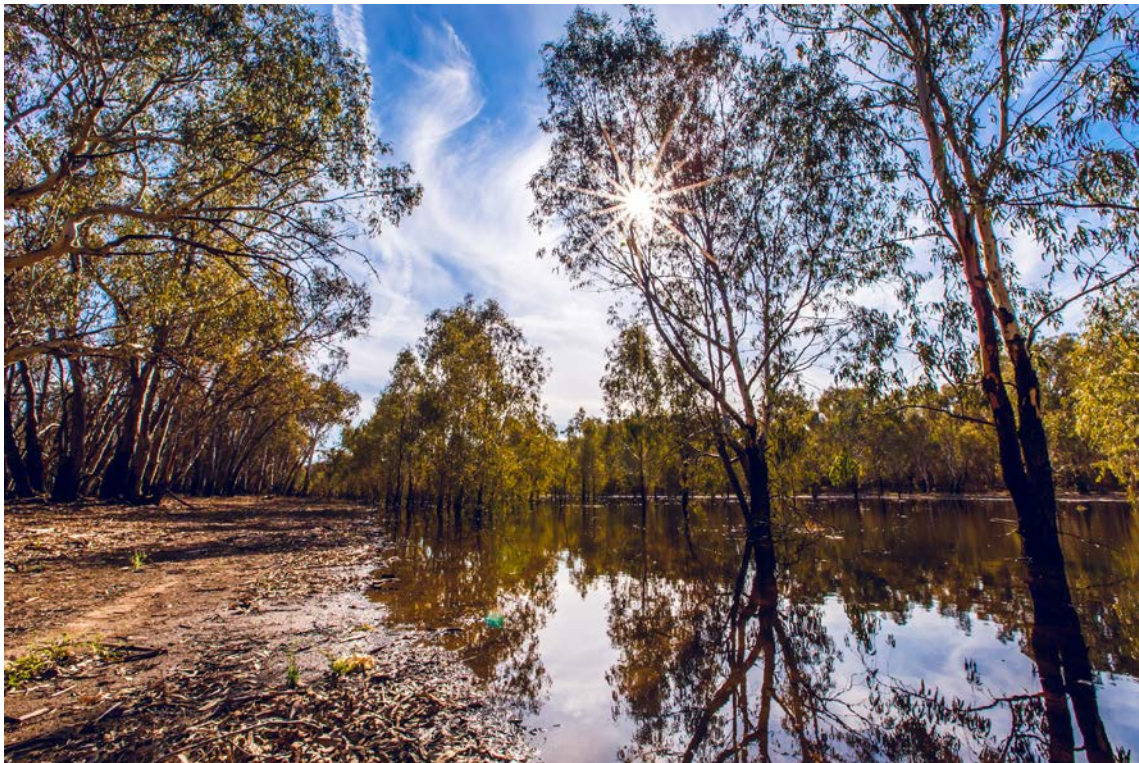


Vinifera story and FAQ

Vinifera is one of nine ecologically significant floodplains earmarked for restoration under the Victorian Murray Floodplain Restoration Project (VMFRP). Visit ymfrp.vic.gov.au for more information.

Location	Vinifera is part of Nyah-Vinifera Park and is 20 km north-west of Swan Hill in north-west Victoria.
Landscape targeted	Seasonal wetland, red gum swamp forest and red gum woodlands and forests
Threatened animal species	Eastern great egret, grey-crowned babbler, broad shelled turtle, regent parrot, white-bellied sea eagle and growling grass frog.



Nyah-Vinifera Park (Source: Mallee Catchment Management Authority)

Why do we need floodplain restoration works at Vinifera?

Over time, we have changed the way the Murray flows to suit our needs, building weirs, dams and levees. Regional communities have benefited in many ways from river regulation, but we are also seeing serious ecological impacts to floodplain health.

