

Open Spatial delivers multifaceted support to Water Authority of Fiji

CUSTOMER

Water Authority of Fiji

WAF is responsible for providing access to quality drinking water and wastewater services to more than 144,000 residential and non-residential metered customers, most residing in urban areas. WAF also sets up water supply systems in rural areas, reaching more than 700,000 people nationwide.

WAF operations cover 18,274 square kilometers of the 332 islands in the Fiji archipelago, of which only 110 islands are inhabited. Fiji's total population is more than 900,000. WAF supplies about 116,342 megaliters of treated water annually to homes and businesses nationwide.

CHALLENGES

- Low data quality
- More than 50 percent non-revenue water
- Network not captured

BENEFITS/INNOVATIONS

- Water and sewer data migrated to Oracle database
- Missing data captured using Munsys
- Enlighten available to all staff and usage increases
- Losses reduced by more than 10 percent a year in an ongoing program
- Substantial savings to WAF through reduction in non-revenue water
- Ability to perform complex network traces to assess damaged in during disaster recovery
- Tracing of planned and unplanned outages has improved customer service
- Syncs with WAF billing system

SOLUTION



Our network assets are better managed, and our customer service is improved.

Open Spatial's work with the Water Authority of Fiji is diverse, ranging from the delivery of geospatial asset solutions to assisting with disaster recovery.

In a 4-year span, Open Spatial and WAF tackled expected and unexpected challenges including improvement of geospatial assets and analysis of GIS datasets after Cyclone Winston.

By implementing Open Spatial's Asset Decision Support Solution in 2012, WAF dramatically upgraded management of its geospatial assets and delivery of customer service. Open Spatial's Asset Decision Support Solution is specifically designed to support water and wastewater businesses and ensures WAF's network assets, including more than 4,313 kilometers of pipes, are accurately recorded. Open Spatial's solution bridges the gap between CAD and GIS and connects operations staff working in the field to the network.

Additionally, Open Spatial's Asset Decision Support Solution syncs with the WAF billing system to highlight unbilled accounts, reduce non-revenue water, and allow access to billing information throughout the organization.

"We considered our investment carefully, and our decision to use Open Spatial's solution was a good one. Our network assets are better managed, and our customer service is improved," said Josua Wainiqolo, GIS Administrator at WAF. "We now have systems in place that ensure we can perform network searches and get correct results."

WAF's work to advance its geospatial assets proved especially valuable after Cyclone Winston hit Fiji in February 2016. It was the largest cyclone to strike the South Pacific in recorded history. Open Spatial's lead geospatial solutions architect arrived in Fiji shortly after the cyclone to work as part of the recovery taskforce and assist the WAF team with extracting and analyzing GIS datasets.

WAF was able to perform complex network traces and get accurate results in order to assess damages and restore fresh water to impacted areas. The team was also able to further identify

the necessity of a national Spatial Data Infrastructure.

“Open Spatial’s solution has led to savings for WAF through the reduction of non-revenue water and improved customer service since we can trace outages and restore service quickly,” Wainiqolo said. Plus, our ability to recover after a natural disaster has proven the system.”

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