

Les solutions analytiques d'IBM aident le comté de Sonoma, Californie, à économiser l'eau

La détection automatique de fuite et le contrôle de la pression permettent de réduire la perte d'eau

Paris - 08 mars 2012: Le département Recherche d'IBM s'est une nouvelle fois associé à l'agence en charge de l'eau dans le comté de Sonoma (Sonoma County Water Agency - SCWA) pour aborder le problème urgent de la gestion de l'eau.

La SCWA fournit de l'eau aux 600,000 personnes vivant au cœur de la région viticole du nord de la Californie.

Ce nouveau programme, qui repose sur une collaboration existante entre IBM et SCWA, utilise les solutions analytiques pour réduire les fuites d'eau d'un des gros clients de SCWA. Ceci est rendu possible grâce à des ajustements au niveau de la pression, réalisés dans le réseau de distribution d'eau à partir d'un certain nombre de données (issues de capteurs, de données de facturation, de manomètres et autres enregistreurs de débit).

Selon le Ministère de l'Environnement, une grande partie des 880,000 miles de conduites d'eau aux États-Unis sont en service depuis des décennies - certains depuis plus de 100 ans - et peuvent être une source significative de fuite d'eau. La Banque mondiale estime les pertes annuelles liées aux fuites à 14 milliards de \$.

IBM Analytics Help Sonoma County, California Conserve Water

Automatic Leak Detection, Pressure Management Aims to Reduce Water Loss

Sonoma County, CA -- March 8, 2012 - IBM (NYSE: IBM) Research scientists and the Sonoma County Water Agency (SCWA), which supplies water to more than 600,000 people in the heart of Northern California's wine country, have once again teamed up to address the pressing problem of water conservation.

The new program, which builds on an [existing IBM-SCWA water management collaboration](#), uses analytics technology to help Valley of the Moon Water District (VOMWD), a purchaser of wholesale water from SCWA, to reduce water loss. This is done by optimizing the setting of the pressure reducing valves at the entrance to their distribution network based on data from existing sensors as well as from SCADA, billing, pressure gauges, and flow loggers throughout the water system.

According to the [Environmental Protection Agency](#), much of the 880,000 miles of water pipes in the United States has been in service for decades - some for over 100 years - and can be a significant source of water loss. The World Bank [estimates](#) that worldwide costs from leaks total \$14 billion annually.

"We're helping SCWA and Valley of the Moon to more efficiently analyze data, anticipate problems and manage

*resources,” said **IBM Smarter Water Program Director Michael Sullivan**. “The ability to track water at such a granular level helps SCWA and Valley of the Moon make informed decisions about how to manage – and conserve – water along its entire lifecycle.”*

Developed by scientists at IBM Research – Haifa in Israel, the pressure management solution provides recommendations for water pressure adjustments based on usage, weather, and environmental conditions. The benefits of improved pressure management include reduced water loss, energy savings, and reduced wear on the infrastructure---alongside an improvement in the quality and turnover of stored water.

*“We are proud to partner with IBM and SCWA on this First of a Kind Program to field test a non-invasive analytical tool to better manage water pressure and potentially locate leaks, said **KrishnaKumar, General Manager, Valley of the Moon Water District**. “I’m glad to see IBM taking the lead and employing its vast institutional strengths to forge unique public private partnerships to solve some of the pressing challenges faced by the water utilities all over the world.”*

Managing the pressure of a water system – comprised of pipes, valves, pumps, tanks and other equipment – is rife with complexity. If a well stops working, some water tanks will not be filled. If pressure is increased to fill those tanks, other tanks may not be emptying as often as they should to maintain a proper exchange of water and maintain required water quality. Or, if there is a leak, reducing the pressure to one pipe will reduce the amount of water lost through the pipe, but it also means that some consumers may not have enough pressure in their taps at home.

Prior to working with IBM, Valley of the Moon operations staff had to continuously – and manually –adjust the pressure of each valve to maintain optimal pressure across the system – a time consuming and inefficient process. Now, IBM analytics provides the engineers with detailed information for recommendations of optimal settings for each valve based on what’s happening across the entire system so that valves can be quickly and easily adjusted as necessary.

In addition to the pressure management work, IBM and SCWA are extending the new technology to also enable leak detection by comparing real-time information about the water system with expected and historical values.

For more information about IBM Smarter Water, visit www.ibm.com/smarterplanet/water

For more information about IBM Research, visit www.ibm.com/research

For more information about SCWA, visit www.scwa.ca.gov

For more information on VOMWD, visit www.vomwd.com

<http://www.vomwd.com/>
