COLLABORATING WITH XYLEM TO ENGINEER A FLOATING PUMP PONTOON SYSTEM AND ACCESS GANGWAY FOR SYDNEY WATER

Client Profile

Xylem is a global water technology provider have been committed to solving the world's toughest water challenges across utility, industrial, commercial, and residential markets globally.

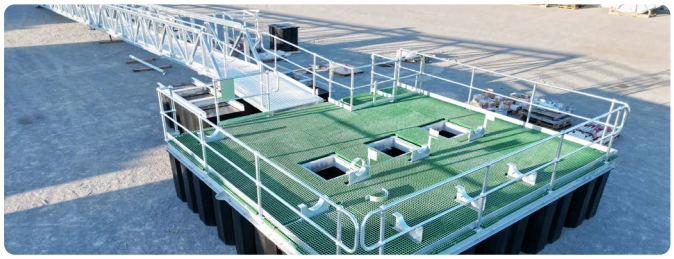
The Problem

Coerco were contracted by Xylem to design, engineer and manufacture a fit-for-purpose pump pontoon system and access gangway for Sydney Water's Picton Water Resource Recovery Facility. This facility treats wastewater from homes and businesses in the Picton area to produce recycled water, which is then used to irrigate crops at the Picton Farm.

As part of the strict design requirements, key considerations included factors such as topography of the lake, submergence and fluctuations in water levels, water density, pump dimensions, pontoon layout and assembly, and the different materials in which the fluids would pass through.
An additional challenge involved the construction of a floating pontoon platform that was both stable enough to support the integrated pump system, yet compliant to AS 4100:2020 (steel structures), AS 4997-2005 (floating structures), and AS 1657:2018 (fixed platforms, walkways, stairways and ladders).

The Solution

A collaborative effort between Coerco and Xylem led to the manufacture of a modular, pre-assembled pontoon design that could be seamlessly installed at the Picton wastewater facility. This not only saved Sydney Water time and money, but the mix of design, materials, and engineering methodology contributed to increased safety and compliance with Australian standards.

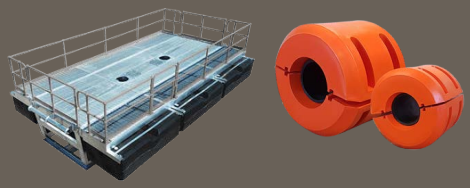


Summary

Location
Sydney Water's Picton Water Resource Recovery Facility

Client
Xylem

Products Used
Heavy Duty Pontoon
Multi Floats®



Coerco's modular floating pontoon design not only streamlined installation, but will provide a long-term, cost-effective solution to support Sydney Water's critical irrigation requirements for the Picton region. – Marc Alberto, Coerco Design Engineer