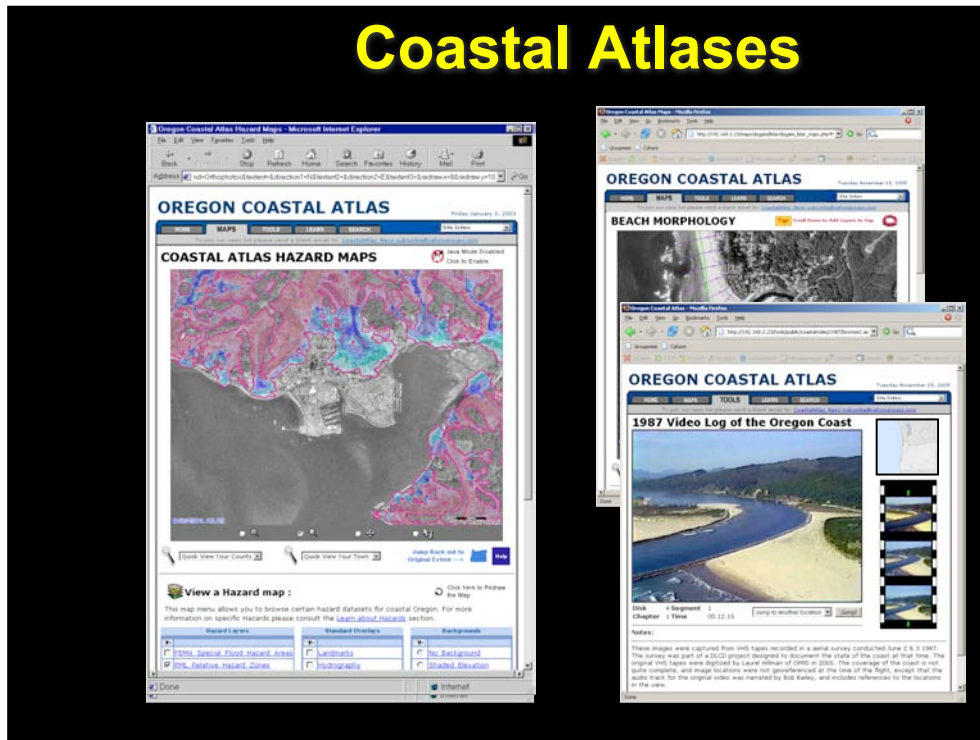


Coastal Atlases



Coastal atlases as coastal data repositories

Example from the Oregon Coastal Atlas, a founding member of ICAN along with the Marine Irish Digital Atlas

Multiple data product types represented here from the over 3000 data sets that can be leveraged from the Oregon Coastal Atlas:

Flat files - ESRI shapefiles

Database relations - Topological and temporal relations in coverages

Images - Digital Orthophoto Quarter Quads, Geotiffs

Video - Shoreline change videography; historic photograph archive

International Coastal Atlas Network (ICAN)

workshop1.science.oregonstate.edu/join

Globally integrate and interoperate among
locally-maintained atlases ...

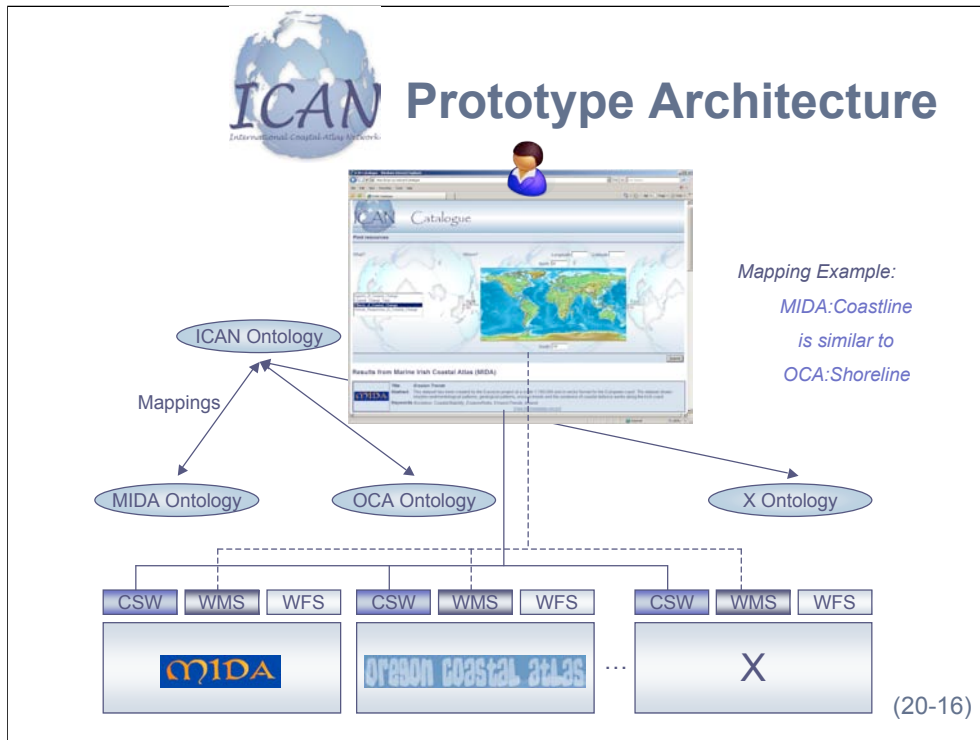
Inform regional decision- and policy-making across
several themes

- Climate change - coastal vulnerability
- Coastal governance (boundaries, protected areas, etc.)
- Coastal hazards
- Population pressures
- Marine spatial planning
- Resource availability and exploitation



Oregon Coastal Atlas group is a founding member of ICAN, currently involving over 30 institutions from 10 countries plus the the UNESCO IODE (Intl Ocean Data/Information Exchange).

ICAN hopes to involve the Washington Coastal Atlas (WA Dept. of Ecology) in near future.



Emphasize that this is USER-CENTERED

Data product type here is CATALOG (using FGDC and ISO 19115 metadata, ontologies)

Each atlas implements its own ontology

ICAN has the super ontology (global ontology)

Then there are mappings between ontologies - mapping is down by the individual atlas owners

Sample of Heterogeneous Data Products of the Coastal Web Atlases in ICAN

Data Product Type	
Flat files	ESRI Shapefile
Database relations	Topological and temporal relations in coverages and geodatabase
Catalogs	FGDC metadata, Catalogue of Oregon Marine & Coastal Information (COMCI) within the Oregon Coastal Atlas
Images	Digital Orthophoto Quarter Quads, Geotiffs, Digital Raster Graphics, satellite derived ocean color products in hierarchircal data format
Time Series	Shoreline change photo or orthophotos quad time series, Regional model output, buoy and cruise station time series
3D gridded	Hydrodynamic modeled current and particle tracking (NetCDF, HDF), USGS DEM, LIDAR
Audio	
Video	Shoreline change videography; historic photograph archive; animations
Computer models	Bluff undercutting and overtopping from water level models, coastal inundation models,
Documents	Observation protocols, technical docs, data summaries, management plans, site evaluations, technical reports
Other	Arc Marine Data Model and associated geodatabase; Coastal Data Model Design