

# SNAPSHOT

## 10 YEARS OF PROGRAM ACHIEVEMENTS

**185** Environmental flows delivered to 185 rivers reaches and wetlands, including 131 new locations since the VEWH commenced in 2011.

**6** Protected six internationally important Ramsar wetlands at Hattah-Kulkyne, Gunbower Forest, Kerang, Bellarine Peninsula, Barmah National Park and Gippsland Lakes.

**6.7 million** The VEWH oversaw the delivery of 6,778,438 ML of environmental water. This volume of water for environment does not include Commonwealth water delivered in the Wimmera by the CEWH, or water delivered to the Snowy River from Lake Jindabyne in New South Wales by the VEWH.



**10**

In 2012-13 only one Traditional Owner group participated in environmental flows planning. Nine years on, in 2020-21, Traditional Owners contributed to the planning, delivering or monitoring of at least 10 watering activities across the state.



**56**

Watering actions across Victoria supported at least 56 different social, economic, recreational values, such as fishing, rowing, camping, geocaching, citizen science and tourism in 2020-21.



**96%**

Of the top 50 Victorian recreational fishing reaches, 28 can receive environmental flows. On average 96% of these reaches receive environmental flows.

Across Victoria environmental flows are supporting:



**120**

At least 120 species benefited from watering events, almost half of which are threatened.



**19**

Platypus at more than 19 locations



**11**

Murray cod at up to 11 locations



**25**

River red gum at more than 25 locations



**14**

River blackfish at up to 14 locations



**8**

Silver perch at up to 8 locations

Indicative Victorian locations of highlights on opposite pages

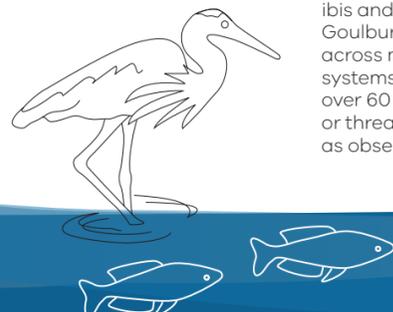
- Hattah Lakes
- Wimmera River
- Glenelg River
- Lake Yando
- Horseshoe Lagoon
- Campaspe River
- Barmah Forest
- Moorabool River
- Werribee River
- Tarago River
- Thomson River
- Snowy River



# HIGHLIGHTS

## 10 YEARS OF BENEFITS FROM WATER FOR THE ENVIRONMENT

Provided critical 'life-support' watering to help fight the decline of vulnerable native waterbirds across Victoria.



Water for the environment has provided a mosaic of wetland habitats in drought affected landscapes creating carefully timed opportunities for birds to breed and feed so populations remain resilient. The focus has been on vulnerable and iconic native species including spoonbills, ibis and egrets of **Barmah Forest** in the north; the iconic brolga in the Goulburn Broken wetlands; and significant duck and swan species across many regions. The number and diversity of species within systems is also improving. Throughout the Central Murray wetlands, over 60 species are showing signs of recovery. This includes 18 rare or threatened species such as the blue billed duck and freckled duck, as observed through VEWH-funded monitoring.

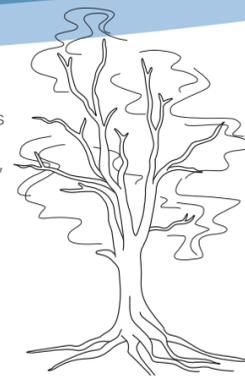
Environmental watering has been targeted across multiple regions, to trigger grayling to move downstream to spawn, as well as help juvenile grayling move into freshwater from marine nurseries. Their exciting return is being monitored in many regions, including Gippsland's **Thomson River** and the **Glenelg River** in the west.

Successfully supported the survival of one of Victoria's most threatened fish species, the Australian grayling.

