OregonView led an initiative to document requirements, capabilities, and opportunities for **Landsat bathymetric mapping**. Many coastal regions around the world are entirely lacking in bathymetry, the underwater equivalent of topography. The lack of bathymetric data hinders analysis of coral reefs and other ecologically-sensitive nearshore habitats, as well as coastal inundation modeling, wetlands studies, and a range of related coastal science and management activities.

Landsat 8, in combination with other remote sensing data, such green-wavelength laser altimetry from NASA’s ICESat-2, can be used to generate nearshore bathymetry for many coastal regions. OregonView is helping promote and enhance this emerging use of remote sensing data.

OregonView PI, Chris Parrish, served as Coastal Processes Lead for the NASA Surface Topography and Vegetation (STV) Incubation Team. Leveraging the STV study results, combined with new analysis of Landsat bathymetric mapping capabilities, and the master’s thesis work of OregonView-supported graduate student, Ben Babbel, OregonView has documented the current **state-of-the-art and future recommendations for bathymetric mapping with Landsat**.

Another major activity of OregonView and Oregon State University graduate student, Selina Lambert, was the development of the **Earth Observation Day game: Rivers: Our National Water Resource**. In collaboration with AmericaView and NASA partners, Selina designed the gameplay and content and created a virtual (Tabletopia) version of the game. Hundreds of copies of the game have been distributed to AmericaView members and partners to provide a fun, interactive introduction of use of remote sensing data in managing natural resources.
OregonView is active in education and outreach events related to natural resource management, citizen science, and benefits of remote sensing. Highlights from the past year have included presentations by OregonView State Coordinator, Peder Nelson, at the Oregon GeoFest Workshop, the ASPRS and URISA GIS-In-Action conference, and OhioView Presents: Remote Sensing on a Shoestring Workshop. Additionally, OregonView partnered with the ASPRS Student Chapter on a 2021 Earth Observation Day Celebration.

OregonView Consortium Membership

The OregonView consortium membership comprises leaders in the remote sensing and geospatial information communities within Oregon and extends across the government, commercial and academic sectors. Member organizations include: Oregon Department of Parks & Recreation (OPRD), USGS Forest & Rangeland Ecosystem Science Center, Oregon Framework Implementation Team (FIT), Oregon Geospatial Enterprise Office (GEO), Portland State University (PSU), Oregon State University (OSU) College of Engineering, College of Forestry, and College of Earth, Ocean, and Atmospheric Sciences.

Federal consortium members identified above do not receive funding from AmericaView.