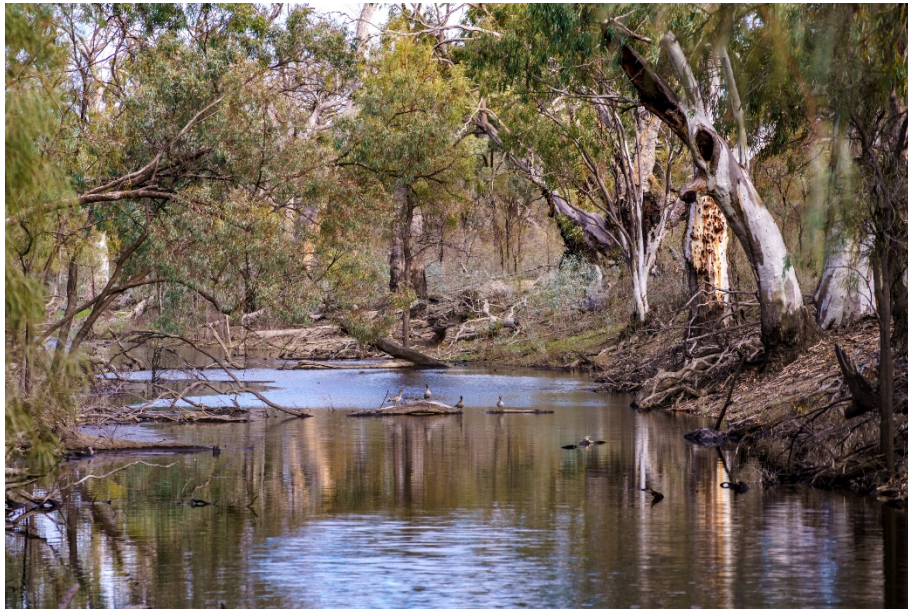


Burra Creek site story and FAQ

Burra Creek is one of nine ecologically significant floodplains in north-west Victoria earmarked for restoration under the Victorian Murray Floodplain Restoration Project (VMFRP). Visit vmfrp.vic.gov.au for more information.

Location	Between Piangil and Kenley, 50 km northwest of Swan Hill, in northwest Victoria
Landscape targeted	54 km anabranch of the Murray River with well-preserved floodplain woodlands and shrubland, and a wetland.
Threatened animal species	25 significant species including the Broad Shelled Turtle, Carpet Python, White-bellied Sea Eagle and the Regent Parrot



Burra Creek is home to a surprisingly diverse range of plants and animals (Photo: Mallee Catchment Management Authority)

Why do we need floodplain restoration works at Burra Creek?

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 continue to see serious ecological impacts to floodplain health.

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

Burra Creek is an anabranch of the Murray River that meanders for 54 km across the floodplain. The creek is flanked by river red gums, black box and lignum communities and a mosaic of wetland and floodplain



habitats. Before river regulation, the Murray would reliably flood Burra Creek every winter to spring, with the occasional bigger flood reaching the higher parts of the floodplain.

Burra Creek has been modified over time with access tracks which are now restricting the flow of water into the creek. River regulation has also reduced the frequency and duration of floods at Burra Creek significantly. The lignum shrubland and woodlands around the creek would be flooded at least once every 10 years, and usually twice in that period. Now they wait as long as 17 years to get their feet wet.

Under our current environmental water program (and unlike most other VMFRP sites), we can pump water into the creek line, but only to a low level. This allows us to water a narrow band of vegetation close to the creek, but we cannot get water further out onto the floodplain, which is where we are seeing the biggest decline in floodplain health.

The works planned under VMFRP will allow us to manage this floodplain more efficiently over the long-term. The infrastructure we build will remove blockages to natural flows and allow us to replicate occasional floods of up to 35,000 ML/d to get water all the way up to the struggling black box and red gum woodlands.

We'll be able to hold water on the floodplain for as long as needed to support the environment, before returning it to the river. More importantly, 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.

Refer to the Burra Creek flooding frequency factsheet to see how flooding patterns have changed over time and how VMFRP works will improve flows at this site.

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 infuse the river with nutrients and support an extraordinarily rich tapestry of life on the floodplain.

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.

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 Burra Creek?

Although less well known than neighbouring park Nyah-Vinifera, Burra Creek is home to a surprisingly diverse range of plants and animals, including 25 significant species. Burra North has one of the best-preserved floodplain woodland and shrubland communities in the region.

Regent Parrots and Major Mitchell Cockatoos nest in river red gum hollows, while White-bellied Sea-eagles, Spotted Harriers and Little Eagles nest in the branches of large healthy red gum and black box trees.

