

Sacramento - California, USA

California Urban Water Conservation Council – Revision of Best Management Practice (BMP) 3 – “Water Audits and Leak Detection”

Client: **California Urban Water Conservation Council (CUWCC)**

WSO is a an active member of the CUWCC Utility Operations Committee and over the last two years has been supporting the committee with a review of the current BMP3 and developing a strategic plan for revision to bring BMP3 in line with current industry practice which uses the standard American Water Works Association (AWWA) water balance and performance indicators as adapted from the International Water Association (IWA) in August 2003 for performance monitoring and target setting.

Introduction: BMP3 is one of 16 BMP which are implemented in the state of California in order to reduce demand in urban water systems. The CUWCC has been empowered in the Memorandum of Understanding (MOU) to assist and monitor the implementation of the BMP within the member agencies.

The original intent of BMP3 was to ensure that agencies annually audited their water system using a quick look method. If more than 10% unaccounted for water (UFW) was identified, then a detailed audit is to be undertaken using the AWWA M36 guide book. Systems with less than 10% UFW are stated to be in compliance with BMP3.

Problem statement: BMP3 is not in-line with the new AWWA best management practice, and is also under utilized by the member agencies.

The MOU which governs the BMP is directly linked to cost-effective savings but it does not address the problem of how to achieve those savings for individual water utilities with varying system characteristics and conditions.

The focus of the old BMP 3 was to identify systems with relatively high recoverable leakage volumes and have them implement cost effective leakage management strategies.

The 10 percent UFW guideline is also not necessarily an accurate predictor of the true cost-effectiveness of potential loss savings opportunities.

The solution: WSO and CUWCC have been working together reviewing existing material and data which has been made available to CUWCC through the annual reporting from the old BMP along with data derived from a research project in order to undertake a meaningful revision.

Results and conclusions to date; To date the first phase and second phases of the project are complete:

- a review of the old practices and report to the utility operations committee has been completed identifying the problems with the old methods and clearly identifying the way forward
- the format for the annual BMP3 report has been revised and approved by the utility operations committee and has been posted to the CUWCC web site as the official data collection mechanism for the new BMP3

The next phase of this project will be to adapt the new AWWA water balance to meet the needs of the California utilities and undertake performance base-lining. The final phase will be to set meaningful cost effective targets for water loss