What is the Victorian Constraints Measures Program?

The Victorian Constraints Measures Program (CMP) aims to reconnect the low-lying floodplains (below the minor flood level) of the Goulburn and Murray rivers, enhancing their health.

If implemented, this would relax or remove physical constraints that prevent the river from connecting to the floodplain. These include pumps and other infrastructure that would be damaged through watering.

What's been happening to the river system?

River regulation has provided significant community benefits but at the same time, floodplains have become disconnected from rivers. Under climate change, it is likely to get worse without intervention. Constraints relaxation helps increase floodplain connectivity and resilience against a drying climate future – but we can only fill wetlands, creeks, anabranches and the low-lying floodplains.

Relaxing constraints would help reinstate that connectivity.

The greatest benefits arising from relaxing constraints occur when the floodplain is inundated (i.e. overbank flows).

Why was a feasibility study done?

We need to understand the risks and benefits of relaxing constraints and undertake technical work to investigate whether this will help reconnect the floodplain and rivers.

The feasibility study modelled various flow scenarios to capture benefits and risks.

The initial project proposals used technical information that was available at the time but was not fit-for-purpose for a project like this. In 2019, the Victorian and NSW Ministers for Water commissioned an independent review of existing modelling (the Wilson review).

The feasibility study takes the review's recommendations into account and incorporates new and updated information (aerial photography, new models, data, river surveys and Geographic Information System tools) and enhanced modelling capabilities. A Consultative Committee of key stakeholders with diverse views and experiences oversaw this study, including Traditional Owner group partners and local landholders.

Climate change impacts

Many parts of Northern Victoria are predicted to experience a warmer and drier future climate, with an increased likelihood of extreme droughts and floods.

The feasibility study found that a floodplain's resilience to climate change would be improved by relaxing constraints, creating a healthier environment for all to enjoy. However, under severe climate change and conditions like the Millennium Drought, the modelling suggests the benefits of relaxing constraints are far less.

Which areas does the study focus on?

The study is focused on the use of available environmental water in the Goulburn River and Victorian side of the Murray River. These rivers are highly valued for their significant role as water sources and for the environmental and recreational opportunities they offer. However, they are no longer free-flowing natural rivers. Over time, they have undergone substantial modifications to meet the water supply needs of towns, industries, irrigation, and to support environmental preservation efforts.

There are also downstream benefits in Victoria that are yet to be fully investigated. The Committee sought advice on the potential benefits and risks of the notified flow rates in the Murray River downstream of the Wakool Junction.

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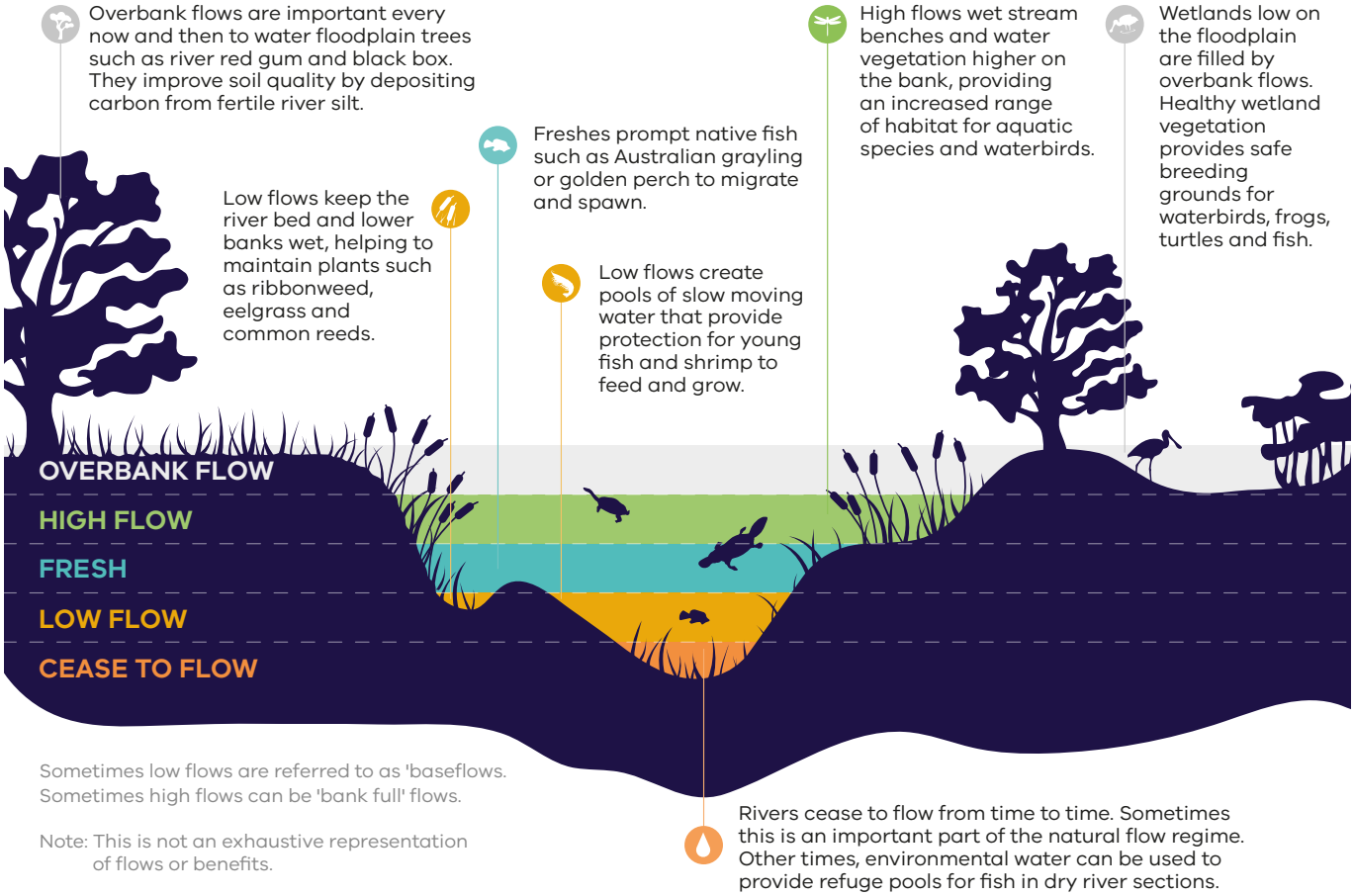
Benefits of different environmental flows in river systems