The Murray River and its floodplains both depend on intermittent flooding to stay healthy. River regulation has caused blockages to flow and reduced the frequency, duration and extent of flood events. We are also seeing increasingly long dry periods between floods, making it harder for floodplains to bounce back.



The Vinifera floodplain in Nyah-Vinifera Park is made up of forests of river red gums and wetlands. Before river regulation, the Murray would reliably flood these low-lying floodplains almost every winter to spring for five to six months of the year.

Vinifera Creek has been modified over time and is now completely disconnected from the Murray at the southern (upstream) end. This area now functions as a separate wetland.

River regulation has reduced the frequency and duration of floods at Vinifera and increased the interval between floods, but with less significant impacts than at other VMFRP sites, because we can manually pump water onto the floodplain and use temporary containment banks to hold it there.

The works planned under VMFRP will allow us to manage this floodplain more efficiently over the long-term – we will no longer need to remove and rebuild temporary containment banks at Vinifera, and we'll be able to get environmental water back off the floodplain and return it to the river, reducing the risk of blackwater events and mosquitos.

If the floodplain goes too long between natural floods, we'll be able to give the environment a 'top up' to keep it healthy, making the floodplains more resilient as we face a future with less water.

Bringing these floodplains back to life will benefit all of our river communities – people, plants and animals – as we restore them for generations to come.

What happens if we don't restore our floodplains?

The Murray River and its floodplains are part of a highly interconnected ecosystem where cyclical wet and dry cycles support an extraordinarily rich tapestry of life on the floodplain and infuse the river with nutrients.

Varying degrees of stress are already apparent across our floodplains. The tree canopy lacks vigour and flood-tolerant vegetation are stressed, which reduces habitat and food available for animals that rely on healthy floodplains.

If we do not intervene, these iconic landscapes will continue to decline, potentially beyond the point of rejuvenation. We risk losing areas that are vital to biodiversity, to Traditional Owners, and to regional communities.

Returning to pre-regulation flows would be devastating for the towns, cities, agriculture and industries along the river. The Basin Plan recovers significant amounts of water for environmental use. Infrastructure helps us use this water to bring our ecologically significant floodplains back to health, without impacting river communities.



Why choose Vinifera?

Nyah-Vinifera Park is home to majestic forests with century-old red gums and beautiful billabongs and wetlands. The park provides food and habitat for a vast array of animals and plants, including waterbirds, woodland birds, mammals and reptiles, and small and large-bodied fish.

It connects the semi-arid Mallee landscape with the Murray River floodplain, providing an essential biodiversity corridor. The regent parrot for example feeds in the nearby Mallee woodlands, but depends on large, healthy red gum near the river for nesting hollows. The carpet python and black wallaby are common in the park, along with the swamp wallaby, grey-crowned babbler and other woodland species.

Nyah-Vinifera Park is highly culturally significant to Traditional Owners. It is also a much-loved recreational hotspot with wonderful camping sites, fishing spots and watering holes.

How are Traditional Owners involved?

Traditional Owners have cared for and sustainably managed the cultural landscapes of the Murray River and its floodplains for thousands of years and their connection to Country continues to the present.

The nine VMFRP sites are culturally significant with many registered heritage sites. The *Aboriginal Heritage Act 2016* describes a legislative pathway for protection of Aboriginal cultural heritage in Victoria. The process requires detailed on-ground assessments to document cultural heritage sites and consultation with Traditional Owner on the proposed works and their potential impacts.

The outcomes of this assessment along with proposed measures to protect sites are documented in a Cultural Heritage Management Plan. First Peoples – State Relations (formerly Aboriginal Victoria) is the regulatory approver at Vinifera.

