

### DESIGN - MANUFACTURE - INSTALL

## 48 SPECIALISED GATES FOR PARR

AWMA have successfully delivered a range of penstocks and stop gates at Sydney Water's North Head STP, for PARR Alliance.

The North Head STP is the fourth largest sewage treatment plant in Australia. Recent works will ensure improved plant performance and reliability.

AWMA were responsible for the design, manufacture and installation of 28 penstocks and 20 stop gates that will withstand more than 3m of head pressure with open waterway up to 4m high x 3m wide.

PARR Alliance's demand for industry leading specifications required the research and development of new design options. Investigations were required both on and off site in an effort to meet the challenging design criteria.

AWMA's experienced installation technicians re-assessed gate seals during the installation process to test leakage rates in-situ under potable water, ensuring the best possible outcomes under the raw sewage conditions.

Client feedback received from the Project Engineer noted AWMA's customer service and ability to adapt to arising challenges as highly commendable, with a maximum rating. In-line with AWMA's ISO 9001:2008 quality process, AWMA encourages feedback upon the completion of all projects.

This challenging project gave AWMA the opportunity to explore maintenance benefits that will in-turn profit the wider industry. AWMA's turn-key capacity presents a unique opportunity for clients to request ultimate design specifications with a guarantee of AWMA's commitment to provide the best possible outcomes.



## GENERALLY SPEAKING

It's our birthday. On July 1 AWMA turned 10! A lot has happened over the last ten years.

We have shared these experiences with great staff and customers and I would like to sincerely thank everyone who has contributed to 'building' AWMA over this time. We are proud of where we are and what we have achieved together.

AWMA thrives on innovation. Our R&D programs have been the cornerstone of the AWMA solutions we offer today. R&D is challenging financially, emotionally and technically. Conversely it is also rewarding in all the same areas. Again, a big thank you to our customers, suppliers and staff who have, and continue to, strive for continuous improvement. It is a good feeling knowing you are out in front, challenging others to catch you.

AWMA have developed a motivated, experienced and passionate team. The company's reputation and success is a direct reflection of this team, a team I am very proud of, a team you will be happy to deal with

Not all the years have been easy and we know that the next 10 years will also have its challenges, but success is sweeter if it is hard won. I look forward to the challenges and all the success we will share together in the coming years.

Thanks again for a great 10 years.

Brett Kelly
Managing Director

## ANOTHER DESALINATION PLANT CONTRACT UNDERWAY

AWMA has been awarded the contract to supply over 100 flow control structures for Victoria's \$3.5 billion desalination plant near Wonthaggi, VIC.

AWMA will design, manufacture, commission and supervise the installation of penstocks and stoplogs for the desalination plant under contract to the Thiess Degrémont Joint Venture.

Desalination plant infrastructure has demanding specifications in regards to design, material selection, quality assurance and documentation. AWMA's experience with the successful delivery of water control structures for the Sydney and Perth Desalination plants reinforces AWMA's capacity to deliver

this vital water project, on time and on budget.

With the procurement and design stages almost complete, the flow control structures will commence manufacture at AWMA's dedicated non-ferrous fabrication facility on time. in July.

The plant is expected to be complete in 2011, producing 150 billion litres of drinking water a year. This is equivalent to providing around a third of Melbourne's annual water supply from a source that is independent of rainfall.

Pictured above are 4m high penstocks ready for dispatch to Perth's Southern Seawater Desalination Plant.



## ZERO LEAKAGE

Two 8m long SideWinder penstocks have been successfully commissioned at the Gibson Island Water Reclamation Plant in QLD with ZERO leakage.

The SideWinders and three TopSeal penstocks were designed, manufactured and installed for contractors Thomas & Coffey Limited.

Plant investigations identified a need to upgrade the final settling tanks with the facility to remain operational at all times. AWMA project managers and installation teams worked within strict program schedules to ensure full compliance.

The AWMA SideWinders are automatically actuated and driven with a rack and pinion gear. A manually adjustable horizontal weir (weir plate) was supplied as a component of both SideWinders. The weir shall have a fully open capacity to divert 29% mixed liquor flows from the bioreactor into the new final settling tanks (max 383 L/sec per gate).

Isolation of individual tanks is managed through the closure of submerged TopSeal penstocks. These penstocks are manually operated and designed to withstand more than 5m of head pressure.

Due to the high corrosive environment the gates were manufactured from grade 316 stainless steel and custom designed to meet stringent plant requirements.

# MODERNISING IRRIGATION INFRASTRUCTURE... FOR OVER A DECADE!

A decade on, AWMA is continuing to deliver modernisation solutions to improve water accountability with enhanced operational efficiencies and OH&S benefits.

