International Coastal Atlas Network

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Outline

- Outline
- Background
- Strategic Aims
- Membership
- Tools
- ICAN Future
- Conclusion

- Background
- Strategic Aims
- Current Membership
- “Tools”
  - Interoperability Prototype
  - Atlas Assessment Survey
- Strategic Directions
- Conclusion

Emergence of "Coastal Web Atlases"

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"A collection of digital maps and datasets with supplementary tables, illustrations, and information that *systematically illustrate* the coast, oftentimes with cartographic and decision support tools, all of which are accessible via the Internet."

(O'Dea et al., 2007)

→ Coastal Zone Management, Governance

→ Governments, NGOs, Citizen Groups

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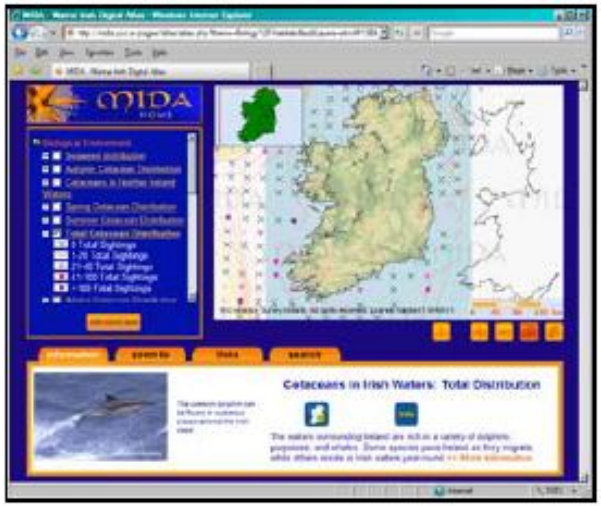
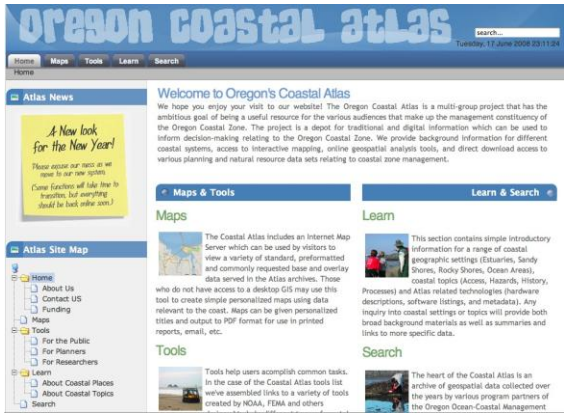
Marine Irish Digital Atlas, mida.ucc.ie