After 10 years of watering in the **Glenelg River**, the last four years have seen a remarkable 150% increase in all native fish species, and the return of grayling which have not been recorded for 122 years. ARI monitoring has identified good recovery in grayling populations in the Bunyip and **Tarago** rivers (in central Victoria).

Helped save and re-establish platypus populations following a drastic decline in numbers during the Millennium Drought.

Environmental watering helped save the last remaining populations of platypus in the **Wimmera** system, and continues to support populations statewide, with promising signs of recovery also in the **Tarago, Campaspe** and **Glenelg** rivers.



Bringing life back to the environment of the internationally significant Hattah Lakes in the Hattah-Kulkyne National Park.

Over the last 20 years, without water for the environment, the lakes would have only filled twice. Water deliveries have provided a further six opportunities for improvements. With the guidance of the community and environmental water infrastructure including pumps and regulators (funded by The Living Murray), long term delivery of water for the environment is reversing large declines seen in the growth of black box and river red gum forests and tree canopy coverage. Other exciting achievements have included waterbird breeding, and the otherwise rare chance for shore birds to feed on mudflats.

Supported the survival of the few remaining populations of Murray hardyhead in Victoria, in sites across the north central and Mallee regions.

Since critical 'life-support' watering in 2007 at the peak of the Millennium Drought, we have been prioritising water deliveries in seasonal watering planning each year, to maintain the levels of salinity and areas of vegetation needed to keep these previously abundant fish populations alive.

Frog populations sky-rocketed in response to targeted environmental watering.

Two examples include a section of the **Werribee River** in 2014-15, and a surge in wildlife sightings at **Lake Yando** Wildlife Reserve in 2014 including five species of frogs. Environmental water also provided perfect conditions for other rare and threatened wetland-dependent species.



There is far greater representation of Aboriginal voices in environmental water decision-making compared to 2011.

In 2017 Rueben Berg, Gunditjmarra man, was appointed to the VEWH Commission. Rueben brings a unique wealth of ideas and perspectives to the VEWH that has enriched our thinking and helped to drive improvements across the program, including how we consider Aboriginal values and perspectives.

Traditional Owners are increasingly leading, influencing and participating in the planning, delivery and monitoring of environmental water on Country.

For example, Taungurung Land and Water Council (TLWC) is actively influencing water management at **Horseshoe Lagoon** Nature Conservation Reserve near Seymour. TLWC, working with Goulburn Broken CMA, Parks Victoria and the VEWH, has identified how environmental outcomes and cultural values align through on-Country knowledge sharing; influenced watering plans for the site through meetings and documentation; and enabled the delivery of water through management of infrastructure.

Collaboration with Traditional Owners and consideration of Aboriginal cultural values and uses of waterways has increased – though there's still room for improvement.

Traditional Owners and Aboriginal knowledge systems make a critical contribution to the Victorian environmental watering program. For example, Wadawurrung Traditional Owners Aboriginal Corporation and Corangamite CMA have developed a strong partnership. They have worked together to ensure that Wadawurrung Traditional Owners have a central voice in waterway management on their Country. Recognising culturally significant places and species, and celebrating traditional practices - like weaving and placing a Buniya Binak (eel trap) in the **Moorabool River** during an environmental flow - helps share knowledge, restore connections and highlight Wadawurrung culture along the river.



Environmental flows can sometimes be adjusted to maximise recreational benefits.

Outdoor education companies, canoe clubs, and recreational paddlers benefit from the ideal white-water rafting conditions created by environmental flow releases in the upper **Thomson**. In the last five years releases have been timed over the Melbourne Cup weekend to enable business and the community to take advantage of the conditions without impacting environmental objectives.

As well as improving the ecology of the **Snowy River** catchment, water for the environment released from Lake Jindabyne provides important paddling opportunities no longer available from natural flows.

Surveys have repeatedly shown that the **Wimmera River** is the most visited waterway for recreation across the Wimmera Southern Mallee region.