Murray Irrigation Limited's modernisation program involved AWMA replacing nearly 2,500 water control structures with all associated actuation systems, operational equipment, access walkways and solar power. The works were carried out at approximately 1,000 sites across a 750,000 ha area of NSW, over a five year staged program. Similar works include projects carried out for Goulburn-Murray Water and Murrumbidgee Irrigation, over the past 10 years

The current statewide SunWater QLD project is running on-time, coinciding with strict shutdown schedules. May and June have seen over 100 water control gates installed complete with handrails, walkways, actuation systems and trash screens (where applicable).

Project Engineer for the SunWater Intersafe
Project, Steven Chau stated "SunWater
is very pleased with the progress
and results of the Intersafe Project
so far. AWMA have demonstrated
exceptional project management
capabilities in meeting the relatively
short periods of scheduled shutdowns
for installations and have delivered
quality workmanship on the channel
control gates, walkways and
handrails. All feedback received from
the operators has been positive."

A renewed nationwide focus on the modernisation of irrigation delivery infrastructure has led to further investment and planning opportunities across all states. AWMA are available for on-site inspections and investigations into sustainable options for:

- Modernisation
- Asset Renewal
- OH&S Risk Reduction
- System Rationalisation or Reconfiguration and
- Improved Water Accountability

AWMA's turn-key capacity allows clients to benefit from a single point of contact, to plan, design, draft, manage, manufacture, supply, install and commission their project from the integration of single sites, to thousands of structures over staged programs.











#### MEET MIKE...

Mike Anthony has joined the AWMA sales team in the key role of Sales Engineer.

This role has been created to focus specifically on AWMA's irrigation client base and Mike has already taken significant steps to build on existing relationships within the industry.

Mike brings with him over 17 years experience in engineering and project management from a broad range of industries including telecommuncations, automotive electronics, and CNC machine tool design and manufacture. We welcome Mike and his family to regional Victoria.

# WELCOME... ROBERT WALERYS

Robert is a welcome addition to our team of Project Managers.

With over 23 years experience in the production industry, Robert adheres to AWMA's high standard of expectations in the areas of quality assurance, OH&S and operational procedures. A local Leitchville resident, Robert is currently working on irrigation modernisation programs as well as numerous other projects.



#### JOHN HOLLAND PARTNER AWMA ON METERING

AWMA would like to welcome Troy Kornmann as Works Supervisor for the Technical Services department.

Troy's qualifications, skills and experience within electrical engineering and manufacturing applications will be beneficial in advancing the automation of AWMA's products and services.

Troy is currently working with the John Holland Group on The Hawkesbury Nepean River Recovery Program. This program consists of seven projects to help improve the health of the river system including a project to supply and install water meters for licensed surface water users.

John Holland in partnership with AWMA were awarded the contract for the installation of the first 200 meters, with AWMA to install and commission the telemetry units.

Milestone 1 involved the installation and commissioning of 100 meters and telemetry units by 30th June which has been successfully completed. The further supply and installation of up to 2,000 water meters and telemetry units is expected for 2011.





# CONGRATULATIONS TO OUR WIOA COMPETITION WINNERS

AWMA attended the WIOA QLD conference and exhibition held in Rockhampton in late June. Following the successful completion of the two day event AWMA drew the winner of their 'Water Saving' competition. Congratulations go to

Pro-Bac Industries. AWMA will also be exhibiting at the entrance to the WIOA VIC event to be held in Bendigo 31st August, booth 69.



#### **CURRENT PROJECTS INCLUDE...**

VIC

- Thiess Degrémont Joint Venture: 100 flow control devices for the Victorian Desalination Plant.
- Siemens Australia: Wedge penstocks for Pakenham Treatment Plant.
- Water Resources Alliance: Wedge penstocks up to 6.5m high for Tourourrong Reservoir.
- Water Supply Alliance: Undershot, wedge and flap gates for ETP's Western Effluent Holding Basin with walkway and platform.
- CRS Industrial Water Treatment Systems: Stainless steel DLF penstocks for KJV Gorgon.
- Maffra Trenching: 50 slide gates for Southern Rural Water's channel system.
- Goulburn-Murray Water: Three undershots 4.3m high for the Lake Boga outfall.
- Goulburn-Murray Water: Undershots for the Avoca Floodway regulator.

SA

- SA Water: Seven undershot penstocks for Yatco Lagoon.
- Vonmac: Segmented stopboards for Kings Billabong near Berri.

#### NSW

- Monadelphous Engineering: Penstocks, stopboards, weir plates and a portable actuator for the Nambucca Heads STP.
- Civil Team: Stainless steel undershots for the Stevens Weir Fishway near Deniliguin.
- Gleesons Engineering: Stainless steel undershots for the Yanco Creek fishway near Narranderah.
- Hunter Water: 11 water control gates (stopboards, topseals and undershots) for the Branxton WWTP.

#### QLD

- SunWater Intersafe Project: Over 400 water control gates and associated products.
- Western Downs Regional Council: Aluminium Segmented Stopboards.

TAS

- Cressy/Longford Irrigation Scheme: Automated Head & Discharge gate.
- Gradco Pty Ltd: Two topseal penstocks 6m high for the Scottsdale Levee Upgrade.