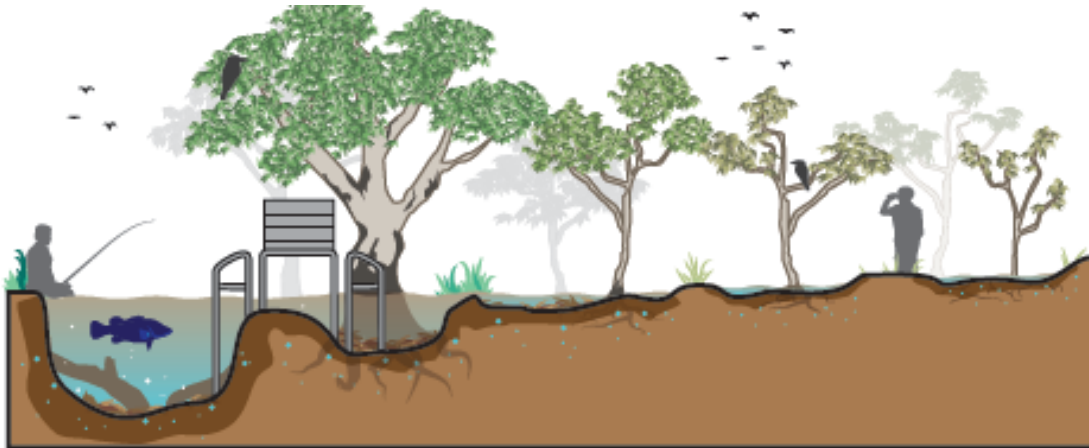
VMFRP partners have long-standing relationships with Traditional Owners and a strong desire and intent to continue to build stronger and more meaningful relationships, regardless of formal recognition status. We recognise the many Aboriginal Victorians who identify as Traditional Owners for Vinifera and the importance of waterways to their identity and sense of belonging.

We recognise the strength and courage of Traditional Owners which has enabled continued connections to Country and culture. As well as our work with these groups to preserve cultural heritage, we are exploring opportunities to support their rights and obligations to progress their aspirations for Country.

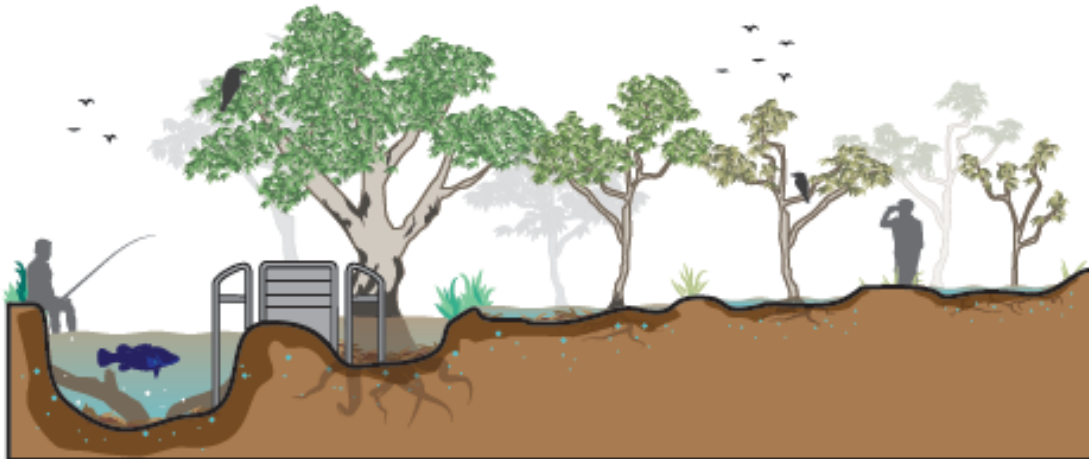
How will you get water onto the floodplain at Vinifera?

Water will be delivered through a combination of natural inflows and, in times when the floodplain is too dry, by temporary pumping using environmental water entitlements. A hardstand at the southern end of the creek will enable us to bring in a temporary pump.

