



Case Study Category: CADW

Case Study Title: Surveying Large Diameter Water Mains with Noise Correlating Acoustic Leak Detection Technology by Portland Water Bureau in Portland, Oregon

Utility Name: Portland Water Bureau

Case Study Abstract: From September 27th to October 22nd, 2010, Echologics Engineering was contracted by the City of Portland to perform a leak detection survey on 20 miles of Portland Water Bureau's large diameter water mains in City of Portland, Gresham and the Bull Run Watershed Area (20 miles to the east). Each leak detection survey involved the placement of two hydrophones and/or accelerometers bracketing a certain area. By correlation of noises detected within the bracket, the location of the source of the noise can be estimated. If a noise meets certain criteria, it is characterized as a leak. During that time period, five potential leaks and three additional points of interest were discovered. Echologics Engineeringo was again contracted in February 2011 by the City t re-visit two points of interest from the previous leak detection survey conducted by Echologics. During the follow-up inspection, the original noises at the points of interest were not reproduced.

Case Study Link: <http://waterid.org/content/surveying-large-diameter-water-mains-noise-correlating-acoustic-leak-detection-technology-po>