-effectiveness of the watering action	• Likely environmental benefit compared against: – costs to deliver and manage water – costs of interventions to manage external threats and risks
Efficiency of water use	• Volume of water needed to achieve the desired outcomes • Volume and timing of return flows that may be used at downstream sites • Alternative supply options such as use of consumptive water en route or augmenting natural flows • Risks of spills from storages in the upcoming water year and any carryover water that may be available
IN ADDITION TO THE MATTERS ABOVE THE VEWH MUST CONSIDER OPPORTUNITIES TO PROVIDE FOR THE FOLLOWING	
Cultural, social, recreational and economic benefits	• Traditional Owner values and uses • Social and recreational values and activities • Economic benefits

The VEWH also considers other factors not specified in legislation but important for making well-informed, practical decisions about environmental watering. These additional considerations include:

- decisions by other water holders about the use of their water for the environment
- decisions by the Victorian and Commonwealth governments about water resource policy
- the resources, knowledge and capability of the VEWH and its program partners
- storage managers meeting their obligations to the environment as part of the right to harvest and distribute water sustainably
- complementary works and measures being undertaken
- the availability of funds to pay the costs of water delivery and/or storage
- the merit of selling available allocation water for resource activities, strategic projects, complementary works and measures, research and knowledge to improve the performance of the environmental watering program
- services associated with managing Water Holdings and delivering water for the environment.

Decision-making process for potential watering actions

Under the Water Act, the VEWH determines how the Environmental Water Holdings are used to most efficiently and effectively improve environmental values and the health of water ecosystems.

The VEWH independently considers the relative environmental benefit associated with potential environmental watering actions and may prioritise those with the greatest benefit.

Waterway managers identify their regional priority sites and watering actions in seasonal watering proposals. Proposals are developed in consultation with program partners, technical experts and the local community and outline annual regional priorities for the VEWH to consider.

Waterway managers engage with stakeholders and communities and advise about the extent and significance of actions to deliver water for the environment and the highest priorities in their region.

Traditional Owners' expertise is sought during the development of waterway managers' proposals and can influence the plan through those proposals. The VEWH also considers all proposals received under the trial implementation of guidelines for Traditional Owners wanting to submit seasonal watering proposals to heal Country.

Storage managers' advice is vital to understanding how practical it is to water at a particular time within potential operational constraints. Storage managers endorse deliveries of environmental flows through their delivery networks. They advise on deliveries after considering likely operational and maintenance activities and the risks associated with the watering actions.

Land managers endorse the delivery of environmental flows on their land after considering land management activities, public access and the risks and benefits of the potential watering actions.

1.2.4 How seasonal conditions affect the use of water for the environment

Seasonal conditions influence how water for the environment is managed, just as rainfall patterns influence how people water their gardens and farmers irrigate their crops. As explained in **subsection 1.1.1**, seasonal conditions influence what water will be available during the water year and how that water may be best used to realise environmental objectives. Waterway managers and Traditional Owners consider a wide range of conditions when planning environmental watering actions for sites in their seasonal watering proposals. Environmental water planning accounts for this variability in conditions by using adaptive planning and by presenting potential watering actions under different planning scenarios, the main scenarios being drought, very dry, dry, average, and wet. Together, these scenarios reflect the broad scope of possible conditions for the year ahead and the potential watering actions required to support values under these conditions.

Waterway managers and Traditional Owners work with program partners to get the best possible outcomes from water for the environment by considering:

- objectives under each planning scenario
- how rainfall, natural flooding and delivering water for operational and/or consumptive use can help achieve or affect short-term management objectives and longer-term environmental objectives
- how water for the environment can build on natural flows or irrigation deliveries to meet environmental needs
- natural climatic cues that might help produce an environmental outcome: for instance, a drying wetland.

Planning scenarios are presented in the seasonal watering plan as a basis for adaptively managing environmental water use as the season unfolds. For example, watering actions may be delivered in line with a dry scenario at the start of a water year and then shift to being delivered in line with an average or wet scenario if conditions become significantly wetter. They also indicate early how much water may be used at different sites and whether the VEWH may need to trade water during the season to meet identified environmental needs.

Figure 1.2.2 shows how different planning scenarios can influence decisions about how water for the environment is managed in a year.

