REMOTE SENSING FORUM

May 8, 2013

10:00 am – 12:00 pm

USGS Oregon Water Science Center 2130 SW 5th Ave, Portland, OR 97201 <u>map link</u> Attend in person or by WebEx

WebEx

https://usgs.webex.com/usg s/j.php?ED=200033802&UID =481298542&RT=MiM0

Teleconference

- DOI locations: 703.648.4848
- Non-DOI locations: 855.547.8255
- Code (both): 95346#

This event is co-sponsored by the Oregon Elevation Framework Implementation Team (E-FIT) and the Pacific Northwest Aquatic Monitoring Partnership (PNAMP).



Airborne Topo-Bathymetric LiDAR Mapping of the Sandy River, OR by Russ Faux, Watershed Sciences, Inc.

A new suite of commercial small-footprint, green-wavelength airborne LiDAR systems are being developed to enable topo-bathymetric mapping in coastal and riverine environments. These sensors can provide seamless topography across the land-water interface at high spatial resolution (5-6 points per square meter). These data have the potential to improve floodplain modeling by continuously mapping shallow water depths that are difficult to measure using traditional in-stream survey techniques.

In fall 2012, Watershed Sciences, Inc. (WSI) in cooperation with Oregon Department of Geology and Mineral Industries (DOGAMI), the Federal Emergency Management Agency (FEMA), and the Bureau of Land Management (BLM) collected airborne topo-bathymetric LiDAR (Light Detection and Ranging) data for the Sandy River, Oregon. The data were collected to map channel and floodplain morphology and to evaluate the effectiveness of new topo-bathymetric LiDAR technology in a Pacific Northwest riverine environment.

This presentation by Russ Faux (Watershed Sciences, Inc.) will explore the results of the Sandy River project with a focus on the ability to accurately map depth, underwater structure, and riparian zones in a classic Northwest River.



You can find logistics information and any follow up documents here: <u>http://www.pnamp.org/event/4226</u>.

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