South Australian Riverland Floodplains Integrated Infrastructure Program (SARFIIP)

Frequently asked questions

Program overview

What is SARFIIP?

SARFIIP is the South Australian Riverland Floodplains Integrated Infrastructure Program.

The $155 million program aims to improve the watering and management of key River Murray floodplains in South Australia's Riverland. Specifically, more efficient watering of the Pike and Katarapko floodplains will help protect and restore these key environmental assets.

SARFIIP is made up of four components including, Pike Floodplain Inundation Measures, Katarapko Floodplain Inundation Measures, Salinity Management Measures and Environmental Pathways. See below for more detail on the individual project elements.

Why do we need the program?

The River Murray is highly regulated and has been negatively impacted by years of over allocation and use of water. The Millennium Drought between 2000 and 2010 had significant impacts for the health of the river and floodplains.

Since the drought, returning flows have brought some improvement, but also highlighted that many areas have only partially recovered from the drought.

Through the Basin Plan more water will be returned to the environment, but this is just part of the solution. Available water needs to be used effectively and efficiently.

SARFIIP will allow for the more effective management of water into and around the floodplains through a variety of projects including the construction of environmental regulators.

Who is funding the SARFIIP program?

SARFIIP is funded by the Australian Government through the Murray-Darling Basin Authority and implemented by the South Australian Government. It will contribute to the implementation of the Basin Plan.

What is the Basin Plan?

The Basin Plan guides governments, regional authorities and communities to sustainably manage and use the waters of the Basin.

The Murray–Darling Basin is an immense region of Australia, through which thousands of interconnected creeks and rivers run. Its name is derived from its two major rivers, the Murray River and the Darling River.

The works program

Where and when will the works be taking place?

The program includes important works for the Pike Floodplain near Renmark and the Katarapko Floodplain near Berri from 2016 to 2020.

Why did you choose these specific sites for the infrastructure?

The Pike and Katarapko floodplains are ecologically significant sites with a diversity of terrestrial and aquatic habitats, populations of rare and endangered species, and sites of value to European and Indigenous cultural heritage. Environmental flows and inundation are crucial to the health and wellbeing of the floodplains.

When will the SARFIIP works start?

The first signs of activity will be construction works on Margaret Dowling Creek in Bert Dix Memorial Park near Paringa and Bank J at the start of Eckerts Creek near Berri. Investigations and planning are currently being undertaken and construction is expected to be ongoing until 2020.

Environmental impacts

What will SARFIIP mean for the Riverland floodplains?

SARFIIP will enable the Pike and Katarapko floodplains to be sufficiently inundated with relatively modest water flows of 10,000 – 15,000 ML/day to South Australia.

The same level of inundation would otherwise only occur with much higher flows of 70,000 – 80,000 ML/day.

This will help restore the health of these floodplains and the plants and animals dependent on the Riverland's wetlands and floodplains, while making sure salinity impacts can be managed.

What's happening on the Pike Floodplain?

The ecologically significant Pike floodplain is home to a diverse range of terrestrial and aquatic habitats, populations of rare and endangered fish and bird species, and sites of value to European and Indigenous cultural heritage

SARFIIP works will protect the floodplain through the construction of:

- environmental regulators with fishways at Tanyaca Creek and on the Pike River
- regulators on the southern Mundic outlet and Snake Creek
- blocking banks and associated structures
- a new inlet, bridge and fishway at Margaret Dowling Creek
- removal of existing flow and fish barriers at Banks D, E, F, F1 and G.

What are the benefits of these works for the Pike Floodplain?

The upgraded Margaret Dowling and Deep Creek regulators will deliver critical environmental flows to the floodplain. The new Pike regulators will also provide secure water levels (or flows) for irrigation diversion as well as increased fish passage.

What's happening on the Katarapko Floodplain?

The Katarapko floodplain is part of the Murray River National Park, which attracts up to 40,000 visitors each year.

It supports four nationally vulnerable species including the Southern bell frog, Murray cod, Murray hardyhead and Regent parrot. A further 15 species living on the Floodplain have a threatened rating at state level, including two reptiles and 13 bird species.

SARFIIP works will improve the environmental flows to this floodplain by constructing surface water infrastructure. This will include new structures at Bank J, The Splash, Piggy Creek, Sawmill Creek and Carpark Lagoons.

What are the benefits of these works for the Katarapko Floodplain?

SARFIIP works will allow the inundation of more than 1300 hectares of the floodplain and its creeks and wetlands by controlling water levels. This will benefit vegetation including Black Box, River Red Gum and Lignum.

The new regulators will allow for variability of flow, inundation heights and effective flooding.

There are other benefits, including improved access within the National Park and increased recreational opportunities.

Affected areas of the park will be closed during flooding.

How long will the park be closed during construction?

Parts of the park will be closed during construction, which could take up to 18 months. For visitor safety, closures will only occur in campsites and areas where building is taking place. All other areas will remain open for camping and visitors within the Murray River National Park. For up to date information, please contact the Natural Resources office in Berri on 8580 1800.

How often and for how long will inundation occur and how will it impact on park visitors?

Inundation will occur approximately every three years for a period of 3 months. The exact timing will depend on many factors such as climatic conditions, when the last natural flood occurred, the condition of vegetation and availability of environmental water.

