

## FIND YOUR WATER LEAKS FROM SPACE?

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magine having a way to find your water system's distribution system water leaks from hundreds of miles from the earth. Well this is now possible and below is one company that explains how this works. Taken from their website: (https://utiliscorp.com/), here is what I found.

Using technology that is used to look for water on other planets, Utilis analyzes satellite imagery to detect leaks and non-revenue-water. The result? Images that cover 3.500 square kilometers at once. The leaks are displayed in user friendly GIS reports including street locations, with great accuracy, saving significant labor associated with finding leaks with current methods.

Taken from satellite mounted sensors, the raw imagery is overlaid on GIS systems and then processed by Utilis' unique algorithms. The Utilis' algorithm detects treated water, by looking for a particular spectral "signature" typical to drinking water. The user is then presented with a leakage graphic report overlaid on a map with streets and pipes.

Raw satellite images of the area are acquired. Utilis takes the raw data and prepares it for analysis, by filtering bounces from buildings and other manmade objects, vegetation hydrologic objects, and more. Utilis uses advanced algorithmic analysis to track the spectral "signature" of potable water in the ground. The leaks are displayed in user friendly GIS reports including street locations.

The Utilis service is provided periodically, on a monthly, quarterly or half-year basis;

At the beginning of each period, Utilis presents a graphic and/or tabular Leakage Report containing the location of suspected leaks. The information is displayed on top of GIS maps.

Utilis periodic Leakage Reports benefits include: early leak detection and repairs verification that significantly contribute to NRW reduction. Repetitive update of the leakage reports improve accuracy of findings, thus enabling composition of more efficient operational work-plans.

I'm sure this is not the only company that offers this service, but it is the first one I found and found it to be quite interesting. I noticed that the cost of this service was not readily available on the site and would be interested in finding out what that might be. It still seems amazing to me that this technology can distinguish the difference between ground water and potable water from information gathered by a satellite. Check out the site and get ready for the changes to our business this type of technology will mean for our future.



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