

EVERY DROP COUNTS

Achieve Low-Cost Energy Savings Through Leak Abatement

Meet your energy goals without blowing your budget – leak abatement can help you realize low cost kWh/yr savings *and* improve customer relationships.

Participate in Bonneville Power Administration's Energy Smart Industrial (ESI) program to offer your water-utility customers incentives that help them offset the costs of detecting and repairing leaks.

ESI can help your customers locate and repair leaks that typically go unnoticed. Proactive attention to leak identification and repair reduces the likelihood of catastrophic ruptures and the high cost to fix them.

Municipal water systems are categorized as industrial and are eligible for ESI support. Energy leak abatement projects are considered custom projects which may be paid out of energy efficiency incentive funds.

What Type of Leaks are Eligible?

- Only hidden leaks discovered through a leak-detection survey qualify for incentives
- Large water-main ruptures that require emergency repairs do not qualify for incentives. Existing major, visible leaks also do not qualify because they are considered "required" maintenance.

How Does the Program Work?

Each electric utility participating in the program is assigned an Energy Smart Industrial Partner (ESIP) who is the main point of contact between the utility and their end users. The ESIP provides technical and reporting assistance and is available to help the customer collect and organize all required custom project information including:

- A description of each leak, with a photo of the damaged piping
- Electric use and flow data from the pump station serving the distribution piping where the leaks were identified
- A copy of leak-survey results and the associated invoice for the service
- Labor costs for hours spent on each repair, and the hourly labor rate
- Invoices for material costs (If materials are taken from a larger inventory, an invoice representing the unit cost for the individual parts is needed.)
- Equipment use costs
- Invoices for permitting fees

ESI also helps utilities promote the ESI program by providing outreach and customer-facing collateral.

WATER DISTRIBUTION SYSTEMS ARE COMPLEX

In aging facilities, small cracks can lead to costly line ruptures, bleeding dry already over-taxed budgets. Other challenges include:

Repairing distribution system leaks reduces the pumping energy needed to provide water and maintain system pressure.

Low energy rates and high construction costs can create a poor financial driver for proactive leak repair.



Not all leaks are this obvious. ESI can help you find the leaks you can't see – yet.

SPIRIT BEND WATER DISTRICT

Saves Over \$4,800 per Year After Leak Abatement Project

Located in Kootenai, Idaho, Spirit Bend identified three leaks during an acoustic survey in 2014. Spirit Bend collected pump flow and energy-use data between 2013 and 2015.

They provided a description of each leak along with copies of invoices and work orders documenting the labor and materials used to repair the leaks. The survey expense was also included.

Eligible Costs for the Leak-Repair Project

LOCATION	LEAK RATE (GPM)	LABOR/MATERIAL COST
Snickers and Spotted Horse	6.9	\$125.00
Spirit Bend and Snickers Lane	6.9	\$629.99
Spirit Bend and Hwy 41	6.9	\$967.12
Totals	20.7	\$1,722.11

RESULTS

Repairing three relatively small leaks saved:

10.88

MILLIONS OF GALLONS OF WATER PER YEAR

\$4,800+

ANNUALLY IN ELECTRICITY COSTS

\$1,205*

INCENTIVE

\$1,722

PROJECT COST

< 2 MO

PAYBACK PERIOD

64,689

kWh/Y ENERGY SAVINGS

*Incentives vary by utility.



“ The ESI folks bent over backwards to help us ... I would absolutely recommend the ESI program to other water bureaus and homeowner associations. ”

— **Bruce Alexander**, President, Spirit Bend Water Association

Interested in Learning More about ESI's Leak Abatement Offer?

Contact your Energy Smart Industrial Partner

Visit www.EnergySmartIndustrial.com to learn more about the ESI program.