



For immediate release:

June 25, 2010

For more information, contact:

Julie Maas, Public Relations Specialist
(505) 383-4095

Office of the State Engineer Releases New Leak Detection Report

(SANTA FE, New Mexico) - Water leak detection has become scientific. The New Mexico Office of the State Engineer (OSE) and the Governor's Water Innovation Fund has released the results of a study that tested a passive form of acoustic leak detection in municipal systems.

Passive leak detection programs are emerging as a relatively affordable method that utilizes permanent and semi-permanent acoustic leak detection devices or "loggers." The loggers are small-scale magnetic devices that are attached to distribution mains, fire hydrants, and key junctures to listen for unusual vibrations that could represent a leak during traditionally slow water flow periods. The loggers transmit the data to a receiver or correlator in maintenance or meter reader truck. When they detect an abnormal vibration, the loggers send alerts to the receiver during the next drive-by. The alerts are investigated for potential leaks.

Ruidoso, Las Vegas, and Rio Rancho are the three New Mexico communities that agreed to partner with the OSE to pilot test this equipment. These cities were selected due to water loss or water supply concerns. Each city received training, on-site assistance, and equipment including 100 acoustic loggers, a radio receiver, a personal digital assistant (PDA), and a ground microphone. Equipment installation began in the fall of 2009. The early results of the program show the loggers are finding leaks prior to lost water progressing to the surface or the leak evolving into main breaks.

All three cities are continuing with the program at various levels. Following initial training and deployment of the loggers, the Village of Ruidoso water department estimates an average of four hours a week are spent on the program. That includes patrolling, database management and any troubleshooting that is needed. Since the new leak detection program was implemented, they have surveyed approximately 20 percent of the distribution system and found over 80 suspected leaks.

"The cost and benefits of a leak detection program should be considered when determining the amount of equipment and the amount of staff time to dedicate to a program," said John Longworth, OSE Water Use and Conservation Bureau Chief. "Each system should consider the cost of the lost water and the cost of replacing that water with future sources."

To continue the program throughout the state, the OSE used the remaining funds in the grant to purchase equipment for the New Mexico Rural Water Association. Their staff has been trained on the new equipment and is ready to help their membership implement a leak detection program.

The report, titled *Quantifying Leaks with Acoustic Loggers* is posted in the Water Use and Conservation Bureau section of the New Mexico Office of the State Engineer website at http://www.ose.state.nm.us/wucp_pws.html.

For more information, please contact Julie Maas, at (505) 383-4095.

The Office of the State Engineer is charged with the administering the state's water resources. The State Engineer has power over the supervision, measurement, appropriation, and distribution of all surface and groundwater in New Mexico, including streams and rivers that cross state boundaries. The State Engineer is also Secretary of the Interstate Stream Commission and oversees its staff.

The nine-member Interstate Stream Commission is charged with separate duties including protecting New Mexico's right to water under eight interstate stream compacts, ensuring the state complies with each of those compacts as well as investigating, conserving and protecting the waters of the State, in addition to water planning.