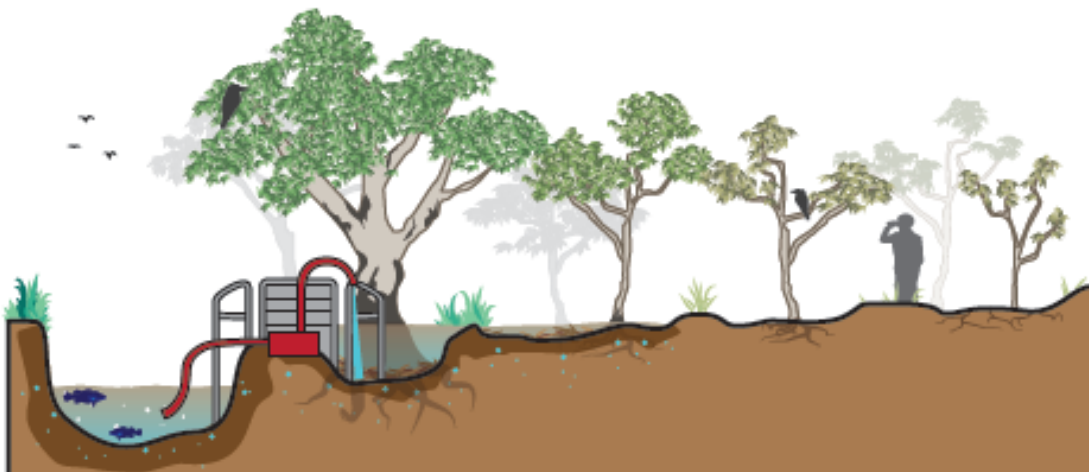
The works at Vinifera will operate under three potential watering scenarios, as shown in Figure 1.



Scenario 1: Infrequently, when the river is high and flowing into the forest, and the water will stay on the floodplain for long enough, we will open the regulators and leave the water to flow naturally.



Scenario 2: Often, the river is high and flowing into the forest, but the flood won't last as long as it's needed, we will shut the regulators and hold the water on the floodplain, before returning the water to the river.



Scenario 3: If the floodplain is too dry, we can use a temporary pump to get environmental water onto the floodplain and close the regulators to hold the water there for as long as needed, before returning the water to the river.

Figure 1: Watering scenarios planned for Vinifera

What infrastructure will you build?

Four small regulators and 2.3 km of containment banks will enable us to get water into the creek/wetland and floodplain and hold it there for as long as needed.

The works will be almost entirely located in Victoria, with the exception of a rock chute, which will extend into the banks and bed of the river on the New South Wales border. A rock chute is a rocky path that slows the water's return back to the river. It's a tried and tested way to avoid erosion and reduce the risk of damage to the stream banks, vegetation and cultural heritage values.

The infrastructure we build will allow us to target different parts of the floodplain to improve the condition of 350 hectares of wetlands, red gum forests and red gum woodlands as needed. Figure 2 shows the impact we can have across the floodplain with different flows using VMFRP works.

