

Case Study

OrganizationWatershed Sciences Inc.

LocationOregon, United States

IndustryMap, Data, and Chart

Lidar Tames a Wild Survey Environment

Watershed Sciences Inc. (WSI) is a professional services business with headquarters in the lush, green hills of Corvallis, Oregon. WSI focuses on providing survey-quality data for businesses and government entities throughout the United States, primarily in the Pacific Northwest.

What Did They Do?

WSI staff members collected bathymetric lidar data of the Sandy River corridor in Oregon, where much of the riverbank is inaccessible and the dense forest alongside the river masks GPS signals. The resultant processed point cloud was classified to identify water surface, terrain, and river bottom and then used in ArcGIS® software to create a surface model interpretation, which helped verify the results of the field collection and led to further analysis of the area.

Do I Need This?

By choosing aerial lidar and ArcGIS for depth analysis, organizations can minimize the risk to staff when encountering dangerous terrain. ArcGIS takes the processed point cloud data and calculates depth analysis, including statistics and depth modeling, so there is no question on how far in the water column a laser can penetrate for confidence. This data can then be used for further interpretation and modeling.

"For years, we scientists and researchers have had high-end computers networked together, so we've had the massive processing power required to deal with this data. But our clients are often on desktops or even mobile devices. Making high-resolution spatial data products available to the end clients in a versatile and familiar environment like ArcGIS is a huge advantage."

Russ Faux, CEO, WSI

For more information, visit esri.com/lidar.



Understanding our world.