Falling branches and leaves provide dense understorey and ground cover in the woodlands, which is great for the Carpet Python and Lace Monitor and ground-foraging species such as the Brown Treecreeper and Hooded Robin and insectivorous species such as the Grey-crowned Babbler. The Tessellated Gecko and Rainbow Bee-eater also love a productive floodplain and an excellent diversity of bat and frog species has been recorded in Burra.

Burra Creek 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 Burra Creek.

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 Burra Creek and the importance of waterways to their identity and sense of belonging.

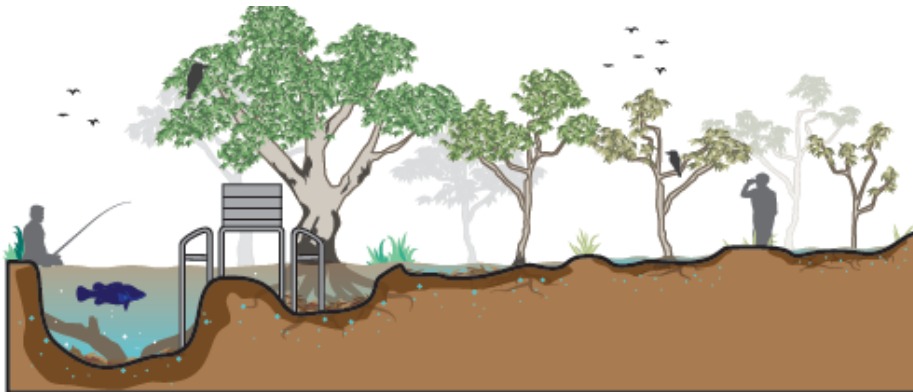
We recognise the strength and courage of Traditional Owners which has enabled continued connections to Country and culture. As well as our work with these groups to preserve cultural heritage, we are exploring opportunities to support their rights and obligations to progress their aspirations for Country.



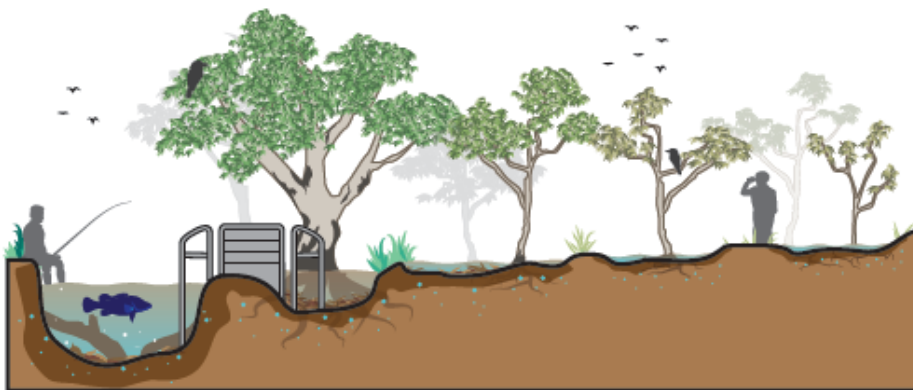
How will you get water onto the floodplain at Burra Creek?

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. Two hardstands will be built to enable us to bring in temporary pumps.

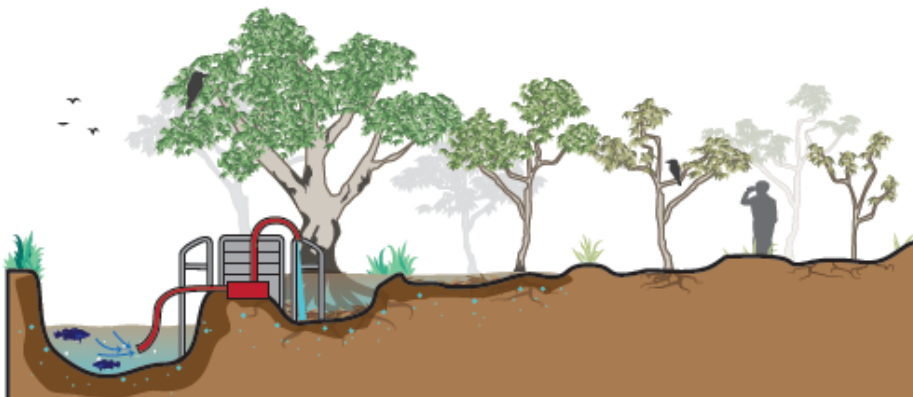
The works at Burra Creek will operate under three potential watering scenarios, as shown in Figure 1.



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 regulator and leave the water to flow naturally.



Scenario 2: Often, when 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 Burra Creek

What infrastructure will you build?

