Water Loss Control Technical Assistance Program
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The Municipal Water District of Orange County (MWDOC) and its member agencies are wrapping up the second year of the Water Loss Control Technical Assistance Program. The program will continue for another three years to further develop regional water loss control fluency and capacity, while supporting MWDOC’s member agencies in complying with new water loss regulations. See Figure 1 for a summary of MWDOC’s Water Loss Control Program progression.

Sixteen agencies compiled and documented water audits during the second year of the Program, and 21 agencies have participated in MWDOC’s choice-based technical assistance program to date. Water audits, analytic assessments of leakage, and revenue loss are now required to be compiled, validated, and submitted to the Department of Water Resources annually. Furthermore, the State Water Resources Control Board (SWRCB) will use the annual water audits to establish water loss standards by 2020. The SWRCB has indicated that targets will not be “one size fits all.” Dr. Kartiki Naik of the SWRCB attended MWDOC’s November Water Loss Control Workgroup meeting to learn more about Orange County’s pioneering efforts and to review two-years of water audit data.

In the next year, many MWDOC member agencies will dig deeper into leakage and cost-effective opportunities for savings through component analysis of real losses. Component analysis of real losses harnesses repair records and infrastructure characteristics to determine each agency’s unique leakage profile, which then allows a utility to determine the costs and benefits of a long-term leakage management program.

Additionally, MWDOC has secured a Bureau of Reclamation grant to build a leak detection equipment lending library. In 2018, MWDOC will purchase acoustic leak detection and pressure monitoring equipment and make the tools and training available to member agencies looking to realize leakage savings and proactively engage with water distribution infrastructure.

*MWDOC’s Water Loss Control Program Progression Years 1-5 Next Page*
Figure 1
MWDOC’s Water Loss Control Program Progression

Year 1
Initial Analyses
compile a water audit to assess water loss and identify data gaps

Year 2
Refinement
improve the water audit and confirm water loss performance

Year 3
Economics
distinguish apparent and real loss component volumes, evaluate economics, and design water loss control programs

Year 4
Implementation
implement pilot interventions against water loss and prepare to meet state distribution efficiency targets

Year 5
Evaluation
evaluate pilot intervention success and implement a flexible, long-term water loss management program

achieve and maintain
cost-effective water distribution efficiency