

Oregon Coastal Atlas

URL: [Http://www.coastalatlus.net](http://www.coastalatlus.net)

Purpose of Application

The Oregon Coastal Atlas is a venue for sharing data, information and analysis tools with decision makers and constituents of the Oregon coastal zone. There are four main functional areas that the OCA provides:

- **Search** (of data archives),
- **Learn** (about coastal places and issues),
- **Tools** (for working on coastal problems), and
- **Maps** (for browsing and visualizing coastal data and information).



Geographic extent

The extent of the OCA covers the entire Oregon coastal zone which encompasses the full drainages of the coast range (except the Columbia and Umpqua & Rogue basins) on the terrestrial side, and the 3 nautical mile territorial sea plus an ocean stewardship area which extends out to the toe of the slope, on the marine side. We don't cut data at these boundaries however, so if a data set is larger, we allow it to extend outside of this zone. For regional context, the extent from (-132, 39) to (-116, 53) is the full footprint of the displayed area of interest in our online map interface.

Target audience

The target audiences are the decision makers and constituents of the Oregon coastal zone. These are comprised of: local planners, state & federal agency staff, tribal governments, researchers, consultants, and interested citizens.

Data included (general categories)

The OCA contains two areas where data can be counted: the searchable data archive, and the interactive map interfaces. There are over 3500 individual datasets in the searchable data archives, not all of which are available to be browsed in the interactive mapping portion. In the interactive mapping portions of the OCA, data sets are organized around informational themes or focused landscape settings. The intent is that this list of organized data collections presented in the interactive maps will grow over time. Currently there are 9 focused collections in place, with 3 more in the current planning stages. For technical reasons (primarily speed), we prefer to have a larger number of data collections with a smaller number of data sets per collection, than the reverse.

Distinguishing features

- Length of deployment (6-7 years)
- Integrated framework that goes beyond online maps
- Directory of Tools, both internal and external

Technology used

- **Web GIS:** Minnesota Mapserver
- **Database:** MySQL and PostGIS
- **Server:** Apache 2.x
- **Other:** Joomla CMS is used overall backend administration; GeoNetwork is being used in a test bed fashion as part of the ICAN prototype project.

Atlas support (financial/institutional)

Initially the OCA was funded with seed funding from the NOAA Coastal Services Center, followed by National Science Foundation funding that formalized the foundational partnership between the Oregon Coastal Management Program, Oregon State University and Ecotrust. When the 3 year NSF grant ended, OCMP opportunistically continued funding with a few targeted grants, and then finally incorporated the project into its standing CZM funding as part of its ongoing outreach to CZ constituents.

Challenges encountered

Project stewardship over time was in question before OCMP decided to maintain funding for the Atlas. Other challenges have included occasional confusion from potential partners about what relationship the Atlas could have with other coastal/marine online IMS sites. Technical challenges have varied over time. In the old days, cross browser incompatibility was a big limiter of what could be deployed. Networking between the various partners was also challenging. Many of those types of challenges have been vastly improved because of the adoption of standards across software vendors and partners. A lingering challenge is migration of new and legacy content of all types (geospatial data, analysis tools, and other web content) into the Atlas. We have a large backlog of information that could be included, but are limited by time and money.

Lessons learned

- Many lessons about user needs and interface design
- Utility of various tool types for various audiences
- Long term statistics can be analyzed for Atlas trends

Future directions

- Continue enhancing mapping interfaces
- Improve search experience, from query to results
- Incorporate new tools / data sets (e.g. current efforts with Ocean data)
- Fully deploy GeoNetwork, fully connect to ICAN
- Potential migration of metadata to ISO
- Increase number of public WxS services
- Increase use of embedded maps
- Increase use of PostGIS for analysis in online tools