Three small regulators, 2.4 km of containment banks and removal of some significant blockages will enable us to get water into the creek and the Burra North floodplain and hold it there for as long as needed. In the south, we will only water the creek line (73 ha) because the floodplain is productive agricultural land. Burra North will benefit from more extensive flooding (330 ha).

We will return the water to the river via a rock chute – a rocky path that slows the water’s return 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 403 hectares of red gum forests, lignum shrubland and black box woodland. Figure 2 shows the impact we can have across the floodplain with different flows.

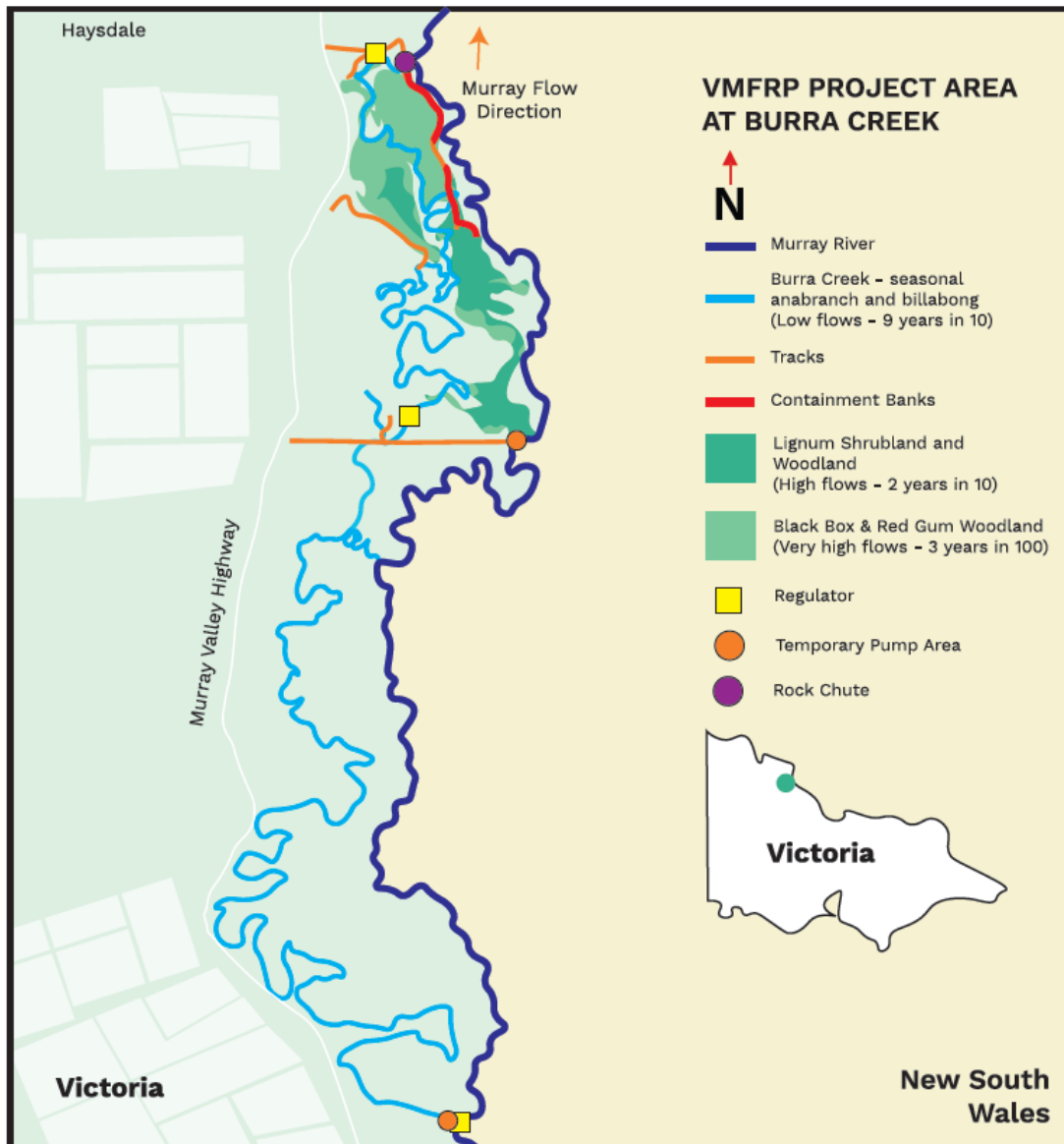


Figure 2: Extent of vegetation that we can reach with VMFRP works

What will the infrastructure look like at Burra Creek?

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 will be 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 Burra Creek.