Sometimes low flows are referred to as 'baseflows. Sometimes high flows can be 'bank full' flows.

Note: This is not an exhaustive representation of flows or benefits.

What does this mean for health of Country?

As part of the consultative process, DEECA engaged with Traditional Owners, including on-Country, who have an enduring connection to water and its management. This included groups downstream to the Victoria/South Australia border.

DEECA will continue to partner with Traditional Owners, to gain insight into their viewpoints should constraints be relaxed.

What were the main findings of this study?

The study show relaxing constraints is required to maximise environmental outcomes from available water for the environment. Here are some key findings:

- **Relaxing constraints provides environmental benefits**

  Without relaxing constraints, water for the environment can only be delivered within the channel and to some environmental sites with infrastructure works. The lower constraints relaxation scenarios have the potential to slow down some ecological decline. The greatest benefit is through overbank flows to wetlands, billabongs and flood runners. However, due to shorter flow durations, constraints has a limited role in improving the health of floodplain communities. Floodplain communities require longer durations of 30+ days for improvement.

- **Landscape resilience to climate change would improve**

  Relaxing constraints reinstates floodplain watering and could slow some of the expected ecological decline caused by climate change.

- **River operators and environmental managers need new and improved modelling and forecasting tools to better predict catchment conditions**

  To manage the risks of going outside of agreed floodplain watering areas, river operators will need some extra tools.

- **Flow buffers are a tool to reduce risks to river operators and landowners**

  Even with flow buffers and risk mitigations, there is still a residual risk to river operators.

- **Public land managers are integral to this project**

  Relaxing constraints would result in a range of ongoing land and asset management activities. This would need planning and support by public land managers.

- **Complementary programs are essential**

  Programs such as grazing management, pest, plant and animal control, and monitoring programs can enhance environmental outcomes and maximise benefits from available water for the environment. Complementary infrastructure projects such as the Victorian Murray Floodplain Restoration Project are needed where relaxing constraints can't meet environmental needs.

What are the risks of the Victorian CMP?

- **Inundating only public land is not possible**

  Floodplains contain a variety of land tenures and there are impacts to private land at all modelled flows. The highest relaxation scenarios offer the best chances for a more resilient ecosystem but are not without significant landowner impacts.

- **Minimising the impact to landowners and asset owners are a priority**

  The aim is to water public land with high environmental value. However, achieving a balance between impacts and outcomes while addressing affected landowners needs careful consideration and engagement.

  Evaluate the costs and benefits across the entire system

  The Murray River functions as an interconnected system. The program must include an assessment of the benefits and risks across this system and not just Victoria.

- **Riverbank erosion**

  Environmental watering plans consider the risk of riverbank erosion. Other activities to stabilise the banks are required to enhance the benefits of watering.

What's next?

The feasibility report will help inform next steps including the Murray Darling Basin Authority-led Constraints Roadmap for implementation.

This will provide further direction on the program's future. For more information about the study and next steps, visit the Victorian Constraints Measures Program website and the Murray Darling Basin Authority websites.

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