Figure 1.2.2 Example planning scenarios under a range of climatic conditions

Planning scenario	DROUGHT	DRY	AVERAGE	WET
EXPECTED CONDITIONS	• No or negligible contributions from unregulated flows; waterways may stop flowing at times, more likely in summer & autumn	• Minor contributions from unregulated reaches and tributaries, more likely in winter & spring	• Unregulated flows provide extended low flows and multiple freshes, more likely in winter & spring; minor storage spills may occur	• Extended, unregulated high flows, multiple large storage spills and overbank flooding, more likely in winter & spring but possible at any time of the year
MANAGEMENT OBJECTIVES	**Protect** • Avoid critical loss • Maintain refuges • Avoid catastrophic events	**Maintain** • Maintain river functioning with reduced reproductive capacity • Maintain key functions of high-priority wetlands • Manage within dry-spell tolerances	**Recover** • Improve ecological health and resilience • Improve recruitment opportunities for key plant and animal species	**Enhance** • Restore key floodplain wetland linkages • Maximise recruitment opportunities for key animal and plant species
EXAMPLE WATERING ACTIONS TO SUPPORT MANAGEMENT OBJECTIVES	• Provide low flows and trigger-based freshes to maintain water quality in deep refuge pools	• Provide summer & autumn low flows to manage water quality and maintain connectivity	• Provide year-round low flows to maintain habitat connectivity to support fish movement	• Maintain year-round low flows and seasonal freshes to improve the quality of in-stream and bank vegetation and trigger the spawning and movement of native fish
		• Extend the duration and/or magnitude of flow peaks to freshen water quality in deep refuge pools	• Extend the duration and/or magnitude of peaks to provide spawning cues for fish	• Maintain connectivity and the exchange of nutrients between the river and floodpath
			• Provide seasonal freshes to support the establishment and maintenance of bank vegetation	• Slow the recession of natural peaks to avoid bank slumping and erosion
				• Top up natural flows if needed, to meet targets for winter low flows and spring peaks

1.2.5 Traditional Owner cultural values and uses, and recreational, social and economic benefits from water for the environment

Seasonal watering proposals illustrate Traditional Owner cultural values and uses of waterways and detail how proposed watering may support cultural objectives for healthy Country.

The VEWH recognises that Traditional Owners have not determined the current government frameworks for managing water for the environment, and it is committed to progressing Traditional Owner self-determination in the environmental watering program, as set out in the Victorian Government's ***Water is Life: Traditional Owner Access to Water Roadmap***. ***How the VEWH will work with Traditional Owners*** sets out the VEWH's commitment to progressing Traditional Owner self-determination. There is more information about this in **subsection 1.2.6**.

Water delivered for the environment improves the health of rivers, wetlands and floodplains and provides many social, recreational and economic benefits. It helps increase populations of fish species (including those popular with anglers), support bird breeding events that birdwatchers enjoy and boost experiences for the many people who gravitate to healthier waterways for relaxation and wellbeing.

Waterway managers work with Traditional Owners, stakeholders and communities to identify environmental, cultural, social, economic and recreational values and uses of waterways. They consider opportunities to support cultural, social, recreational, and economic values and uses when planning environmental water deliveries, provided the delivery does not compromise environmental outcomes. Longer-term benefits for the environment and the community sometimes involve short-term inconvenience. For example, floodplain watering in Hattah Lakes may limit access, which can inconvenience campers in the short term, but the environmental benefits of watering boost tourism and recreational experiences in the long term and enhance the experience of connecting with nature. If there might be short-term inconveniences, waterway managers work with land managers to minimise disruptions to users.

Values and uses considered during planning for environmental flows are shown in each system in sections 2 to 5. Specific watering actions planned to align with a social or recreational objective or support Traditional Owner cultural values and uses are identified by the icons shown in **Figure 1.2.3**.

Figure 1.2.3 Cultural, social and recreational objectives icons

1.2.6 Self-determination for Traditional Owners in the environmental watering program

This seasonal watering plan complies with existing legislative requirements to consider Aboriginal cultural values and uses when preparing seasonal watering proposals, which are currently based mainly on engagement conducted by waterway managers.

The ***Seasonal Watering Plan 2025-26*** included the first proposed watering actions submitted by Traditional Owners directly to the VEWH, which is an early outcome of the Victorian Government's 2022 ***Water is Life: Traditional Owner Access to Water Roadmap***. The roadmap sets out short, medium and long-term policy actions to reform existing government frameworks and processes for the management of water on Traditional Owner Country, including water for the environment. The VEWH is working with Traditional Owners, DEECA and waterway, land and storage managers to progress *Water is Life* policy actions.

