

## FLOOD PROTECTION

With such extensive widespread flooding throughout Australia at the moment, AWMA is committed to continue developing partnerships and solutions that assist clients with suitable and viable flood mitigation projects.

No two floods are the same and, as such, no two solutions are the same.

Due to the range of variables, flood barrier design is most successful when facilitated in partnership with technical experts, manufacturers, construction companies, developers, asset owners and authorities all working together to develop flood mitigation solutions that reduce flood risk.











## GENERALLY SPEAKING

The recent flood events in Queensland, New South Wales and Victoria were a national disaster that may take years to recover from.

In future years, it is likely that this level of flooding will occur more often than it has historically. Australians are very resilient people, but a repeat of the 2022 floods would have huge implications on communities, infrastructure, services and the economy.

It would be more viable, going forward, to investigate flood mitigation and protection measures in all forms to reduce the tangible and intangible costs associated with flood risk.

AWMA has developed a range of proven flood protection infrastructure that offers customised options to protect personal property, entire communities and major public infrastructure. It is not possible to protect every asset in every flood, but in many cases, there are a range of options available to prevent or moderate flood damage.

Flood protection can be facilitated in various ways, including a combination of:

- Floodplain management
- Building modifications
- Water storage and retention dam management
- Waterway rehabilitation
- Physical flood barriers.

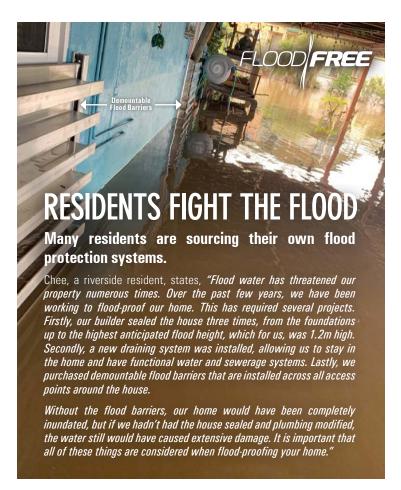
AWMA will continue to support initiatives for flood mitigation and flood protection through:

- Continuous research and development of our flood barrier systems
- Development of barriers to suit new applications
- Engineered options to protect more assets at higher flood levels
- Options for more economically viable installations.

Our thoughts are with the many thousands of people that have been impacted by the recent flood events.









# DEMOUNTABLE FLOOD GATE FOR VIC WTP

CCB Envico has completed an upgrade of the Echuca Water Treatment Plant, including a demountable flood gate required to protect the plant from water ingress.

The flood gate consists of two sections, each 5000mm wide x 1000mm high. Permanently stored on-site, the flood gate segments include lifting points for ease of transport and placement into the side frames by on-site operators.

The upgrades aim to ensure Echuca's water security, allowing for growth, and protecting the township's water supply.



Installing a flood barrier that is based on the engineering principles of buoyancy creates a self-actuating flood barrier, rather than one requiring power or human intervention to deploy.

A buoyant or passive flood barrier will always deploy when needed. Once water can no longer drain into the storm water systems and starts to back up, the flood barrier rises.

Human intervention and power are not required to activate a passive flood barrier.

AWMA offers a range of passive flood barriers.

Pictured is the entrance to a commercial building in Melbourne. This property had been flooded twice, at a significant cost to the owner. With a FloodFree Passive Tilting Flood Barrier now installed, the building is protected from water ingress during heavy rain events.

Nicci, the property owner, states, "Our underground carpark and basement entrance is below street level. It doesn't take much rain to fall before it fills with water. I witnessed two significant flood events in my street that cost me thousands of dollars, I wasn't waiting for a third. I worked with AWMA's FloodFree team to have a flood barrier installed across the car

park entrance that would automatically stop water ingress whenever it was needed, without me having to do anything.

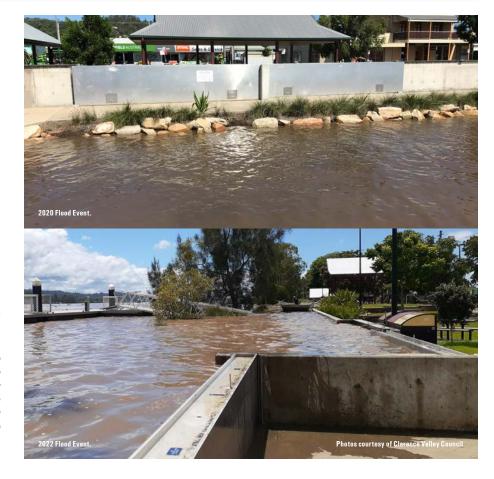
It is amazing how the barrier rises when needed, with the alarm system activated, always floating that bit higher than the water level in order to protect the property from rain water, storm water and street wash. Then, once the water recedes and the storm water systems clear, the barrier drops just as fast, reinstating building access. Having that piece of mind that the flood barrier will deploy and protect the property as and when needed, has been invaluable."

# LEVEE SAVES MACLEAN

Clarence Valley Council's levee system recently saved the township of Maclean from inundation when flood waters came within millimetres from the top of the flood barriers.

Retractable flood barriers are a valuable asset, as they are permanently installed on-site. They are designed to be an extension of existing infrastructure, customisable to suit surrounding aesthetics. To deploy, the barriers are slid along a stainless steel track and locked into place. Retractable flood barriers are most commonly used to close and protect pedestrian walkways and vehicular access points.

A Clarence Valley Council spokesperson stated, "The retractable flood barriers we integrated into our levee system saved the township from being completely inundated. We have been upgrading our flood mitigation system to include retractable flood barriers over the past four years. Working with AWMA, we have refined the design to suit our on-site and operational requirements. Now, they have been well-proven!"



## RECENT PROJECT GALLERY

### INNOVATIVE - CUSTOMISED - SUSTAINABLE





## **AWARD WIN!**

The success of AWMA's Self-cleaning Fish Protection Screens was recognised at the Manufacturers' Monthly Endeavour Awards last month when awarded Environmental Solution of the Year.







#### WE HOPE TO SEE YOU AT THESE UPCOMING EVENTS.





FLOOD I ENVIRONMENTAL I IRRIGATION I WATER TREATMENT I DAMS I ENERGY & RESOURCES



#### **HEAD OFFICE**