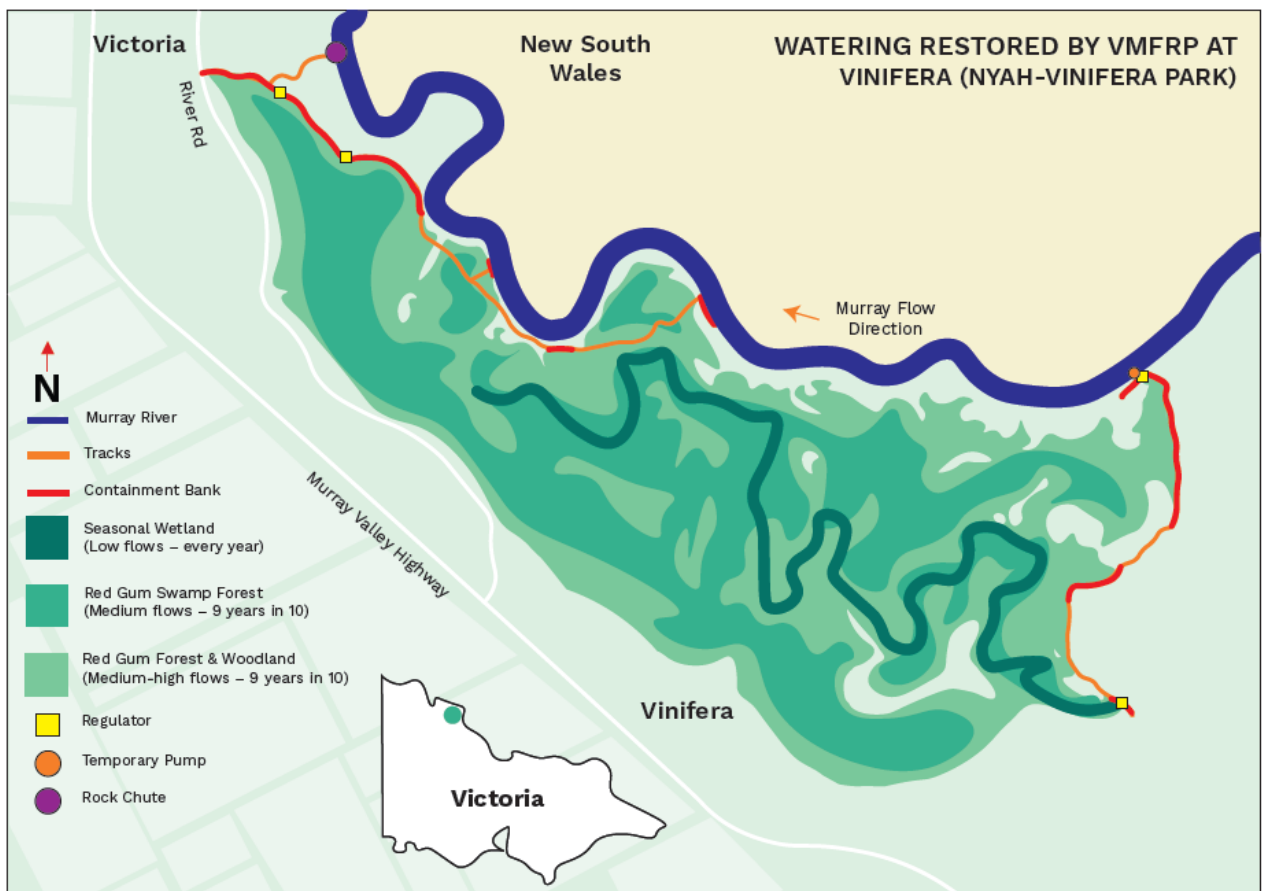


Figure 2: Extent of vegetation that can be reached with VMFRP works (based on conceptual design from October 2021)

What will the infrastructure look like at Vinifera?

We have designed infrastructure to deliver environmental water that is tailored to the site conditions, the landscape being targeted and the species that live there.

As much as possible, new infrastructure is sited on areas that are already disturbed, such as existing access tracks. This helps us minimise ecological impacts during construction.

We've been building environmental water infrastructure for more than 15 years. This experience has taught us what works best to deliver water to the largest area to get the greatest ecological results.

The infrastructure in Figure 3 is similar in scale to the infrastructure planned for Vinifera.



Raised track (containment bank) at Hattah Lakes



Horseshoe Lagoon regulator at Wallpolla Island

Figure 3: The scale of proposed infrastructure at Vinifera

Will access to the park be restricted during flood events?

Watering events will mostly occur in winter and spring over 2 to 4 months.

Larger natural flows will happen every 9 years in 10 and many tracks will get flooded by water escaping the banks of the Murray River and creek line, which will restrict vehicle access. In the years that we need to top up these natural floods with environmental water, additional internal tracks may also be affected and could be impassable for a few months after the natural flood peak has receded.