1.2.7 How risks are managed

Risk management is essential for managing water for the environment, and program partners continually consider risks during annual and longer-term planning, implementation, and review.

The VEWH and its program partners have a risk management framework that addresses interagency risk, respects each partner's practices and documents roles and responsibilities for operating arrangements.

The seasonal watering proposals that form the basis of this plan identify potential risks associated with the specific watering actions proposed for the coming water year. Partners jointly assess risks, and they identify and commit to mitigation actions when developing proposals to manage the shared risks of delivering water for the environment.

The main shared risks are shown in **Table 1.2.1**. Program partners consider and assess these and other potential risks as the year unfolds and planned watering actions are about to start.

Some risks may only occur at the time of delivery, such as forecast heavy rain coinciding with a planned environmental flow, which could increase the risk of nuisance flooding. Program partners review risks immediately before a planned environmental flow and take agreed measures to reduce the risks. They identify and agree on mitigation actions through operational risk workshops and endorsement of seasonal watering proposals and/or delivery plans. Watering actions will not be carried out if unacceptable risks to the public or the environment cannot be mitigated.

Table 1.2.1 Main shared risks of delivering water for the environment

Type of risk	Example mitigating actions
Delivering water for the environment contributes to third-party impacts	• Identify and understand the capacities of water systems and monitor water levels at key locations to inform daily water release decisions to reduce potential risks. • Take into account potential catchment run-off from forecast rainfall before deciding on the timing, duration and volume of releases of water for the environment. • Put a communication plan into action (for example, including media releases, public notices, and signage) before environmental flows to ensure people are informed about significant deliveries; this includes early liaison with stakeholders who may be affected. • Restrict access by closing gates and tracks.
Inability to achieve or demonstrate environmental outcomes from delivering water for the environment	• Conduct intervention monitoring with available resources to identify the environmental response and consider longer-term environmental responses. • Conduct research to better understand responses to water for the environment. • Share the outcomes of monitoring and apply learnings to future deliveries. • Undertake complementary works to help achieve the environmental objectives of delivering water for the environment.
Delivering water for the environment has adverse effects on the environment (such as bank erosion and the spread of weeds)	• Plan the timing, frequency, length and variability of environmental flows to limit adverse effects. • Monitor the outcomes of deliveries of water for the environment and adapt future deliveries and/or scientific recommendations and learnings if necessary.

Even with the best risk management controls, unintended effects may result from environmental flows or situations in which those flows cannot be delivered as planned. Program partners work together in these situations to respond to incidents and then learn and adapt their risk management. The VEWH has developed an agreed approach to incident management to help program partners report, investigate and respond to risks.

1.2.8 How environmental watering emergencies are managed

An emergency watering action is where water for the environment may be necessary to prevent, alleviate or respond to an acute environmental threat.

Common threats are:

- impacts on water quality from low oxygen levels, toxic levels of blue-green algae, high temperatures or high salinity
- falling water levels at a refuge habitat or breeding site that are an immediate risk to native aquatic plants and animals.

Acute environmental threats are unpredictable, so potential emergency watering actions may not be specified in sections 2 to 5 of this plan. The VEWH has developed a procedure for emergency watering actions to be taken at short notice.

Emergency watering procedure

Emergency actions to deliver water for the environment are usually one or other of the following scenarios:

- the necessary watering action is not described adequately or at all in the current seasonal watering plan, but there is a valid seasonal watering statement with water available that covers other watering actions for the affected system and authorises a total volume that is enough for the proposed emergency watering action, or
- there is no authorised seasonal watering statement for the affected system, or there is not enough water available under the seasonal watering statement to cover the proposed emergency watering action.

Under the first scenario, waterway managers and/or Traditional Owners can re-prioritise watering actions authorised under the existing seasonal watering statement to allow the emergency watering action without affecting the overall resource.

Under the second scenario, waterway managers and/or Traditional Owners must ask for an emergency seasonal watering statement from the VEWH before water for the environment can be used for an emergency watering action. The VEWH has administrative processes to support emergency decisions to deliver water and to expedite requests for emergency seasonal watering statements.

1.3 How to read the seasonal watering plan

Four broad geographic areas—Victoria's Gippsland, central, western and northern regions—are represented in sections 2 to 5 of the seasonal watering plan with regional overviews that include:

- a description of the region
- an acknowledgement of the Traditional Owners of the area
- a record of communities and program partners engaged
- a description of how risks are managed
- a seasonal outlook for the region.