Oregon Coastal Atlas, www.coastalatlas.net

- *Rich Local Information*
- *Web User Interface*
- *Web Services*

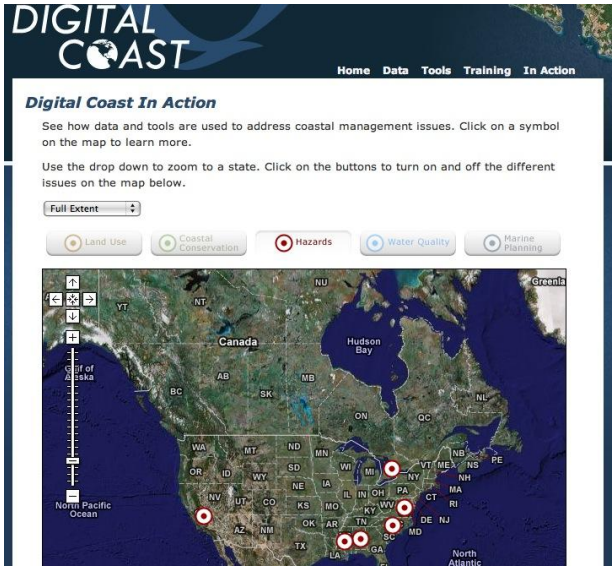


MIDA, Ireland

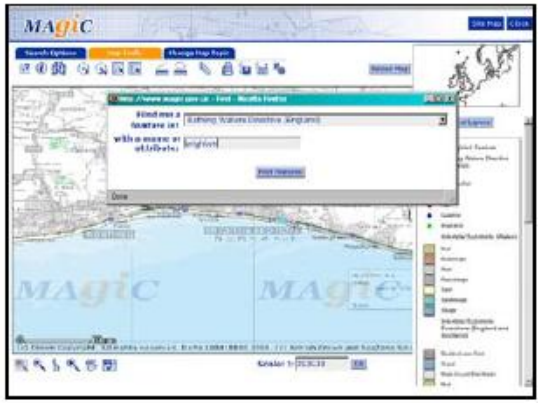


Oregon Coastal Atlas, USA

De Kustatlas, Belgium



NOAA Digital Coast, USA



Magic, UK

And many MORE ...

Enter ICAN …. Intellectual Merit

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- Significant capacity, varying approaches
- Regional governance, coordination
- Best practices?
- Widespread solutions needed
  - Access to and documentation of data
  - Integration of tools
  - Decision support for coastal mgmt via atlases
  - “Semantic interoperability”

Workshop 1, 2006 Cork, Ireland

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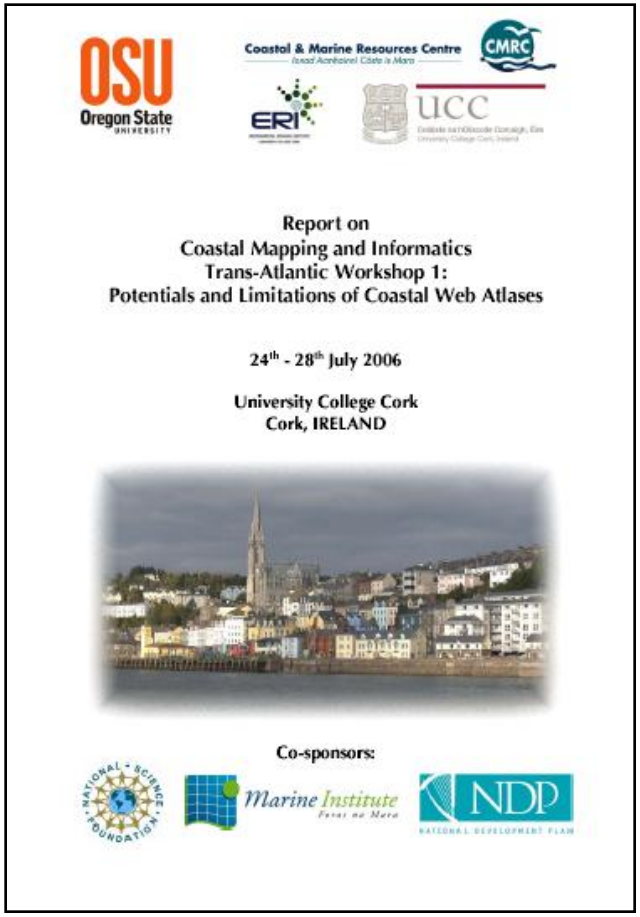
- To create & strengthen **relationships** between experts in marine & coastal mapping in North America and Europe
- To identify **state of the art** approaches to coastal mapping and informatics



