

**SOUTHERN WATER**  
TASMANIA

# Water metering project - Project management tool case study

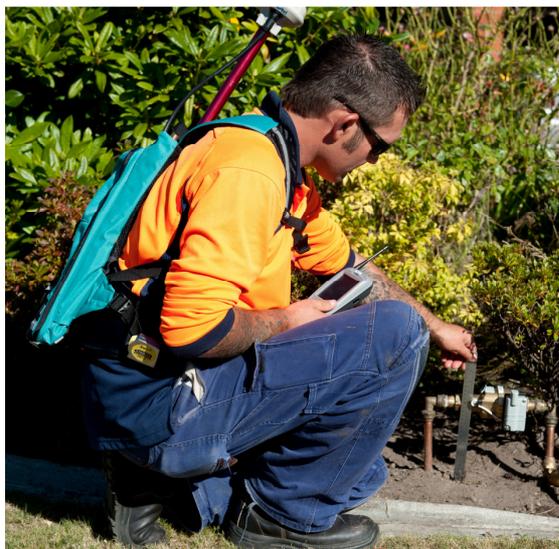
Award winning software to track metering rollout

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**WATER SERVICES**  
ASSOCIATION OF AUSTRALIA

Industry reform made it necessary to change water pricing for a majority of southern Tasmanian urban areas, from a land-value basis to service and usage, in a very short time frame. Project Management applying a purpose-developed Geographic Information System streamlined the installation of 52,000 meters in just 12 months—identifying properties, planning locations around customer instructions, forecasting expenditure, scheduling installations, managing contractor workflows, and obtaining first readings. This innovative IT project management tool was an award-winner. Results of installing efficient water meters include the automation of thousands of daily transactions, reduced water leakage and waste, while reducing the cost of meter reading from \$3 to 30c.



### COMPLIANCE IN COMPACT TIME FRAME VIA TECHNOLOGY

Water pricing for majority of Southern Tasmania urban areas was based on land value. There was a Regulator requirement for two part pricing (service fee and volumetric consumption fee) by 1 July 2012. Therefore 52,000 meters water meters needed to be installed.

Facing an extremely short delivery timeframe (just over 12 months) and variable data on existing installations, a project management tool was commissioned to assist with locating stop taps, scheduling meter installations, completing quality assurance checks and obtaining first meter readings. This project management tool utilised

spatial information principles and technology associated with Geographic Information Systems (GIS). The system utilised Southern Water's existing information system foundation and leveraged the power of spatial information and relationships to automate thousands of manual transactions that would occur on a daily basis.

### LEVERAGING THE KNOW HOW OF EXPERTS

Southern Water's Water Metering Project Team commissioned the project management tool, which RIA Mobile GIS (a Tasmanian IT company) developed and supported. Esk Mapping & GIS (another Tasmanian IT company) was recruited to perform the role of System Administrator, effectively operating and managing the project management tool.

### MEETING A TIGHT DEADLINE

There was a need to:

- > Deliver the project within a short timeframe
- > Manage the project budget
- > Manage customer requests

There was also a need for:

- > Information in near real time (daily reporting)
- > Forecast of expenditure due to different installation rates applying to meters in grass vs concrete

Unmetered properties were able to be identified using a central spatial database, with the information then sent to the contractor for installation of meters in batches, and onto billing and asset management systems. During the identification process specific instructions from customers regarding the proposed location of meters was recorded and passed to the contractor. Field officers received scheduled tasks via handheld units each day, ensuring information on the location of meters was based on pre-set workflows.

With different installation rates applying for meters in grass or concrete, the technology meant that likely project expenditure also could be forecast and monitored. Other benefits from the technology were the validation of customer details, asset data

collection and the integration of the billing system with the new meter reading system.

In summary the system provided:

- > Progress monitoring
- > Ongoing cost management
- > Real time project metrics to discuss with contractor
- > High level project and Board reporting (worm graphs and maps)

The first residential water meter was installed on 4 April 2011 by the Water Metering Project. The first iteration of the project management tool was ready for this milestone. Based on user input and feedback, the project management tool evolved to meet the requirements of the Water Metering Project.

The project management tool effectively ceased operation in July 2012, with water meter data and processes being transitioned to “business as usual” systems.

## EFFICIENCIES A RESULT

Southern Water benefits from:

- > Validation of service connection details (asset data collection)
- > 3 way QA process (installation contract, meter supply contract, billing data)
- > Integration with its billing system and new automatic meter reading system (walk-by)

Ultimately Southern Water’s customers benefit as the efficient installation of water meters will enable Southern Water to run a better and more cost effective business.

Further efficiencies will include:

- > Completion of non-residential water meter installations (commercial and industrial connections).
- > Ongoing water meter renewals program.



## SOUTHERN WATER

Southern Water is Tasmania's largest water and sewerage services provider, serving over 95,000 customers in 12 council areas.