Parks Victoria will provide information to park users to plan their visits when environmental water occurs. Check the [Parks Victoria website](#) for the latest information and closures in Nyah-Vinifera Park.

What about mosquitos and blackwater?

Before river regulation, the floodwater would usually recede back to the Murray in spring. When floodwater stays on the floodplain over summer, there's more chance of mosquitos and blackwater events.

At Vinifera, we can pump water onto the floodplain, but without infrastructure, we cannot get this water off the floodplain and back into the river. The infrastructure we build will enable us to get floodwater on and off the floodplain during winter and spring, reducing the risk of blackwater events and mosquitos.



Will the VMFRP improve access tracks at Nyah

Tracks used during construction to transport equipment and materials will be restored and left in good condition at project completion. Improving access tracks beyond this is outside the scope of this project.

Parks Victoria will maintain tracks to ensure visitors can access the park, including the wetlands and healthy floodplains. Check the [Parks Victoria website](#) for the latest conditions and closures in Nyah-Vinifera Park.

To support the delivery of environmental water, Parks Victoria will manage pest, plant and animals to ensure the best ecological outcomes are achieved.

How does it fit in with the other VMFRP sites?

The infrastructure at Vinifera is one part of a package of works to be delivered in Victoria under the Basin Plan.

Floodplain infrastructure is designed to target specific ecological results at each site. The decision to release water at a site is based on monitoring of floodplain conditions and is part of a holistic approach to keeping the Murray and its floodplains healthy.

Floodplains are interconnected with the river and the greater Murray–Darling ecosystem. Operations at individual sites can influence ecological outcomes in others. For example, release of water from one site may trigger a fish migration and breeding event to repopulate other sites, or watering at multiple sites concurrently could ensure plentiful food supply for colonial nesting waterbirds.

The Basin States and the Australian Government work together each year to work out how to operate the river system as a whole, and how to coordinate and prioritise environmental water delivery across all the different regions. This process has been in place for more than a decade.

How is this different to existing environmental water programs?

Planning and delivery of environmental water operations is coordinated via catchment management authorities, in consultation with stakeholders including Traditional Owners, land managers, water authorities and the local community, and informed by the results of ecological monitoring programs.

Infrastructure gives us greater reach across more floodplains and helps us get better ecological outcomes at sites that are either difficult or impossible to reach under our current environment

Will the other wetlands and floodplain spaces still get water?

Murray River floodplains and wetlands will continue to receive naturally occurring floods. VMFRP sites along with other floodplains across north-west Victoria will also receive environmental water when needed to complement existing natural flows as part of a holistic approach to maintaining healthy rivers and floodplains. Figure 4 shows the sites included in Mallee Catchment Management Authority's environmental water program, alongside with VMFRP sites.

