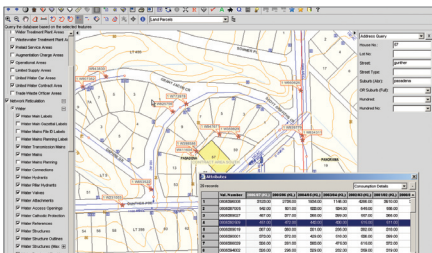




The difference is what you see

SA Water Corporation

AquaMap



SA Water is a government owned corporation, providing water and wastewater services to over 1.5 million customers throughout South Australia. SA Water owns more than \$7 billion in assets, primarily composed of more than 25,000 kilometres of water mains, over 8,000 kilometres of wastewater mains, and associated treatment plants, laboratories and fabrication workshops.

AquaMap is the web-interface of SA Water's GIS and is used extensively by SA Water staff and external clients

// Outcomes

- All SA Water staff now have access to accurate and up-to-date GIS information in an easy to use self help kiosk portal
- External access to AquaMap has resulted in faster decision making for the surveying and plumbing industries
- Significant reduction in overtime for staff to respond to customer enquiries
- Customer enquiries are now answered with increased efficiency and accuracy
- Increased revenue by identifying customers who are within service areas but not connected and hence do not receive rates notices
- Higher levels of productivity from the GIS team as a result of day to day enquiries now serviced online via AquaMap

// Challenge

To ensure the effective management of their vast network of assets and the highest standards of customer service, SA Water has focused on the development of leading edge technological systems. As the first utility in Australia to fully capture and store their entire network in a Geographic Information System (GIS), SA Water has always strived to make the most of their location information.

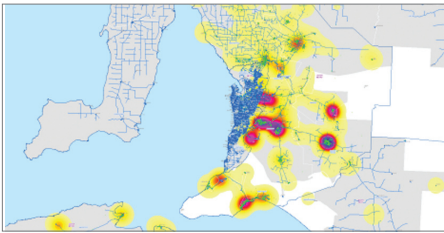
Despite having a GIS that was considered to be data rich, with detailed information on reticulation networks and treatment plants, reservoirs, tanks, valves, manholes and drains, there was an increasing demand on SA Water's GIS department for location-related data, products and services. To ensure continued high levels of customer service, and to meet increasingly stringent regulations, SA Water's location intelligence capability needed to be extended throughout the organisation and external parties, and integrated with other corporate databases.

// Solution

Since upgrading their GIS, and implementing a location intelligence gateway known as AquaMap to users, SA Water has delivered increased access to corporate and GIS information to more than 1,300 staff across the organisation and to many external clients. Using GIS technology from ESRI Australia and ESRI Inc., SA Water is now able to efficiently organise and publish location-based information from various sources and corporate systems, benefiting from a location-based common operating picture of their utility's activities.

SA Water can now more effectively assess how their water and wastewater assets are performing, and address areas of importance relating to customer service, operational management and planning.

The corporation can also efficiently edit data and access accurate and up-to-date information from the GIS and other corporate systems.



The GIS is used to analyse the density of field operations.

SA Water can now more effectively assess how their water and wastewater assets are performing, and address areas of importance relating to customer service, operational management and planning.

// Benefits

AquaMap allows staff to answer a range of customer queries with increased efficiency and accuracy, especially important with an ever-increasing number of enquiries and requests received by the utility. Enquiries relating specifically to developments and new connections rose to peak levels in 2008. By having ready access to the corporation's location information, SA Water has seen a significant reduction in the backlog of enquiries and the associated costs of budgeting for continual overtime.

The upgraded GIS has delivered significant benefits across the organisation, with enhanced analytical and technological capabilities experienced in asset management, customer service, operational management, finance and administration, and planning.

SA Water staff are now able to efficiently edit and access accurate and up-to-date data from the GIS and other corporate systems, resulting in significant productivity improvements.

All levels of staff can get a snapshot of the latest location-based information about the network, and this has greatly improving the level of customer service the corporation can provide.

No longer confined to the operational level, GIS is now being used by a wide range of staff throughout the organisation, with access to AquaMap recently extended externally to surveyors, land developers, and the plumbing industry. By providing direct and secure access to appropriate location information, customers have benefited from better informed and faster decision making, with very positive feedback received from external users.

// The Future

SA Water is currently working on a range of initiatives to integrate location-based data with other key business processes. These include the development of a "Mobile Field Force" solution that will deliver integrated location-based and work management data to tablet PCs fitted to operational vehicles. Other initiatives include the automation of responses to requests for locations of underground services from "Dial Before You Dig" clients, improved integration with SA Water's SCADA and systems modelling applications and the creation of an online system for processing new water and wastewater connection applications.