Each region is divided into system sections for waterways and wetlands that can be supplied with water for the environment from an environmental entitlement. Each section presents the system's environmental values, environmental objectives and planned actions for the year.

The system sections include:

- **a system introduction**, naming the one or more waterway managers, storage managers and/or environmental water holders for the system
- **a system overview**, describing the system's location, its waterways and major features
- **environmental values**, outlining the main water-dependent species, communities, ecological processes and habitats that rely on healthy waterways and form the basis for environmental objectives. **Figure 1.3.1** provides a summary of the icons used in the plan and the environmental values they represent
- **environmental objectives in the system**, which **Figure 1.3.2** shows, summarising the outcomes sought for each environmental value in the system. Each objective usually relies on one or more continuing watering actions and complementary actions, like controlling invasive species or installing fishways
- **social, recreational and economic values and uses** considered in planning for environmental flows, along with opportunities to support these values
- **the scope of environmental watering**, which **Figure 1.3.3** shows, setting out potential actions to deliver water in 2026-27, the expected physical or biological effects of the actions and the longer-term environmental objectives they support. Achieving each environmental objective relies on one or more potential actions and their expected watering effects

- **scenario planning**, which **Figure 1.3.4** shows, indicating in a table the range and priority of potential actions to deliver water for the environment in the coming year under different climate and water availability conditions (represented as planning scenarios). The text accompanying the table explains the rationale or need for the proposed combination of potential actions for each scenario. Drought, dry, average and wet planning scenarios are prepared for most systems, but occasionally, there are more or fewer scenarios. **Subsection 1.2.4** explains how seasonal conditions are considered in planning
- **a Traditional Owner-led watering inclusion** in systems where watering actions have been proposed by Traditional Owners directly to VEWH. This inclusion has a similar structure to the rest of the system section, as described above, but relates specifically to the Traditional Owner-led proposed watering actions. It includes the scope of environmental watering, scenario planning, and the outcomes for healthy Country sought through watering.

Figure 1.3.1 Icons used in the plan and the environmental values they represent

A Frog populations	**PR** Platypus or water rat (rakali) populations
B Waterbird populations	**T** Turtle populations
CN Carbon and nutrient cycling and connectivity	**TA** Terrestrial (land-based) animals
F Fish populations	**V** Vegetation
G Physical stream characteristics	**WQ** Water quality
MI Waterbugs (macroinvertebrates)	

Figure 1.3.2 Example environmental objectives table

Environmental objectives in the Macalister system

	F1 – Increase the distribution, recruitment and abundance of all native fish, and increase opportunities for the spawning and recruitment of native migratory fish (such as Australian grayling)
	**G1** – Maintain the form of the riverbank and bed to provide physical habitat for aquatic animals and plants
	**PR1** – Increase the abundance of platypus and rakali (water rats)
	**V1** – Maintain emergent (non-woody) and fringing (woody) vegetation in the streamside zone **V2** – Reinstate submerged aquatic vegetation
	**MI1** – Increase the abundance and number of functional groups of waterbugs
	WQ1 – Improve water quality during periods of reduced or no passing flow from Lake Glenmaggie **WQ2** – Improve water quality in the Thomson River estuary

In this example, environmental flows that provide optimal spawning opportunities for Australian grayling will contribute to achieving this objective, as will complementary works such as the construction of fishways to increase the habitat range for native fish.

The **Environmental objectives in the system** table uses an icon and a letter/number code for each objective. The icons and codes in that table are then used in the **Potential environmental watering actions, expected watering effects and environmental objectives** table to set out the environmental objectives of each potential action.

Figure 1.3.3 Example potential environmental watering actions, expected watering effects and environmental objectives table

Potential environmental watering actions describe the timing, magnitude, duration and frequency of environmental flows to rivers or the timing of releases to wetlands. **Subsection 1.2.3** explains how watering actions are prioritised. The seasonal watering statements issued by the VEWH authorise waterway managers to undertake environmental watering actions described in this table. **Subsection 1.2.2** explains how seasonal watering statements and watering authorisations fit into the environmental watering planning framework.

Environmental objectives are those listed in the environmental objectives table for each system (as the **Figure 1.3.1** example shows). Each environmental objective will be supported by one or more watering actions and functional watering objectives.

