



NIMMIE-CAIRA WATER INFRASTRUCTURE PROJECT

The \$180 Million Nimmie-Caira Project is a significant water saving project for NSW and particularly for the Murrumbidgee Region. The project's reconfiguration of water delivery infrastructure aims to enhance the distribution of environmental water to lands identified as having high ecological value.

Nimmie-Caira is part of the Lowbidgee floodplain, the largest remaining area of wetlands in the Murrumbidgee Valley within the southern Murray Darling Basin. This floodplain and its associated wetland systems are areas of national and international significance.

AWMA were engaged by Comdain Infrastructure to custom design and manufacture LayFlat and Undershot

gates in a variety of sizes and configurations. A total of eight LayFlats and 16 ULF undershot gates were manufactured from grade 304 stainless steel, for 14 sites.

Electrical cabinets with solar and batteries were also provided for full SCADA functionality including local and remote monitoring and control capabilities.

AWMA partnered with Parasyn to deliver an innovative cloud-based SCADA system for this project. Programmable Logic Controllers (PLCs) are used to perform all control of the gate positions and/or levels to maintain flow. Operators are able to monitor and issue control setpoints from either the local system or the remote system.

GENERALLY SPEAKING

It's great to see some decent rains this winter, in many areas that have been way too dry for too long. Let's hope we get plenty in the catchments as well.

It's worth remembering that AWMA provide customised water control solutions and infrastructure. We don't have a stock of standard products sitting in a warehouse. Every product is custom designed to ensure we bring to the table the best solution that meets all operational and safety requirements, delivers a cost effective and sustainable solution and is manufactured to achieve low whole of life costs.

Our 20 plus years of specialist experience in designing, manufacturing and installing this type of infrastructure yields optimal results when AWMA are engaged in the early stages of planning and design.

It is our objective to always engage early. There is no charge for AWMA to assist in early contractor involvement. AWMA offer as much support and advice as we can to ensure stakeholders receive an end-product that will satisfy all objectives.

An example of where early engagement pays dividends is when we are working with civil designers. We are often able to put solutions on the table that will allow modifications of traditional civil designs, saving many times the value of the infrastructure we are supplying, in reduced civil works costs.

It's not just the tendered cost of the infrastructure being supplied that should be considered when weighting tenders. AWMA can offer project cost and time savings that cross over civil, install and schedule reductions, as well as operational and whole of life benefits for the asset owner.

We look forward to working with you (early) on your next project.



Brett Kelly
Managing Director

NEW ZEALAND INTAKE SCREENS

The Mid Canterbury area of New Zealand's south island is a powerhouse for food production, 10% of which is enabled by Barrhill Chertsey Irrigation Limited (BCI). BCI is a farmer owned cooperative sourcing water from the Rangitata and Rakaia Rivers, both alpine braided rivers.

BCI now has nine main distribution networks, a total 250km of buried pipelines. The network's infrastructure includes river intakes, fish screens, pumping facilities and a small hydro generator.

A cylinder style intake screen manufactured by AWMA was recently installed as a trash screen in a head pond for a new delivery line. This new line delivers around 700 litres per second to farms that previously had no access to water.

The Canterbury area of New Zealand has documented 'good practice guidelines for fish screening'. This government document notes cylindrical screens:

- Have been widely applied, have a good performance record and have been accepted by the resource agencies as positive barrier screens;
- Have a proven cleaning capability that removes debris off the screen;
- Result in lower maintenance costs;
- Are easily accessed if maintenance is required.

AWMA manufacture fish-friendly intake screens with a degree of customisation available. Configurations include 'T' or drum style screens that may be mounted on retrieval systems such as a custom framework with electric motor-driven winch or submersible pontoons.

The key benefit of AWMA's intake screens is the self-cleaning function that eliminates any debris loading or suspended solid build-up from the screen. The self-cleaning function utilises one exterior static and one internal rotating brush that can be powered or self-propelled. Propeller driven screens operate automatically whenever the flow in the suction pipe exceeds a minimum flow velocity, turning an impeller that rotates the screen through a gearbox arrangement.

The Cylinder Screen material and design dictates very low maintenance requirements. The screen medium is wedge wire, available in a variety of slot sizes to suit the application. Manufactured from Grade 304 stainless steel the screen is extremely strong and durable.

For further details visit AWMA's website or give us a call.



WELCOME TO AWMA

NZ REPRESENTATIVE

We would like to welcome Michael Apeldoorn.



Michael is AWMA's new Regional Manager for New Zealand.

