

Australian Water Authority uses geospatial technology to increase productivity and share information



EAST GIPPSLAND WATER PARTNERED WITH INTERGRAPH TO CREATE A COMPLETE, SPECIALISED GEOSPATIAL INFRASTRUCTURE MANAGEMENT SOLUTION

THE CHALLENGE:

The East Gippsland Water (EGW) asset register, which holds information about the authority's pipeline assets, was intended for financial reporting and not readily available for staff use. Personnel could obtain copies from the Bairnsdale head office and at all depots, but updated plans were only available every three months, which meant that up-to-date data was hard to come by.

EGW realised that a geographic information system (GIS) would greatly enhance its ability to manage its sewer and water supply networks more efficiently. The GIS would have to be a sophisticated system that could keep track of various status levels of pipeline assets, manholes, and fittings. In addition, the GIS must make accurate, up-to-date information available to staff – including data accessibility and quality, information reporting, and ongoing data maintenance and quality control.

THE PROJECT OBJECTIVES:

- Improve productivity in accessing required information about assets, asset performance, and overall system performance.
- Ensure accurate, secure, and consistent information is available to staff company wide-assisting in reliable operations and planning to minimise risks of incorrect decisions and actions.

THE SOLUTION:

EGW turned to Intergraph to create a solution that would enable the Authority to manage its assets easily. In the project's first phase, Intergraph and the Authority developed a database model to define the network relationships between features within the sewer and water pipeline system, establish data integrity rules, and control data editing. The GeoMedia Professional and GeoMedia PublicWorks rule-based data model created a management audit trail which tracks all edits, new features, and deleted features.

PROFILE:

East Gippsland Water, Victoria, Australia

Website: www.egwater.vic.gov.au

East Gippsland Water provides water and waste water services to 27 towns and communities in the East Gippsland region.

Authority area extends from Bairnsdale to Dinner Plain in the north and Mallacoota in the east. Most towns are located on the coastal plains, exceptions being Omeo, Dinner Plain, and Swifts Creek in the high country.

In addition, the Authority services many rural consumers in ten distinct water-supply systems.

PRODUCTS USED:

- GeoMedia®
- GeoMedia Professional
- GeoMedia PublicWorks
- GeoMedia WebMap
- GeoMedia WebMap Publisher

KEY BENEFITS:

- Head office and selected depots have simple Web access to GIS
- Users have quick, easy access to sewer and water pipeline asset data
- Users have immediate access to data as soon as it is updated
- Staff can link into finance, record management, and customer billing systems
- Staff has access to up-to-date, reliable, and matching data in both

Phase II of the project created the East Gippsland Water intranet site. Using GeoMedia WebMap and GeoMedia WebMap Publisher, EGW created a Web-based solution that provides the head office and selected depots with simple Web access to the new geospatial infrastructure management system. Users now can access sewer and water pipeline data, previously only available in hard copy, quickly and easily. When data is updated, it is available to all users instantly – in real time. Users can check the system’s screen view against the paper plan and can link into pipeline asset register, finance system, document management system, and customer billing system.

EGW has developed a GeoMedia Professional and GeoMedia PublicWorks-based administrator solution that enables users to update both the new system’s database and the pipeline asset register database simultaneously – providing up-to-date, reliable, and matching data in both databases.

EAST GIPPSLAND WATER USES THE GEOSPATIAL WEB-BASED SOLUTION TO:

- Provide sewer and water plan information to customers, plumbers, developers, solicitors, consultants, and contractors through staff access to the intranet
- Search for locations by street address or title plan information – users can then zoom into the relevant area
- Query incident and customer complaints
- Search, view, and print sewer and water plans
- Link to documents, such as technical data

Thanks to its new complete geospatial solution, EGW is using Intergraph technology to identify, validate, and update its existing pipeline asset register – matching it with financial ledgers. This ensures that both locations contain exactly the same up-to-date information.

FUTURE PLANS:

The Authority plans to develop a depot and power user solution that can be used to map, analyse, and report key performance indicators, such as customer complaints, leaking water mains, analysis of possible relationships between incidents and pipe age, materials, etc., determining properties affected by closures or blockages, and much more.

For more information, visit www.intergraph.com

ABOUT INTERGRAPH

Intergraph Corporation is the leading global provider of spatial information management (SIM) software. Security organisations, businesses and governments in more than 60 countries rely on the company’s spatial technology and services to make better and faster operational decisions. Intergraph’s customers organise vast amounts of complex data into understandable visual representations, creating intelligent maps, managing assets, building and operating better plants and ships, and protecting critical infrastructure and millions of people around the world.



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