metasphere
make data count

AWARD-WINNING RETARDING BASIN MONITORING

SUPPLY OF REMOTE TELEMETRY UNITS & SENSORS FOR LEVEL MONITORING

BACKGROUND

Water authorities around the world face the same challenge: they must manage hundreds or thousands of underground water assets that are difficult to access and costly to monitor.

Critical above-ground assets such as plants, pump stations, tanks and reservoirs are commonly monitored, but below-ground assets like manholes and pipelines have been literally left 'in the dark', due to accessibility and technology challenges, and the high costs involved.

STAKEHOLDERS

Melbourne Water is a statutory authority owned by the Government of the state of Victoria. They manage and protect the city's major water resources, including water storage reservoirs and how drinking water is supplied. **Melbourne Water** is also responsible for reliable sewerage, healthy waterways, and drainage and flood management in Melbourne.

SAGE Automation is a leading provider of innovative engineering solutions for industrial automation and control services.

BUSINESS NEEDS

Melbourne Water wanted to monitor several sites that that are typically below ground and/or low-lying assets, in order to provide a higher level of service to the customers. These sites had previously been unmonitored due to challenges in access, location and power. The project needed to select, test and implement low-cost monitoring hardware that would:

i) not require mains power
ii) connect to the clients' existing IT infrastructure, and
iii) roll out within a reasonable time frame and at a lower cost.

Monitoring of these sites allowed **Melbourne Water** to better manage storm water flows by receiving live alerts of potential overflows and warning residents of potential flooding events.

THE METASPHERE SOLUTION

SAGE Automation delivered a low-cost, maintainable solution for monitoring thirty-eight of **Melbourne Water**'s most critical retarding basins.

The solution incorporated **Metasphere**'s **Point Colour** remote telemetry unit (RTU) dataloggers, field sensor devices and **SAGE**'s cloud-based SCADA service *STRATUS* for interim alarming and visualisation. Field works were managed by **ALS Global** and supported by **SAGE**.

The client achieved increased visibility of its sites for improved customer experience, environmental management and reduced capital expenditure.

The solution won the Victorian **Australian Water Association** *Infrastructure Project Award* in December 2018 and went to the national awards in 2019.

Point Orange is a self-contained remotely telemetry unit (RTU), with internal battery pack, IP68 unit enclosure, either a 4G (NB-IoT/ Cat-M1) or tri-band 3G modem, and quad band GSM/GPRS fallback, auto switching internal and external antenna options, software configurable AI, CI, DI, Modbus and SDI-12 communication options, integrated submersion sensor, local diagnostic points and intelligent alarm reporting. It communicates with **Metasphere**'s Master Control System, DNP3/ WITS DNP3 Masters or FTPS servers.

BENEFITS

The offering provided a low-cost, maintainable solution to Melbourne Water for monitoring critical retarding basins. Melbourne Water was better able to manage storm water flows by receiving live alerts of potential overflows, enabling them to pre-warn residents of potential flooding events.

SAGE Automation is a leading provider of innovative engineering solutions for industrial automation and control services.

Based in Australia, the company has offices in each state capital. Drawing on diverse industry and technical experience, SAGE delivers projects that enhances control and improves efficiency for clients across the defence, infrastructure, manufacturing, resources and utilities sectors.

FIND OUT MORE!

If you would like to monitor low-lying assets, get in touch to find out how **Point Colour** RTUs transform your operation