

Arizona Department of Water Resources
Conserving Water Today for Arizona's Tomorrow

Patch the Pipe

Arizona's Leak Detection Program



Arizona's Leak Detection Program

Patch the pipe is a water efficiency program for Arizona water providers to assist them in reducing their distribution system losses.

The purpose of the program is to assist water companies in detecting leaks, using state of the art digital leak detection equipment.



Leak Detection Equipment

Most water utility companies and water providers report 10 to 20% lost and unaccounted for water in their systems. Many of these losses are due to *LEAKS!*

For Program Information:

www.azwater.gov/conservation

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Statewide Conservation Office
(602) 771-8423

Phoenix AMA
(602) 771-8585

Pinal AMA
(520) 836-4857

Prescott AMA
(928) 778-7202

Santa Cruz AMA
(520) 761-1814

Tucson AMA
(520) 770-3800

Interested? Here's How the Program Works:

- Contact the ADWR Statewide Conservation Office if you would like assistance. Staff will help assess your need for leak detection.
- ADWR has purchased leak detection equipment and will make it available for loan to eligible water providers.
- Participation is FREE, and will be implemented on a first come first served basis.
- Once the leaks are detected, it will be the responsibility of the water company to implement the repairs.
- Staff will follow up to make sure the leak has been sealed and provide further assistance as needed.



Installation of Transmitter



Patch the Pipe is a program of the ADWR in cooperation with the Bureau of Reclamation.

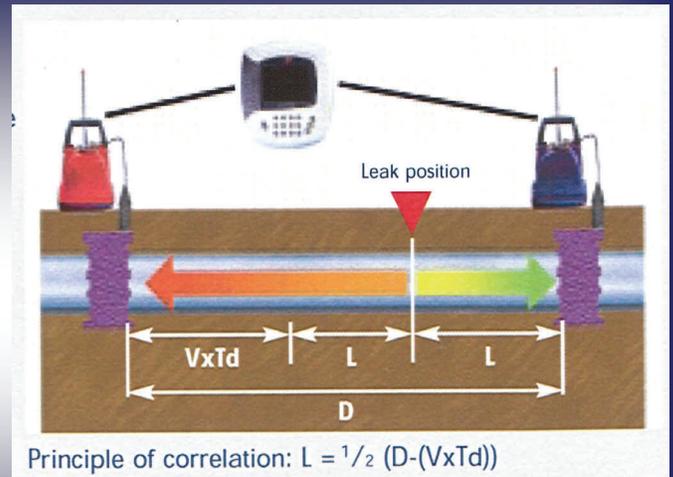
Background Information

Pursuant to the Community Water System Planning Legislation of 2003, all community water systems are required to implement water conservation plans that increase the efficiency of the water system, reduce waste and encourage consumer water conservation.

To assist communities with these conservation efforts, the Arizona Department of Water Resources conservation staff are providing technical assistance with leak detection.



Leak Detection System. Magnetized Units transmit leak status signals to Patroller unit



Principle of correlation: $L = \frac{1}{2} (D - (V \times T_d))$

Digital Leak Noise Correlator. Correlator Unit pinpoints leak location

If leaks go undetected, system water waste will continue and may even increase!



Working Together in Collaborative Conservation Partnerships

By using state of the art leak detection equipment, supplied free of charge by the ADWR on a first come first serve basis, water systems can save thousands of gallons of water in a year by detecting and repairing leaks early. As an example a 1-gallon per minute leak wastes 1,000 gallons per day (525,000 gallons per year) while a steady stream of water can waste more than 40 gallons per day (14,600 per year).

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The Arizona Department of Water Resources is committed to providing technology transfer and water efficiency programs to communities throughout the State of Arizona.

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