

Helicopter-based LIDAR Bathymetry Survey at Grand Canyon

Fugro Pelagos has conducted a helicopter-based Airborne LIDAR Bathymetry (ALB) survey of a portion of the Colorado River, within the Grand Canyon, for the United States Geological Survey (USGS). The Colorado River below Glen Canyon Dam was undergoing a “high flow test study” in an experiment to rebuild sandbars and beaches that provide habitat for endangered wildlife and campsites for Grand Canyon tourists. As part of this experiment, the USGS’s Grand Canyon Monitoring and Research Center required pre- and post-test bathymetry of the river to support sediment storage and movement studies.

Fugro used the SHOALS-1000T, to successfully acquire post-flood bathymetry data and water penetration imagery on the Colorado River, during the controlled flow conditions. While Fugro had already conducted successful ALB surveys in riverine environments, this was the first time that the SHOALS-1000T system had ever been deployed in a rotary wing aircraft.

Fugro’s technology allows them to collect data in locations that were previously off limits due to access or safety issues.

<https://www.hydro-international.com/content/news/helicopter-based-lidar-bathymetry-survey-at-grand-canyon-2>