Workshop 2, 2007 Corvallis, USA

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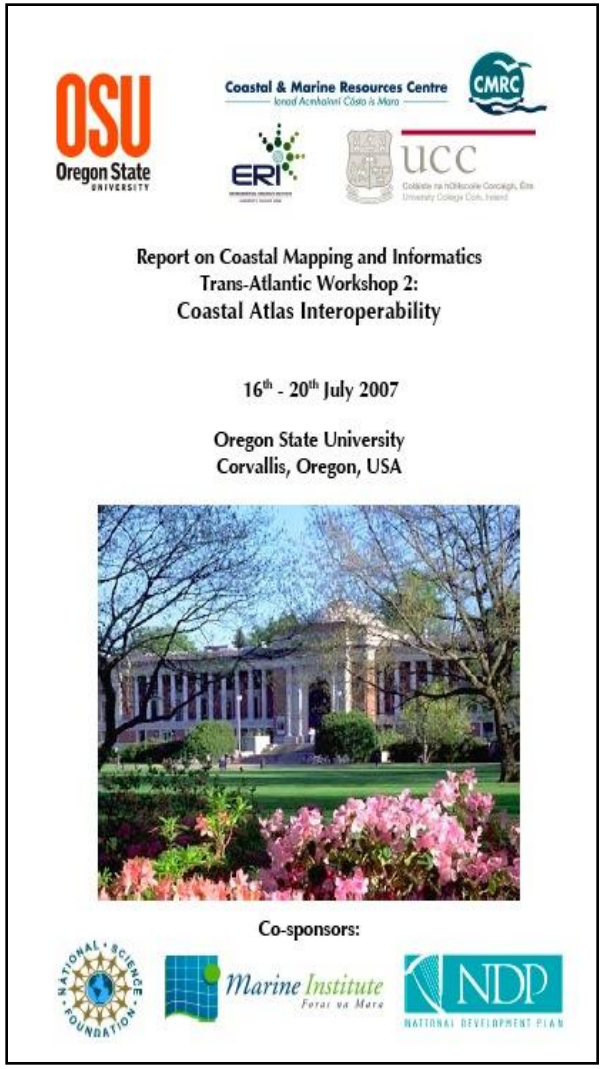
- Improve searches *between* atlases
  - metadata to ontologies
  - **Marine Metadata Interoperability (MMI)**
- Semantic interoperability
- Linkages to use cases, communities
- Proof-of-concept ontologies & **interoperability prototype**
- Large, collaborative funding proposals



Workshop 3, 2008 Copenhagen, Denmark

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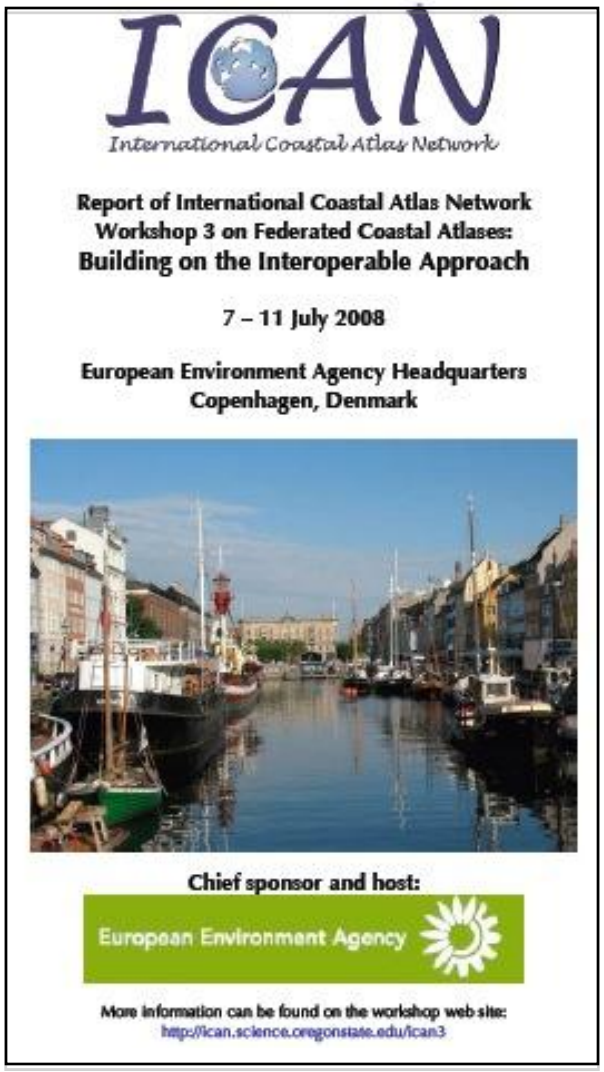
- European Environment Agency sponsorship
- Advance actions in:
  - Technical developments
    - Review of interoperability prototype
  - Strategic directions
  - Governance structure
- Link to relevant initiatives in Europe