Parts of the park may be closed during inundation but others will remain open and new recreational opportunities will become available for visitors.

The inundation will provide many environmental benefits including improving the condition of vegetation and the resilience of the area into the future.

Potential construction impacts - what about groundwater

Disposal from the construction?

DEWNR will comply with EPA requirements for saline groundwater disposal. Management of this issue will also be determined by factors including groundwater conditions on site, surrounding facilities and solutions posed by contractors.

Any potential impacts to river water quality will be carefully considered and protecting the interests of third party users will be at the forefront of all project planning.

Will the water that comes off the floodplain add salt to the river?

Yes, the water from flooding the floodplain will carry additional salt into the river, however, DEWNR is working to protect water users from any overall changes to salinity.

Information from other environmental watering activities and complex groundwater and surface water models are being used to understand where and how much salt will be added to the river.

Using this information, DEWNR will develop operating strategies and management measures for the floodplains that best protect water quality. Communities will be engaged to understand the likely impacts.

How will DEWNR deal with the dust and noise from construction?

DEWNR staff will ensure that the Contractor takes measures to ensure that dust and noise are minimised. Reducing these impacts will be written into the agreements for contractors on the project. Landholders and impacted communities will be advised in advance of pending works.

Will there be any changes to access?

Road access will be altered for some projects under SARFIIP. Adequate notice will be given to impacted parties including landholders and where possible alternate arrangements will be made for access.

Sites will also be closed to public access during construction to ensure the safety of the public and contractors.

Supporting SARFIIP projects

What is the Salinity Management Measures (SMM) project?

The integration of salinity management into broader floodplain management and operations can achieve ecological, economic and social outcomes.

The Salinity Management Measures (SMM) project will complement the construction of regulators and blocking banks at Pike and Katarapko floodplains, which are being built to manage flooding (inundation) and water levels to improve and protect the region's wetlands and floodplains.

Onground activities include groundwater and surface water investigations to understand how management actions may impact real time and long term salinity targets in the River Murray and how groundwater management will benefit ecological recovery. Surveys and monitoring have been undertaken on-ground, in-stream and by air.

This research, together with other monitoring and surveys will inform the most appropriate approaches to managing saline groundwater.

What is the Environmental Pathways Program and why is it important for the health of the river?

South Australia has many works to control environmental water ranging from works at Chowilla to smaller structures to control water at individual wetlands. The integration of these large regulators with weir pool raising and managed environmental flows represents a challenge and opportunity being addressed through various works.

The EPP will consider opportunities to integrate the environmental water management projects (floodplain, wetlands and weir pool management) in the context of general river operations. The EPP will also consider additional opportunities for infrastructure investment between Lock 1 at Blanchtown and the state border to complement the existing works and provide connectivity zones between these sites. These pathways will seek to increase the resilience and functionality of the river ecosystem.

SARFIIP project management

How is SA Water involved?

SA Water is one of the key project partners for SARFIIP. Strong partnerships between the DEWNR, the Australian Government, the Murray-Darling Basin Authority and organisations including SA Water are critical to the success of the program.

DEWNR and SA Water will work in partnership to complete detailed design and construction of infrastructure between now and 2020.

How is the Murray-Darling Basin Authority involved?

The Murray-Darling Basin Authority is overseeing the delivery of SARFIIP in the context of the Basin Plan.

Who is doing the work, is DEWNR using local contractors or are they coming from interstate?

In line with State Government policy the emphasis is on using local contractors.

Economic benefits

Will local jobs be created through the program

SARFIIP is expected to generate more than 70 fulltime jobs at up to 17 sites from 2016 to 2020.

About half of these will be construction roles based in the region with many of the remaining roles – in a variety of program areas - also based locally.

Having a construction workforce and other program employees in Renmark, Paringa, Lyrup and Berri over 5 years will have significant flow-on effects for the providers of goods and services.

Providers of accommodation, food and hospitality, retail items and recreational activities will all experience the benefits.

Will the program increase tourism and recreation opportunities?

Improving the condition of the Pike and Katarapko floodplains will provide scope for new nature-based tourism activities including attracting visitors to planned inundation events.

New and enhanced visitor opportunities and opportunities for Riverland communities include walking, bike riding, cultural tours, bird watching and fishing.

Will there be any benefits for irrigators?

The significant improvements to water quality in the Pike River anabranch are predicted to provide productivity benefits for Pike River irrigators.

This will increase the income from farm production, food value-adding, processing, packing and distribution, food service and retail for the region. The combined estimated income from these activities was $2.2 billion in 2015.

Will vegetation be cleared during construction

Yes – but protection will be front of mind during planning. Any construction permits need to go through native vegetation removal approvals. As far as possible, replacements plants will be the same species.

Community engagement

How is DEWNR working with the community to ensure that the program is successful?

SARFIIP and a number of other Riverland projects have been driven by a partnership approach, with their ongoing success dependent on community involvement and support.

We are working in the Riverland with local stakeholders, including the Pike Community Reference Committee and Katfish Reach Steering Group.

Traditional owners, recognised native title holders and the First Peoples of the River Murray and Mallee are being engaged in SARFIIP to draw on their knowledge and protect their unique cultural heritage.

How can I stay updated on project progress?

For more information visit: www.naturalresources.sa.gov.au/samurraydarlingbasin/water/river-murray/restoration-programs

FIS 94077