Potential environmental watering action	Expected watering effects	Environmental objectives
Summer/autumn low flow (125 ML/day during December to April)	• Maintain habitat and water quality in pools and riffles for waterbugs and fish • Facilitate localised movement between habitat types for small-bodied native fish and platypus • Prevent encroachment into the in-stream channel by invasive plants	F1, PR1, V1, MI1
Summer/autumn fresh(es) (one to two freshes of 230-350 ML/day for seven days during December to March)	• Wet aquatic and fringing vegetation to maintain its condition and support its growth • Wet low-lying benches to prevent encroachment by invasive plants and enable vegetation zonation • Provide velocity and depth diversity and prevent sediment smothering by fine sediments • When delivered in February to March (at 230 ML/day), the fresh also aligns with and supports native fish movement to: – trigger downstream migration of adult short- and long-finned eel and upstream movement of juvenile Australian bass – increase the water depth over riffles to facilitate local movement between habitats for large-bodied native fish	F1, G1, V1

These example icons demonstrate which potential watering action may be modified to increase benefits to Traditional Owner values and uses or recreational opportunities, provided environmental outcomes are not compromised.

The ability of the VEWH and its partners to modify flows to deliver these benefits will depend on the weather, climate considerations, the available water and the way the system is being operated to deliver water for other purposes.

An **expected watering effect** is the physical, chemical, biological or behavioural effect experienced from a potential watering action. Each potential watering action will have one or more expected watering effects.

Figure 1.3.4 Example environmental watering planning scenarios table

The predicted volumes of water for the environment that will be available under each scenario for the year.

Potential watering actions that are required this year, given current environmental conditions and the planned environmental watering strategies under each planning scenario.

The subset of watering actions the waterway manager proposes to deliver with the predicted supply under each scenario.

The subset of watering actions that may be delivered if opportunities arise. Some of these actions can and should be delivered if more water becomes available through increased allocation or water trade or transfers, or if tier 1 actions are achieved with less environmental water than expected.

Other tier 2 actions are not considered essential to deliver during the year under a planning scenario but are likely to be needed in coming years. They may be delivered during the year if environmental conditions change or to take advantage of operational circumstances.

Planning scenario	Drought	Dry	Average	Wet
Expected conditions	• Very low streamflow • Reduction in passing flow • Increased surface water loss to groundwater • Irrigation releases likely	• Low streamflow • Some reduction in passing flow • Increased surface water loss to groundwater • Irrigation releases likely	• Average streamflow • Partial freshes naturally provided • Some irrigation releases likely	• Above-average streamflow • Partial or full freshes naturally provided • Irrigation releases unlikely • Tarago Reservoir spills
Expected availability of water for the environment	• 2,100 ML	• 2,500 ML	• 3,600 ML	• 3,900 ML
Tarago River (targeting reach 2)				
Potential environmental watering – tier 1 (high priorities)	• Summer/ autumn freshes (five freshes)	• Winter/ spring low flow (partial) • Winter/ spring fresh (one fresh) • Summer/ autumn low flow • Summer/ autumn freshes (three freshes)	• Winter/spring low flow • Winter/spring freshes (two freshes) • Spring high flow • Summer/ autumn low flow • Summer/ autumn freshes (five freshes) • Autumn high flow	• Winter/spring low flow • Winter/spring freshes (two freshes) • Spring high flow • Summer/ autumn low flow • Summer/ autumn freshes (five freshes) • Autumn high flow
Potential environmental watering – tier 2 (additional priorities)	• Winter/ spring fresh (one fresh) • Autumn high flow • Summer/ autumn low flow • Winter/spring low flow • Spring high flow	• Winter/ spring low flow (full demand) • Spring high flow • Autumn high flow	• N/A	• N/A
Possible volume of water for the environment required to achieve objectives	• 2,000 ML (tier 1) • 3,100 ML (tier 2)	• 2,500 ML (tier 1) • 1,800 ML (tier 2)	• 3,065 ML (tier 1) • 0 ML (tier 2)	• 3,160 ML (tier 1) • 0 ML (tier 2)
Priority carryover requirements for 2026-27	• 0 ML			

The volume that is planned to be kept in storage to achieve high-priority watering actions the following year. For the seasonal watering plan, predictions of the volume of water available and carryover are made before the beginning of the water year and are based on best available information. They are estimates only, and the VEWH and its program partner revise the estimates continually throughout the year.