

## *Orlando Utilities Commission, USA*

### **Orlando Utilities Commission (OUC) AWWA-IWA Standard Water Audit**

Client: **Orlando Utilities Commission**

OUC is required to prepare a water audit on a periodic basis by the St. John's River and South Florida Water Management Districts. OUC therefore decided to bring in an external company to undertake an independent water audit using the newly approved International Water Association (IWA)/AWWA methodology which, rather than trying to account for water, identifies revenue and non revenue water and separates water loss from authorized consumption. In addition, OUC wanted to learn the new IWA/AWWA method of water accounting and to use the results from the independently conducted water audit to further improve OUC's already good water loss management. WSO was contracted to carry out a standardized water audit for the OUC and to train OUC in the use of the new audit methodology.

A top-down water audit is an exercise in which documentation is collected reviewed and verified if necessary to determine each component of water use and loss. This included:

- Analysis of system input volumes, export volumes & source and export meter testing;
- • Identification and confirmation of consumption volumes
- • Identification and classification of apparent and real losses
- • Calculation of confidence limits for each component of the water balance
- • Identification and allocation of appropriate performance indicators
- • Calculation of the Economic Level of Leakage (ELL)

The findings and benefits of this project were:

- OUC is managing their real and apparent water losses very well, when compared with North American utility performance.
- OUC's management of the large customer meters is very good.

- The analysis identified room to improve the management of the small customer meters and thereby reduce the level of apparent losses.
- WSO developed a set of detailed recommendations which will allow OUC to further improve their apparent loss control of their small meter population.
- The work undertaken by WSO identified that if OUC would value its real losses at the retail cost then it would be economically beneficial for OUC to reduce real losses further through the implementation of regular acoustic surveys to locate unreported breaks that are currently not being identified and repaired.
- OUC was introduced to the new AWWA/IWA water audit methodology and the training provided allowed OUC to continue using the new methodology for its internal water audits.