

**TOWN OF PRESCOTT VALLEY  
REQUEST FOR COUNCIL ACTION  
Date: November 21, 2013**

**SUBJECT:** Purchase Leak Detection Equipment

**SUBMITTING DEPARTMENT:** Utilities Department

**PREPARED FOR:** Neil Wadsworth, PE - Utilities Director  
Mark Kieren – Utilities Operations Manager

**AGENDA LOCATION:** Comments/Communications , Consent , Work/Study , New Business , Public Hearing , Second Reading

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**ATTACHMENTS:** 1. Utiliuse Quote for leak detection equipment  
2. Sole Source letter from Fluid Conservation Systems

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**SUMMARY BACKGROUND:** Arizona Department of Water Resources requires the Town of Prescott Valley to maintain its Produced Unsold water volume annually at less than 10% of our total produced volume. The Town’s water loss has been between 9 and 10 percent annually for the past few years. In calendar year 2012, the Arizona Department of Water Resources calculated our Lost and Unaccounted for water to be 9.7%, which is equivalent to 165 million gallons of water loss in a year’s time, or about 315 gallons every minute. This water loss costs the Town about \$100,000 every year.

To better control this number, and to reduce water waste and save money, it is crucial that we implement a formal on-going leak detection program as part of our daily operations. Town Staff would like to implement the use of Perma-log leak detection equipment which is able to identify size and location of water leaks using sound waves. This equipment interfaces with the Town’s flex-net meter radio read system to provide results directly to our desktops. The system works by deploying multiple (between 10 and 20 or more) listening devices into a designated area of the water system and collecting sound data for a minimum of 24 hours. Computer software analyzes the data and identifies which devices have detected a leak, and how large the leak is. Field correlation equipment is then used to triangulate to the leak location.

If approved, Staff will purchase and deploy the system, and move it throughout the system over the course of the next year. Leaks will then be prioritized and fixed as they are discovered.

The Town will realize cost savings in addition to achieving water loss reduction. Based on annual operating costs, for each 1% of water loss reduction, the Town will save about \$11,000 per year.

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**OPTION ANALYSIS:** The Council may vote to:

- 1.) Approve this purchase, **OR**
- 2.) Not approve this purchase, **AND/OR**
- 3.) Direct staff to pursue other options

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**ACTION OPTION:** Motion to approve the purchase of Leak Detection equipment per the attached Utiliuse quote in the amount of \$68,821.61 as outlined in the Fiscal Analysis, **OR** Motion not to approve this purchase. **VOTE**

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**RECOMMENDATION:** Town staff recommends the purchase and approval of the Leak Detection Equipment from Fluid Conservation Systems through Utiliuse.

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**FISCAL ANALYSIS:** The Fiscal Analysis is noted per Table 1 below:

**Table 2**

Purchase Permalog Leak Detection Equipment from Utiliuse		
HTE Code(s): 511-7020-700-7410		
FISCAL YR 2013/2014	Approved Budget:	\$151,500.00
	Expended & Encumbered:	(\$9,028.34)
	Utiliuse Invoice:	(\$63,325.00) < (this action)
	State Tax (8.68%) not included in Quote	(\$5,496.61) < (this action)
	Balance:	<u>\$73,650.05</u>
		FISCAL YR 2013/2014

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**REVIEWED BY:**

Management Services Director \_\_\_\_\_

Town Clerk \_\_\_\_\_

Town Attorney \_\_\_\_\_

Town Manager \_\_\_\_\_

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**COUNCIL ACTION:**

Approved    Denied    Tabled/Deferred    Assigned to \_\_\_\_\_