Raised track (containment bank) at Hattah Lakes



Horseshoe Lagoon regulator at Wallpolla Island

Figure 3: The scale of infrastructure at Burra Creek

Will access be restricted during flood events?

Watering events will mostly occur in late winter to spring for up to 3 months.

The smaller more regular flows won't go beyond Burra Creek, which means no tracks will be inundated in the north or south of Burra Creek. Full access to the park will be maintained.

With larger natural flows, tracks in the northern part of Burra Creek will get flooded by water escaping the banks of the Murray River and Burra Creek, which restricts 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.

However, these larger floods only happen on average every 2 years in 10 for less than a month, so will have little impact on access to regular camping spots.

The Burra South floodplain will not be watered beyond the creek line. The VMFRP is working with landholders to ensure access is maintained to critical irrigation infrastructure during construction and operation.

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 Burra Creek.



Will the VMFRP improve access tracks and manage issues related to pests, plants and animals?

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 Burra Creek.

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 Burra Creek 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 environmental water program.

Will the other wetlands and floodplain spaces still get water?

Murray River floodplains and wetlands will continue to receive naturally occurring floods.

VMFRP and 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.

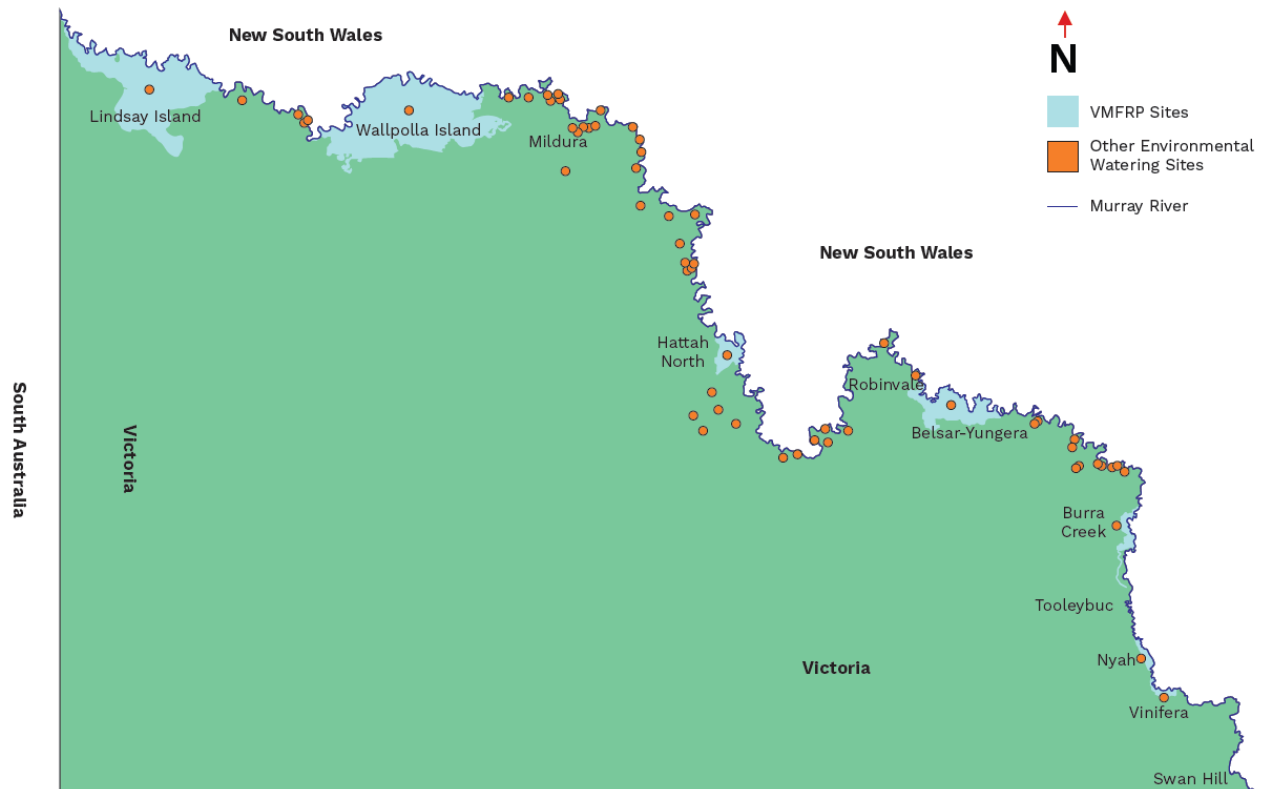


Figure 4: Environmental watering sites in the Mallee Catchment Management Authority area

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 Burra Creek 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 Burra Creek 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.