Based in Christchurch, Michael will assist new and existing clients with AWMA's water control solutions. AWMA specialise in the design and manufacture of custom water control infrastructure, including penstocks, stop boards, bulkheads, flood barriers and self-cleaning screens. Michael's details are available on the AWMA Contact page of our website. He will also be attending the WaterNZ and NZSOLD/ANCOLD conferences, please feel free to introduce yourself!



FLOODFREE CONSERVATORIUM

Many properties located close to waterways and floodplains have recently been re-classified as flood prone to protect residents from the risk of 1 in 100 year flood events and the rising sea level.

AWMA are assisting many councils, building developers and home owners to incorporate flood protection into their assets, with options available for greenfield and brownfield sites.

Lendlease engaged AWMA to design, manufacture, install and commission flood barriers to protect the Melbourne Conservatorium of Music.

AWMA's FloodFree Concealed Flood Barriers protect the main entrance to the building with a barrier 16.1m wide x 1m high, as well as a secondary entrance 3.15m x 1m. As pictured this barrier is 'concealed', vertically, beneath the pavement with a top plate, side panels and drainage system integrated into the surrounding aesthetics. Once approaching water reaches a predetermined height, alarms will signal and the flood barriers will automatically rise.

The Loading Docks and Stairways are protected with FloodFree Passive Tilting Flood Barriers; 4m wide x 1.25m high and 2m wide x 1.35m high. These flood barriers are integrated horizontally, into the flooring surface, they are fully trafficable and automatically rise once a predetermined water level is triggered.

AWMA's range of FloodFree Barriers have been accepted by Melbourne Water for flood barriers as required in DA applications. They are Australian-made, proven systems, designed for low maintenance, low risk and best value for money. All products are made-to-order to ensure specifications are accounted for (including flood type, debris, operation, safety etc).

Further details may be found on the AWMA or FloodFree websites.

INSTALLATION



CONCEALED



INSTALLATION



CONCEALED

DEMOUNTABLE LEVEE EXTENSIONS FOR DONALD

The Buloke Shire suffered a period of prolonged drought, followed by severe flooding. Succeeding investigations into the shire's flood mitigation infrastructure, AWMA were engaged to develop a flood protection barrier for

the township of Donald.

In the Buloke Shire, as in most rural communities, roads and access are critical. At one stage in the days

immediately following the Donald flood events, flood waters and flood damage resulted in over 65 roads in the municipality being closed.

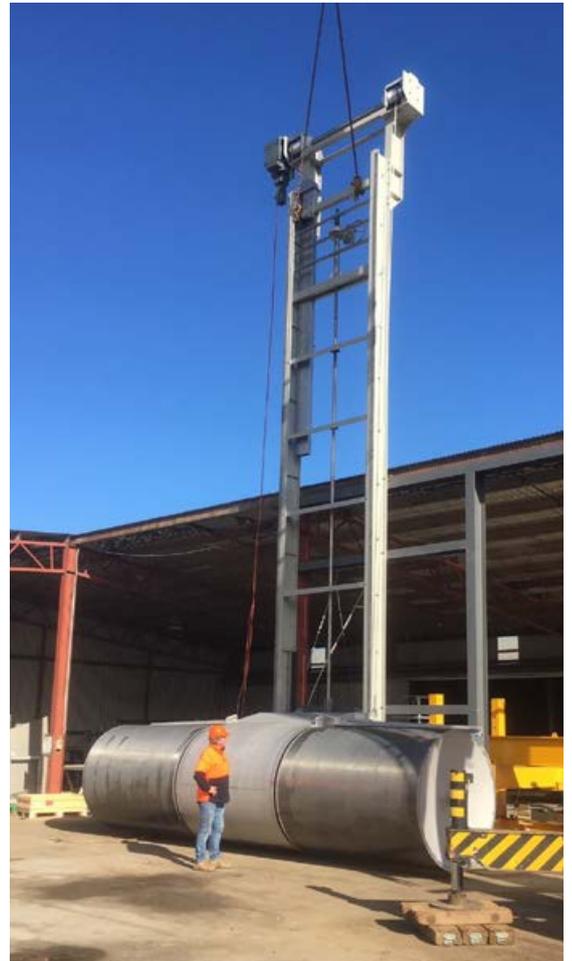
The FloodFree Demountable Barrier allows fast and effective isolation (and re-opening) of road crossings, levee openings and access points. Barriers are custom-designed to suit site specifications including road camber, kerbing, adjoining infrastructure and flood characteristics.

Visit the Donald Demountable Flood Barriers on our website to view videos of the installation process.



RECENT PROJECT GALLERY

INNOVATIVE - CUSTOMISED - SUSTAINABLE



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



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