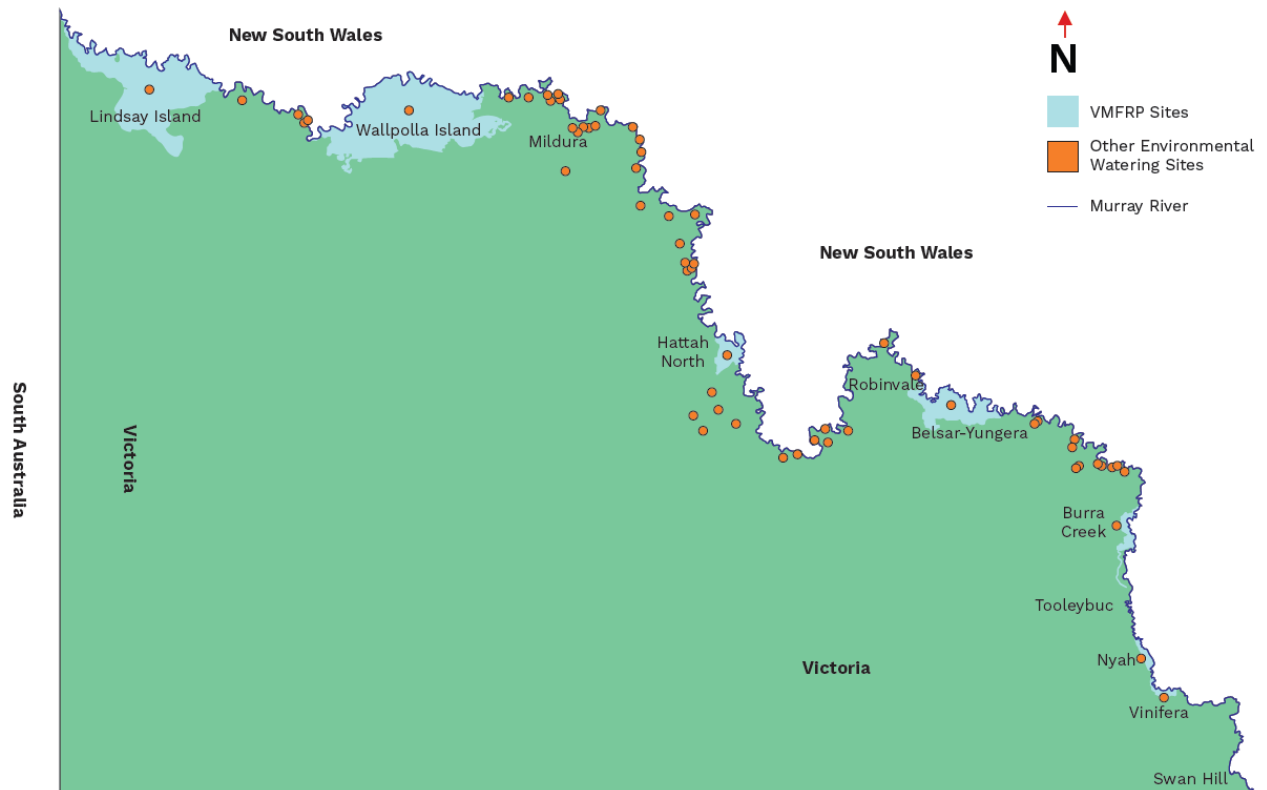


Figure 4: Environmental watering sites in the Mallee CMA area

When will you start building?

Construction is anticipated to start around December 2022, depending on funding, the environment assessment process outcome, and obtaining other legislative approvals. Projects will take about six to nine months to complete. All projects are to be operational by mid-2024 under legislation.

How do you know it will work?

The VMFRP partners have a long history of working with environmental water and using infrastructure to deliver environmental water. Specialist engineers and ecologists have been working together on the project design for Vinifera since 2012.

Projects are currently undergoing a rigorous, transparent and comprehensive environmental assessment process to assess potential ecological impacts and benefits. We are confident that these works will bring these floodplains back to life and help them to flourish, restoring these valuable landscapes for generations to come.

We already know from infrastructure built under [The Living Murray program](#) that these projects deliver great outcomes for plants and animals.



What is the environmental assessment process?

In December 2020, the Minister for Planning determined that an environment report is required to assess any potential environmental impacts at Vinifera during construction and beyond. The Commonwealth Government also requires an assessment of potential impacts to threatened species.

Specialist investigations are now under way to assess potential impacts to areas such as biodiversity and habitats, water quality, cultural heritage, social, economic and amenity impacts, and waterway use and infrastructure.

Community consultation and advice is a significant part of this assessment process.

The environment report will be publicly exhibited in 2022, giving the community and stakeholders an opportunity to have their say.

An Advisory Committee will consider the environment report and public submissions received, and will then prepare a report for the Minister for Planning.

Find out more about the regulatory assessments at www.vmfrp.com.au/planning-approvals and how you can get involved at www.vmfrp.com.au/get-involved.