ICAN Strategic Aims

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- Share experiences and find common solutions to coastal web atlas development
  - **Knowledge portal**: Guides, cookbooks, "engines", discussion boards, code, use cases…
- 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

OSU Oregon State University

ICAN

International Coastal Atlas Network

- Home
- About ICAN
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  - Governance
  - Atlas Assessment
- ICAN Prototype
- Discussion Room
- Expertise Directory
- Atlas Directory
- Resource Directory
  - Related Links
  - Software, Services
  - Documentation, Tutorials, Cookbooks
  - ICAN Publications
  - Acronyms
- ICAN FAQ
- Site Map

Promoting web atlases around the world for coastal conservation, management, and governance... » **Find out more.**

The International Coastal Atlas Network (ICAN)

Submitted by dawn on 16 November 2008 - 12:12am.

ICAN is a newly-founded, informal group of organizations who have been meeting over the past two years to scope and implement data interoperability approaches to coastal web atlases (CWAs). The **mission/strategic aim** of ICAN is to share experiences and to find common solutions to CWA development (e.g., user and developer guides, handbooks and articles on best practices, information on standards and web services, expertise and technical support directories, education, outreach, and funding opportunities, etc.), while ensuring maximum relevance and added value for the end users. The long-term view is for global-level operational interoperability which will evolve as the ICAN community strives to increase awareness of the opportunities that exist for increased coastal and marine data sharing among policy makers and resource managers as strategic users of a CWA. ICAN participants seek to play a leadership role in forging international collaborations of value to the participating nations, thereby optimizing regional governance in coastal zone management.

Read more

Current Membership: 30+ organizations from 14 nations and growing…

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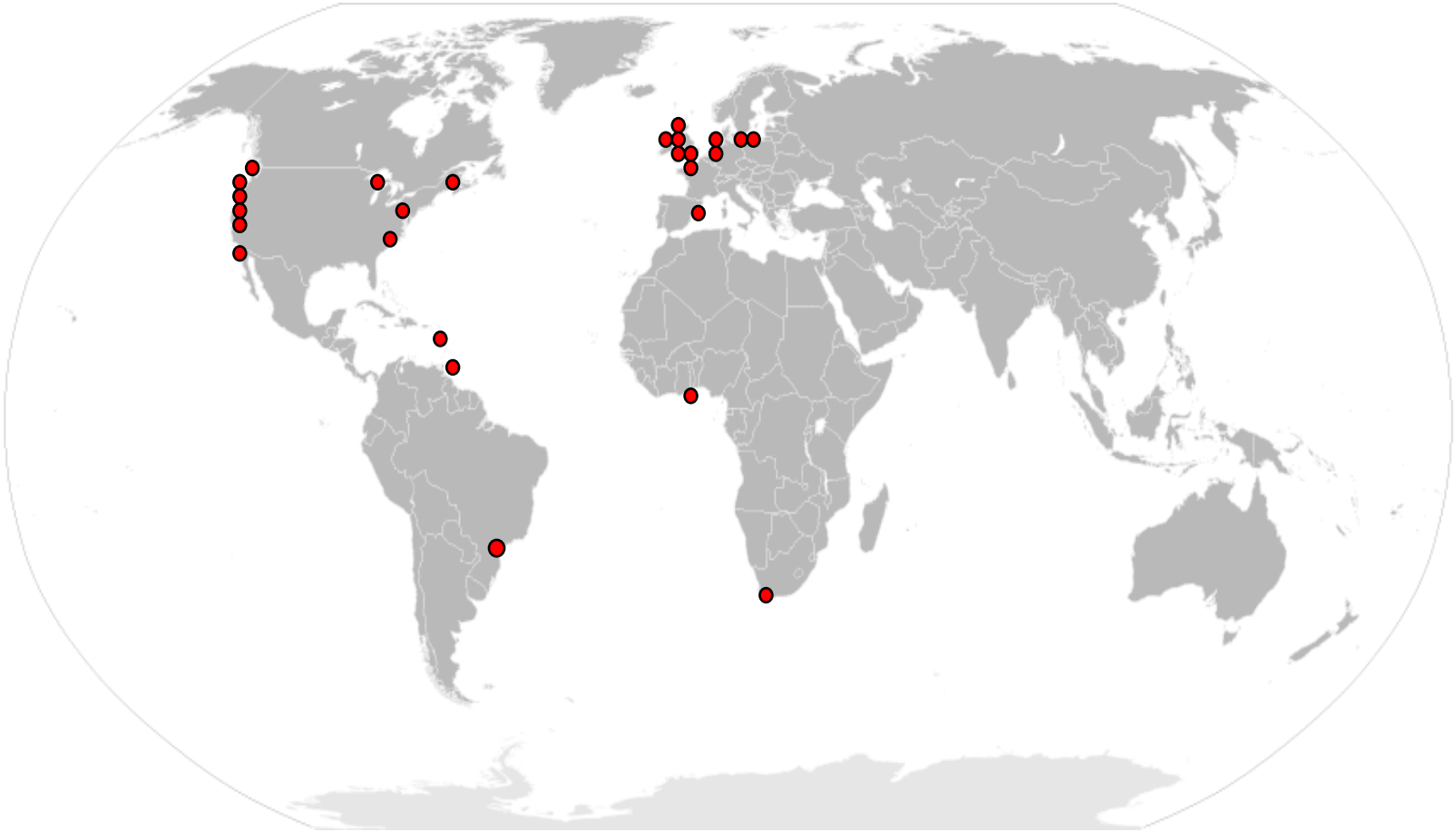

