

MidCoast Water

Customer Success Story

Autodesk® Topobase™

Autodesk Topobase gives us the database and application tools to help maintain data accuracy and to provide a visual indicator of potential problems in the spatial maps. It also helps MidCoast Water provide better answers to geospatial questions, by closing the gap between GIS and CAD through industry-specific information management. Our teams can more easily access information in the infrastructure model, minimizing the need for data conversion and redundant data entry

—Brendan Soustal
GIS manager
MidCoast Water

Smart water management.

GIS integration with Autodesk® Topobase™ software helps solve integration problems and improves efficiency for regional water organization.



The Company

MidCoast Water (MCW) delivers water and sewage services to the Manning and Great Lakes communities of New South Wales, Australia, supplying 11 billion liters of water per year to 35,000 households spread over 7,000 square kilometers. The main water supply is derived from the Manning River, serving urban settlements from Crowdy Head to Pacific Palms. Smaller water supply plants operate at Bulahdelah, Stroud, and Tea Gardens.

With new technologies and ongoing system improvements, MidCoast Water continues to provide safe, high-quality drinking water and responsibly managed waste treatment, meeting the current and future needs of its community.

The Challenge

MidCoast Water's geographical information system (GIS) and procedures were not meeting its business needs and needed an update. Departments used a variety of spatial management processes and technologies, making the smooth flow of data from one department to the next, or one software system to the next, near impossible—and preventing internal teams from sharing design and records data without a time-consuming and error-prone conversion process. In addition, due to the GIS setup, MCW also found it difficult to create consolidated reports and share information beyond the core records team.

The organization needed a solution that could address GIS integration issues and increase productivity. Explains Ian Cannington, Industry Manager, Utilities and Government for Autodesk Australia, "MCW needed cutting-edge technology that could meet its requirements without disrupting business. The openness of the data that the software provides was also a key factor in choosing Autodesk."

Autodesk®

Design is integrated across the infrastructure asset lifecycle, helping to improve decision analysis.

The Solution

Built on innovative AutoCAD® Map 3D software, Autodesk MapGuide® software, and Oracle® software, Autodesk® Topobase™ software consolidates isolated stores of CAD and GIS data into a central spatial information database. Topobase integrates infrastructure design and management, giving MCW easier access to more accurate design, spatial, and asset information that can help users make better decisions, manage infrastructure assets more efficiently, and enhance data quality. In addition, MCW can now manage maintenance of all its physical assets, including scheduling and parts required.

Autodesk Topobase is an open and flexible framework that can easily be configured to support specific business processes and integrated with existing business systems. MCW's industry-specific module contains a data model, business rules, and multiple display models, all of which can be configured to take into account additional business requirements.

The Result

The resulting solution integrates design and GIS, improving productivity and minimizing time-consuming manual steps and conversion processes that can introduce mistakes. In addition, MCW employees now have access to more reliable data resulting in the organization running more efficiently and providing them with the ability to share up-to-date spatial information with all necessary stakeholders. Organization-wide workflows and business rules help speed up common tasks, improve consistency, and support data quality by minimizing scattered, redundant data creation and maintenance.

Says Brendan Soustal, GIS manager for MCW, "Autodesk Topobase gives us the database and application tools to help maintain data accuracy and

to provide a visual indicator of potential problems in the spatial maps. It also helps MCW provide better answers to geospatial questions, by closing the gap between GIS and CAD through industry-specific information management. Our teams can more easily access information in the infrastructure model, minimizing the need for data conversion and redundant data entry."

From planning to ongoing infrastructure management, Autodesk Topobase manages all events in the lifecycle of MCW's infrastructure assets, helping to both protect vital infrastructure and give MCW the power to control and manage its own environment. Data changes are regulated by requirements and rules built into Autodesk Topobase, allowing even employees without programming or database expertise to use the system.

Design is integrated across the infrastructure asset lifecycle, helping to improve decision analysis in many areas—for example, when setting maintenance priorities so as to help prevent major outages and supply problems. When MCW needs to perform maintenance or replace an aging section of water utility pipe, engineers create construction plans for the project, determine which residents must be notified, and schedule the project. Once field staff replace the pipe, engineers add relevant as-built information and register the project as complete—all within a single environment.

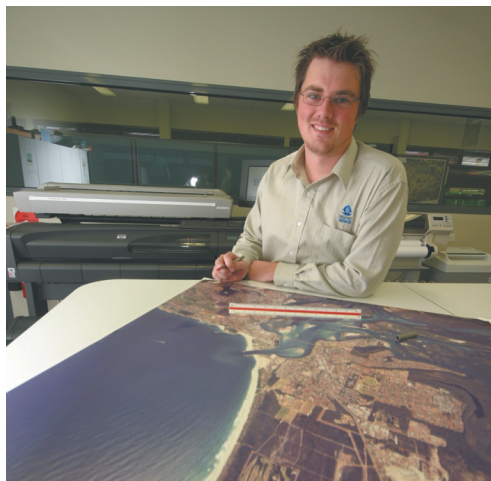
Adds Soustal, "Not only can MCW maintain the accuracy of the data and provide visual indicators of potential problems, but also, in our maintenance planning process we can communicate those plans more quickly and easily. With this solution, we can automate letter generation to affected residents, helping to ensure that they are aware of, and prepared for, any disruption in service."



MidCoast Water can more quickly and accurately manage distribution networks, and can integrate, access, and share design, as-built, and geospatial data across business processes—extending the reach and value of its infrastructure asset information.

For More Information

To help you get the most from your investment, Autodesk offers consulting and distribution partner services to help organizations implement Autodesk Topobase more quickly and successfully. Autodesk Consulting and partner services can assist with data migration, configuration, implementation of local standards, and interfacing with existing systems. To learn more, visit www.autodesk.com/topobase.



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