This achievement has been largely supported by environmental flows, which provide increased opportunities for recreation and tourism, and wellbeing that comes from access to nature. Visitors and locals to Horsham, Dimboola and Jeparit enjoy a wide range of activities and events, including fishing competitions, water skiing, rowing, barefoot water skiing, running, triathlons and picnicking.

Environmental flows work alongside agriculture, recreation, and tourism and contribute to our communities.

A recent study calculated that environmental flows contribute up to \$80 million a year to northern Victorian communities based on its links to local industries. This figure will likely double over the next decade.

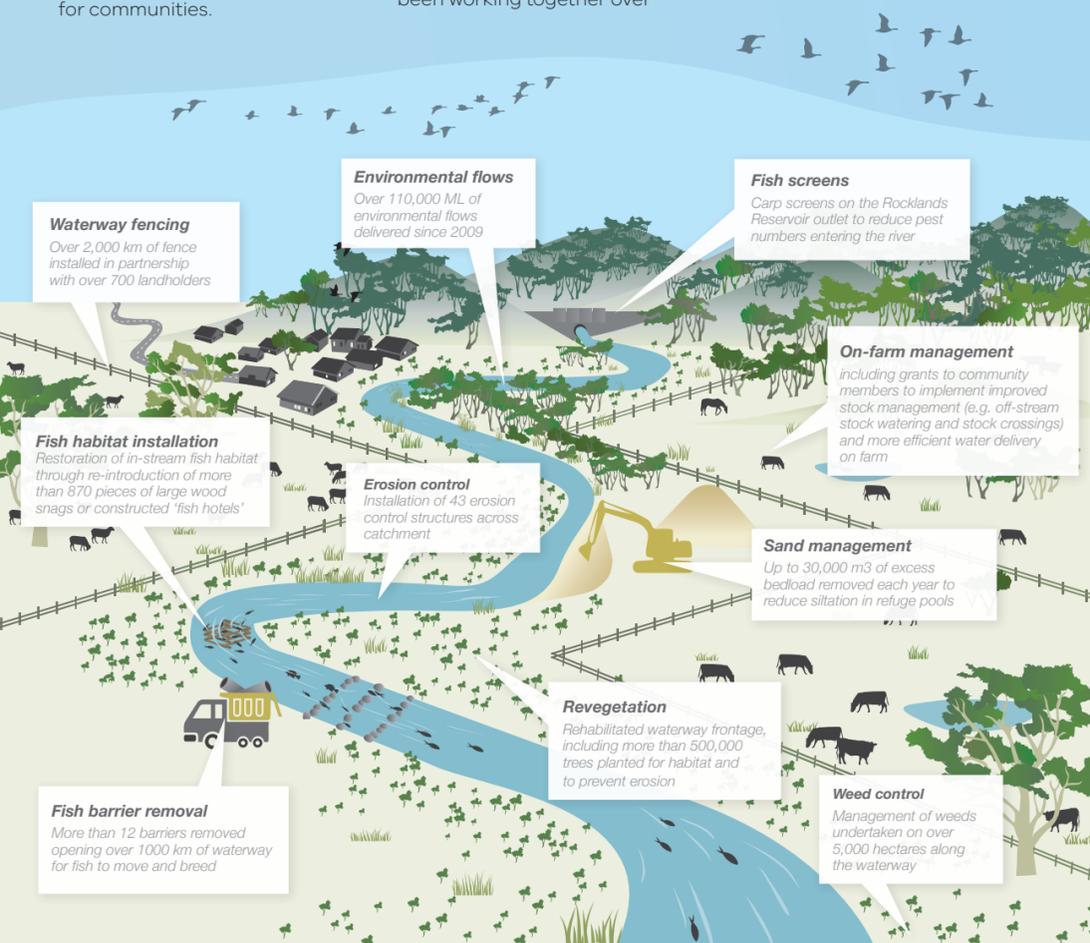


# IMPROVING THE HEALTH OF OUR RIVERS AND WETLANDS TAKES MORE THAN JUST WATER

Efficient and effective delivery of environmental flows is fundamental for supporting life in many of our river systems, but there is a suite of other complementary catchment management activities that need to work together to improve catchment and waterway health for communities.

