Upgrading the Oregon Coastal Atlas for Regional Interoperability

Tanya C. Haddad, Oregon Coastal Management Program
CMA2, December 2013, Miami, FL
The Oregon Coastal Atlas is a venue for sharing data, information and analysis tools with decision makers and constituents of the Oregon coastal zone.

Entire Oregon coastal zone which encompasses the full drainages of the coast range (except the Columbia, Umpqua and Rogue basins), plus 3nm Territorial Sea & ocean stewardship area.

http://www.coastalatlas.net
Background

- Data management within Oregon Coastal Management Program
- Legacy data stored in all kinds of old media, files
- Attempt to make archives easier to access became the Oregon Coastal Atlas
- Recent focus on CMSP brings the problem of data discovery across institutions to the fore
Atlas Evolution

- Phase I: Archive Building, Content assembly, Tech & Tool Experimentation
- Phase II: Technology consolidation, Map modernization, stewardship
- Phase III: Transitioning to standards and services across all activities

http://www.coastalatlas.net
Function

• What do people do with the Coastal Atlas?

http://www.coastalatlas.net
Quick Tour

http://www.coastalatlas.net
Technology

Joomla! CMS: PHP, MySQL

MapServer
Ka-map

MySQL
MapServer
PostGIS
OpenLayers
e tc.

PHP
MySQL

PHP
MySQL
MapServer
Welcome from the Governors of California, Oregon, and Washington

California Governor Edmund G Brown Jr. (left), Oregon Governor John Kitzhaber (center), and Washington Governor Christine Gregoire (right) participate in the West Coast Governors Alliance on Ocean Health to address critical ocean and coastal protection management issues facing all three states.

Our oceans are home to a great diversity of marine life and clean beaches, and oceans are vital to West Coast fishing communities, recreation and tourism. We know that isolated local efforts cannot adequately address the breadth of degradation to our oceans. By cooperating, our three states will combine our resources and influence to make a real difference in the fight to clean and protect the oceans.

- Governor Gregoire
West Coast Action Teams Need:

• Better access to regional data;
• Ability to share data with experts and stakeholders;
• Ability to visualize and map data;
• Improved data management ...

To address priority ocean issues
Mission Statement

• Increase the efficiency of coastal and marine geospatial data discovery to support West Coast ocean health.

• Provide a single point of access for the data, decision-support tools, and human resources relevant to regional ocean and coastal management issues.
Workgroups

- **Outreach**
  the communication branch of the Framework

- **Data**
  determines which data sets and information products need to be included in the System

- **IT**
  provides the technical expertise to integrate disparate data sets in different formats into the System
Build Out

- Initial catalogs from three west coast states are expected to connect to portal by May 2013.

- Outreach to other data owners and providers begins now and includes a matching aspect.

- Build-out will include assistance with metadata and data services to continue into 2014.
Discovery Portal

Process

• Survey of Action Teams for priority data
• Technology evaluation
• Functional scoping
• Interface design & branding package
• Preliminary launch and contributor feedback, November 2013
• Public launch early 2014

http://portal.westcoastoceanoceans.org
Regional Activities

• Much is happening at the west coast regional level
• Over the coming year these activities are increasing as the west coast data network becomes more active
• There are opportunities for funding to connect data products to the emerging regional portal
• More work ahead…
Goals

• 3 states connected by 2013
• Pursue missing priority data layers throughout 2014
Oregon Data Network

- Oregon Coastal & Marine Data Network
- An approved framework team (FIT)
- Our aim is to support the community of producers and users of Oregon coastal and marine data to proactively address emerging data needs.

http://www.coastalmarinedata.net
Network Events

- Networking events
- Workshops
- Several webinars / workshops
- NOAA’s National Geodetic Survey (NGS) “Continually Updated Shoreline Product”
- Training opportunities sponsored by FGDC CAP grant:
  - Intro to metadata & catalogs
  - Intro to Geoportal Server
  - Intro to pycsw
  - Intro to Oceans.Data.gov
Internships

- Effort to support Oregon network members with connecting to the emerging regional framework
- Intern is funded by FGDC CAP grant for outreach and training, will be hosted by the Institute for Natural Resources
- Work with ODFW to connect a specific nearshore ecological data collection to the Oregon Spatial Data Library
- Work to create re-usable tutorials on how to successfully connect data sets or data collections to catalogs
New Services

http://www.coastalatlas.net/services/
http://www.coastalatlas.net/services/wms/
http://www.coastalatlas.net/services/wfs/
http://www.coastalatlas.net/services/csw/

Etc.
Technology

Joomla! CMS: PHP, MySQL

MapServer
OpenLayers
Dojo
GeoMoose

MySQL
MapServer
PostGIS
OpenLayers
etc.

PHP
MySQL
GeoNetwork
pycsw?
Sharing the Data Catalog

• Some users only want data (& metadata)
• Requires a catalog application to manage documented resources
• New focus on enabling services
"... a scholar's positive contribution is measured by the sum of the original data that he contributes. Hypotheses come and go, but data remain. Theories desert us, while data defend us. They are our true resources, our real estate, and our best pedigree."

Santiago Ramon y Cajal, Nobel laureate
in Advice for a Young Investigator, 1916

translated by N. Swanson and L. Swanson
Cambridge, MA, MIT Press, 1999
Thanks!

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History

- Oregon Coastal Atlas Project launched 2001
- Multi group project involving Oregon State University Geosciences, Ecotrust and Oregon Coastal Management Program
- Funded initially by NOAA CSC, NSF, FGDC. Now maintained by OCMP.
- Initial version was active 2001 to 2006
- Saw considerable growth over that period
- Many significant changes occurred in both the tech and user communities
- OCMP became main steward, and version 2.0 was 2007 to 2012
- Recently revamped to Atlas 3.0
- New work focusing on exposing data archive via services
- Upcoming replacement of main map interface
- Always adding new data

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