

Water Utility Saves Hundreds of Thousands per Year with GIS

White House Utility District (WHUD) in Tennessee serves a population of 90,000 in a 600-square-mile area, making WHUD the state's largest water district. Like many utilities, WHUD faced the chronic concern of aging infrastructure that could leak, as well as the potential for more severe main breaks. WHUD sought a way to manage its infrastructure data to make more informed decisions about capital improvement spending as well as respond faster and more strategically to main breaks and water leaks.

What Did White House Utility District Do?

WHUD adopted a location strategy by using the ArcGIS® platform. The utility enabled an enterprise geographic information system (GIS) that integrated all critical information, including asset data and field crew updates. The GIS staff configured office dashboards and field applications that consumed the central geodatabase information on any device, anywhere. As a result of organization-wide access to GIS information and focused water-loss applications, WHUD was able to quickly isolate underground leaks for speedy repair, respond faster to urgent main breaks, and strategize capital improvement spending based on data-driven prioritization. Money was saved through not having to perform acoustic leak diagnostics, water was saved by faster discovery of and response to water loss, and capital improvement spending was more efficiently allocated. WHUD's engineering team estimates the total direct savings to be \$1 million per year, with more than \$200,000 of that coming from early leak detection. Through better capital improvement expenditures that led to deferred bond issuing, WHUD has saved \$32 million.

Case Study

Organization

White House Utility District

Location

White House, Tennessee

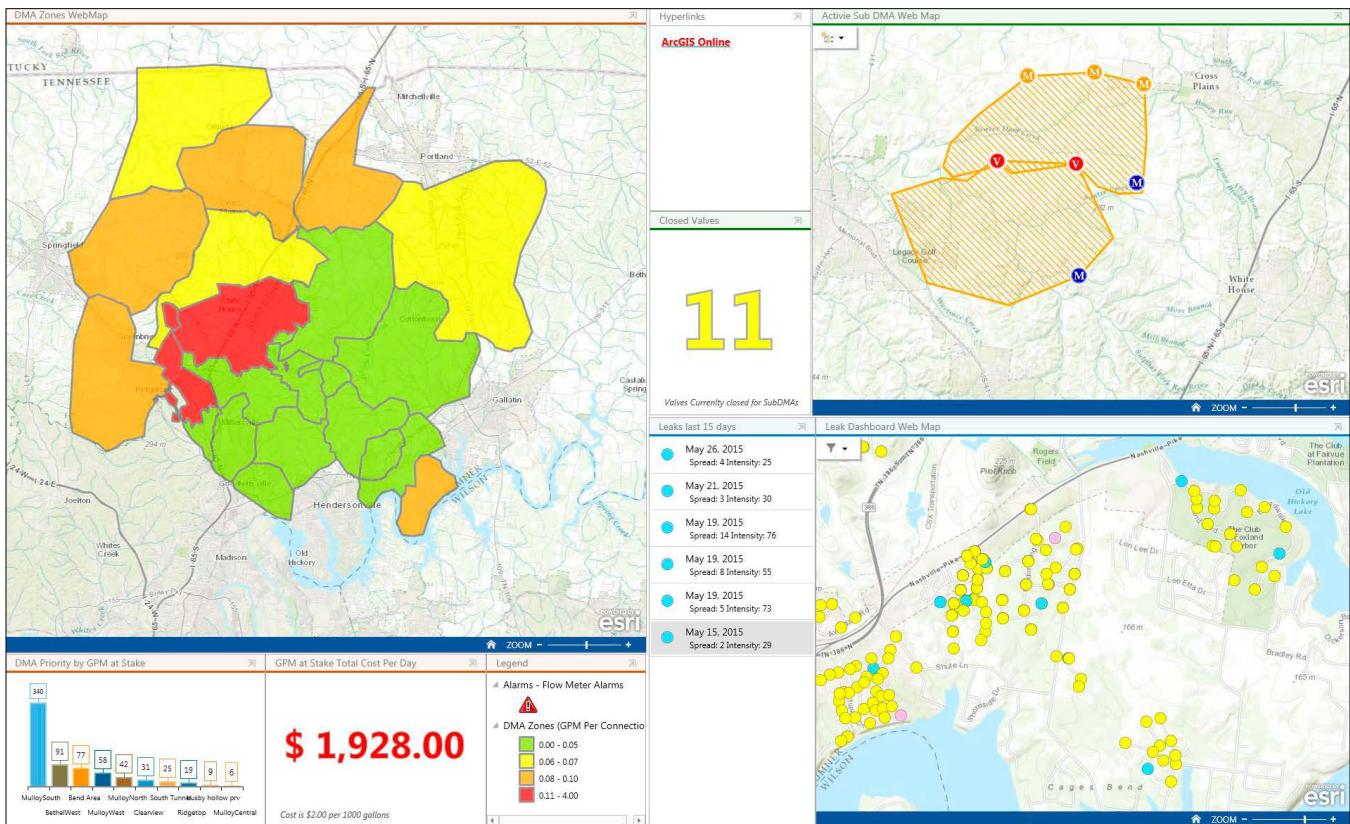
Industry

Water, Sewer

"Because of the investment in ArcGIS, we've seen a great return. Thanks to the easy access [for] all employees, we are able to redirect work to other areas, such as leak detection, to help eliminate the amount of water that's being needlessly put on the ground, saving hundreds of thousands of dollars each year."

Amy Meadows





Could You Use This?

If accessing critical water utility information is difficult and you face the same chronic concerns (e.g., water loss, aging infrastructure) as WHUD, consider adopting an enterprise GIS. An integrated, single source of information that can be consumed in a variety of maps, web applications, and focused solutions can both save water and extend the life of your assets. You may notice additional benefits too. WHUD noticed improved customer service from web applications, for instance, by including a web map that enabled customer service representatives (CSRs) to report more accurate outage updates to inquiring customers. In addition, WHUD has noticed faster workflows and saved labor costs, allowing the utility to refocus resources and do more with the same amount. Staff estimate they save as much as \$37,000 per leak, and general manager Bill Thompson considers GIS the cornerstone of information making that happen. Every employee at WHUD has access to maps daily.

For more information, visit esri.com/water.