The award-winning Glenelg River Restoration Project is a fantastic example of integrated catchment management. The Glenelg Hopkins CMA, landholders, communities, Traditional Owners, government agencies and businesses have been working together over

many years to restore sections of the Glenelg River adversely impacted by human activities – creating benefits which have flowed to the whole community.



# MANAGING THE VICTORIAN ENVIRONMENTAL WATER HOLDINGS

A key role of the Victorian Environmental Water Holder (VEWH) is to plan for and authorise the use of environmental water for Victorian waterways, including coordinating with other environmental water holders.

Our goal is to ensure the most efficient and effective use of the water that is available each year to achieve the greatest environmental outcomes.

The amount of water for the environment available to VEWH has grown over 10 years, but so has the number of locations (rivers, wetlands and floodplains) that rely on managed environmental flows.

Each year, the VEWH scopes environmental watering activities identified by catchment management authorities and Melbourne Water to develop a statewide seasonal watering plan.

On average, 89% of the required activities identified in plans since 2011 were fully or partially achieved through a coordination of environmental flows, natural river flows or delivery of consumptive water en-route to customers.

Reflecting on 10 years of the VEWH:  
[Bit.ly/Reflections10YearsCEOs](https://bit.ly/Reflections10YearsCEOs)

## THEN AND NOW: Reflections on the growth of the environmental watering program

	2011-12	2020-21
Total water available under VEWH's water entitlements (including CEWH, Living Murray and donations)	720,716 ML	1,188,568 ML
Total water delivered (including CEWH, Living Murray program)	479,211 ML	654,585 ML
Number of river reaches and wetlands receiving environmental flows	45	171
Percentage of required planned watering actions fully or partially achieved	91%	92%
Number of watering authorisations by VEWH Commission	45	55

# WATER FOR THE ENVIRONMENT IS WORKING



## 10 YEARS OF ACHIEVEMENTS

These exciting highlights of achievements across Victoria's environmental watering program over the past 10 years (2011 - 2021) are evidence that water for the environment is helping to improve the health of our waterways.

Water for the environment is water that's set aside in storages such as reservoirs and dams, and managed to deliver environmental flows which support plants and animals, and help improve and preserve the condition of our rivers and wetlands.

Water for the environment is managed through the Victorian environmental watering program, which is a partnership between: water managers including catchment management authorities (CMAs) and Melbourne Water; Traditional Owner groups; land managers including Parks Victoria and local councils; the Victorian Environmental Water Holder (VEWH); DELWP; Arthur Rylah Institute (ARI); water corporations; and other agencies including the Commonwealth Environmental Water Holder and the Murray-Darling Basin Authority.

Momentum is growing every year, and just in the past 10 years we have come a long way.

We are seeing some threatened fish, bird and platypus populations showing signs of recovery, the return of plant and animal species not seen in waterways for many decades, significant bird colony breeding events, and the restoration of important in-stream and streamside vegetation.

As a result of the growing collaboration between partners in the program: cultural, recreational, social and economic benefits are flowing to communities across Victoria.

We can all be encouraged by this obvious progress, as we look to the opportunities and challenges in the next 10 years.

What is water for the environment, and the environmental watering program: [Bit.ly/WhatsW4TE](https://bit.ly/WhatsW4TE)

Find out how water for the environment is planned in your region: [Bit.ly/MySWP](https://bit.ly/MySWP)

Waterway managers are central partners to the program, and are your best contact for getting involved in planning for water for the environment in your region.



The VEWH recognises Aboriginal people as the first land and water managers in Australia. We recognise the 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 community. We acknowledge Traditional Owners across Victoria and pay respect to their Elders past and present.

