



# KINGFISHER RTUs

Application Note **County of Maui Board of Water Supply Scada System Upgrade**

## About the Project

This project was undertaken by our American Kingfisher RTU distributor, ATSI.



The client is the Board of Water Supply of the County of Maui.

Maui County is composed of three islands (Maui, Lanai and Molokai). There are a number of cities of Island of Maui.

Maui County is rather unique as they have a SCADA and Telemetry Division located in Kahului, HI, whose job is to maintain and implement SCADA projects. This facility is staffed with a number of engineers and technicians, who quickly grasped the capability and ease in programming of the Kingfisher based ATSI RTU.

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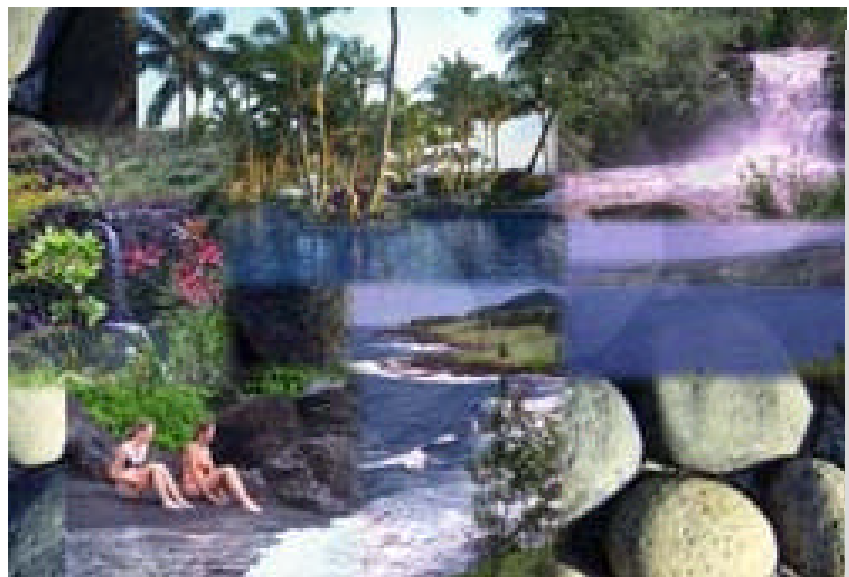
## The SCADA System

County engineering staff members purchase integrated RTUs from ATSI, complete with radio, back-up battery, lightning arrestor & wired to terminal blocks. The engineering staff provides their own application programming & MMI development for systems that they install.

SCADA systems have already been implemented in Central Maui, the Island of Molokai and Hana. Future projects will include additional RTUs in Maui, and Lahaina.

- Booster / Well Run Time & Number Starts
- RTU Communications Status
- Power Status
- Real Time & Historical Trending

Most recently, during the 1998 drought that hit the Islands, the County of Maui derived great benefit from their ATSI SCADA system. There had been several wildfires on parts of various islands. When these fires suddenly jumped from unpopulated areas to areas where



The County has elected to use a UHF radio network, featuring several store-and-forward sites. Radios operate with 2.0 watts of RF power output and are PC programmable.

The County typically configures their SCADA system to monitor and automatically control the following:

- Reservoir Levels
- Reservoir Level Trending
- Well Flow (Analog)
- Well Flow Total (Digital)
- Booster Discharge Pressures
- Booster / Well Call (Start/Stop)
- Booster / Well Status (Running/Off/Fail)

homes and property were threatened, the County Operations Staff was able to take immediate action and maintain and re-route water pumping to areas whose power lines had been destroyed by fire.

County personnel have remote access to the system to handle alarm conditions by logging into the system from home. Alarm conditions are reported by the ATSI alphanumeric paging software running in the Front End Processors.

The County of Maui has purchased over 50 RTUs, and continues to add new sites to the system.