



South Australian Constraints Measures Project

We acknowledge the Traditional Custodians of the lands and waters, current land managers, and all Aboriginal and Torres Strait Islander South Australians. As a department, we acknowledge that Aboriginal Nations are the first managers and decision makers of Country and that Country has sustained their culture and economy for thousands of generations. The care, skill and knowledge of Aboriginal Nations has shaped the character of Country across the continent and is seen as an integrated and interdependent cultural landscape.

What are constraints?

A 'constraint' is a technical term for anything that reduces the ability to deliver water for the environment. Constraints can include physical restrictions such as low-lying bridges, crossings or impacts to private land. Constraints can also include operational aspects such as river rules or operating practices. These 'constraints' mean we are not running the river system as efficiently as we could.

What is the Constraints Measures Project?

By relaxing constraints to river operations, water for the environment can be used to boost and prolong natural high flows so that more water can reach the rivers' connected floodplains and wetlands more often.

In 2012, Basin state governments asked the Murray–Darling Basin Authority (MDBA) to develop a Constraints Management Strategy to investigate how water can get to where it's needed, when it's needed, while avoiding or mitigating impacts to riparian landholders, communities, and industries.

The SA River Murray Constraints Measures has delivered a number of milestones under the

constraints management strategy including:

- investigating the extent to which small overbank flows can connect rivers to floodplains more often for a healthy floodplain environment
- investigating any impacts of these flows on people and property
- identifying infrastructure improvements to reduce effects of these flows
- engaging stakeholders to incorporate their local knowledge in decision making.

What will the Constraints Measures project deliver in the next phases?

Following a co-design process with local communities, South Australia will deliver practical on-ground works to improve river and floodplain connectivity. These works also aim to build community resilience at local sites. Water for the environment can then be used to increase the amount of water available to wetlands and floodplains and help keep it there longer. The on-ground works will be delivered in two phases:

- Early on-ground works have been approved for completion by 30 June 2024
- Additional priority sites are to be submitted to the Commonwealth for consideration by September 2022

DEW is committed to working in partnership with First Nations peoples as the first managers and decision makers of Country. The Department acknowledges that the lands and waters have sustained their culture and economy for thousands of generations. The return of the river to a more natural wetting and drying cycle is broadly supported by First Nations people along the River Murray.

Why do we need greater flexibility in river operations to achieve environmental outcomes?

The development of the River Murray for economic, human and navigational purposes, as well as the influence of drought cycles, has caused the flow of water throughout the Basin to be vastly different to pre-development flows.

Locks and weirs were built in the early 1900s to manage the river levels, ensuring that growing river communities had a reliable water source and allowing boats to travel up and down the river for transport. This interrupted the natural river 'rise and fall' pattern that resulted in wetting and drying of the riverbanks, wetlands, and floodplains.

We now know how important these changes in the river levels are to fish, frogs, birds and plants. Regularly having more water in the river, wetlands, and floodplains, as well as greater variation in river levels, will help everyone that relies on good quality river water.

Water for the environment can be used to boost naturally high flows to improve the health of our rivers, wetlands and floodplains. Water for the environment is already held by Commonwealth and State environmental water holders across the Basin, who make decisions about when, where and how much water is released for the environment, and with measurable environmental outcomes in mind.

The following picture is an example of a natural high flow event (in November 2020) where environmental water was used to boost the height and the duration of natural high flows to achieve enhanced environmental outcomes.



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The Constraints Measures Strategy is being delivered by the South Australian Government in partnership with the Australian Government and the Murray-Darling Basin Plan.

What outcomes can we expect?

Reconnecting the floodplains and wetlands to the main river allows plants and animals to move throughout the river systems and colonise new areas. Fish and frogs will move from the deeper river into the food-rich waters of these shallow habitats to breed and, in turn, provide more food for birds, turtles and yabbies.

Infrastructure improvements will help make sure that the river can be safely operated and managed under high flows, so that the water needs of South Australians can continue to be met. Many roads and public infrastructure are important to communities for access to towns, properties, and for emergency services. Although it is impossible to upgrade all infrastructure under this project, infrastructure will be prioritised based on how it benefits the community. Infrastructure upgrades undertaken as part of the Constraints Measures Project will improve accessibility during high flow events and increase community resilience to high river flows.

There will be greater certainty for communities that they can still enjoy their everyday activities when flows in the river increase, whether that be as a result of a natural event or a managed event.

How will this impact the community?

You may notice a number of early on-ground works taking place along the river in South Australia's Riverland, Mid-Murray and Lower-Murray areas. This may include improvements to boat ramps, moorings, car parks and a broad range of other improvements to public parks and spaces. Although this may cause temporary disruption and inconvenience, these improvements will help to ensure that you can continue to enjoy these local spaces during future periods of high flow.

For more information

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