## MAKING EVERY DROP COUNT

A key focus for VEWH over the past 10 years has been to improve the sophistication in use of the water management tools it has available.

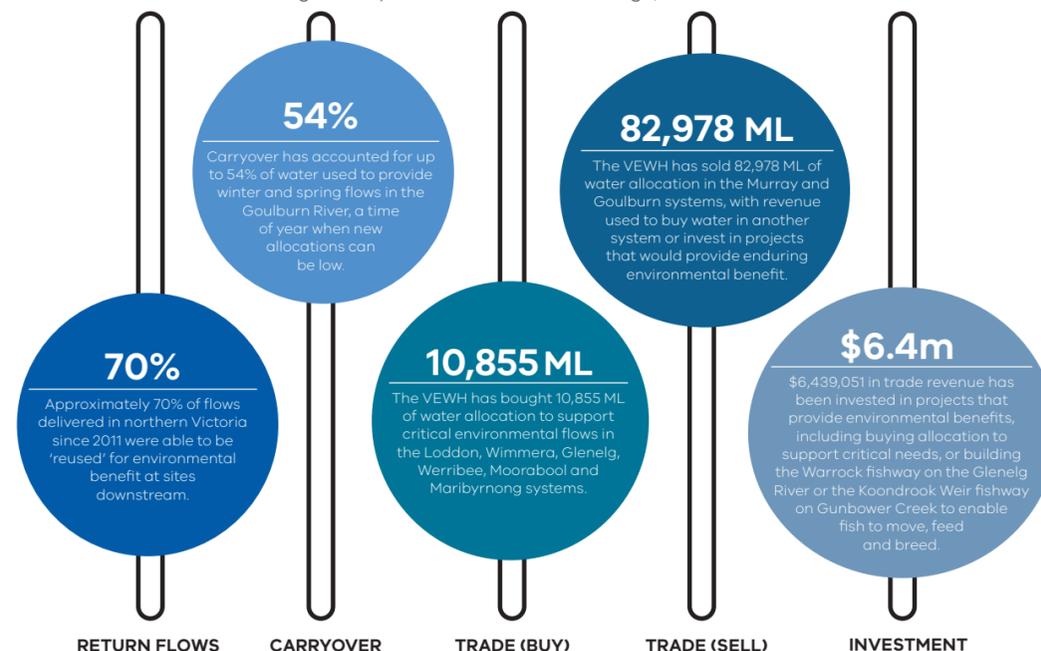
One of these tools, 'Return Flows' is an efficient method of using

one water release to achieve multiple specific objectives at multiple locations as it travels downstream.

The VEWH can also buy small amounts of water allocation in years when there isn't enough,

or sell when investment options can deliver a more enduring environmental benefit.

Find out more about these tools here: [Bit.ly/ManagingW4TE](https://bit.ly/ManagingW4TE)



RETURN FLOWS CARRYOVER TRADE (BUY) TRADE (SELL) INVESTMENT

### ACHIEVEMENTS 2011-21: VEWH's use of its water management tools

## Community and environmental benefits

- 150% increase in all native fish species, and endangered variegated pygmy perch numbers have increased by 350%
- Species such as the estuary perch have now returned to the upper Glenelg after more than 50 years of being confined to the lower reaches of the river
- Rare Wimmera Bottlebrush has become more prevalent along the river
- Improving water quality and riverside camping conditions at Harrow ahead of the annual Johnny Mullagh cricket match between the Gunditj Mirring and Barengi Gadjin Traditional Owners on the March long weekend
- Supporting improved recreational fishing opportunities, estimated to deliver around \$500,000 annually in local tourism expenditure
- Salinity levels in the Glenelg River have decreased by 80% since environmental flows commenced in 2009. Benefiting both the plants and animals that rely on fresh flows and the 85% of farmers who take domestic and stock supply from the waterway