WEST COAST GOVERNORS' AGREEMENT on OCEAN HEALTH

CALIFORNIA OREGON WASHINGTON

westcoastoceans.gov

Welcome

"Just as our western states have started to work together to fight global warming and protect our air, we now join forces to make sure we are doing everything in our power to maintain clean water and beaches along our coast."

- Governor Schwarzenegger

"Our oceans provide critical economic, environmental and social benefits to the Pacific Coast states. Today's historic agreement will mean clean water, healthy oceans and a better future for our children."

- Governor Kulongoski

"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

WCGA Update - Sign me up!

Please send me updates about the West Coast Governors' Agreement on Ocean Health.

Enter your Email address:

West Coast Governors' Agreement on Ocean Health

On September 18, 2006 the Governors of California, Oregon and Washington announced the West Coast Governors' Agreement on Ocean Health. The Agreement launched a new, proactive regional collaboration to protect and manage the ocean and coastal resources along the entire West Coast, as called for in the recommendations of the U.S. Commission on Ocean Policy and the Pew Oceans Commission.

NEWS!

4/23/08 Governors of California, Oregon and Washington Request Congressional Support for Maritime Pollution Prevention Act. Read the Press release

3/14/08 Governors send letter to US Secretary of Commerce requesting a declaration of a fishery resource disaster if salmon fisheries are closed. Read the Press release

Release of the final plan is anticipated in early 2008.

The Agreement seeks to advance the goals of:

- Clean coastal waters and beaches;
- Healthy ocean and coastal habitats;
- Effective ecosystem-based management;
- Reduced impacts of offshore development;
- Increased ocean awareness and literacy among the region's citizens; and
- Expanded ocean and coastal scientific information, research, and monitoring;
- Sustainable economic development of coastal communities.

The Agreement also underscores the importance of managing activities that affect our oceans on an ecosystem basis. That is, managing human activities and their impact on ocean resources in a way that accounts for the relationships among all ecosystem components, including people and other species and the environment in which we all live.

Interoperability Prototype

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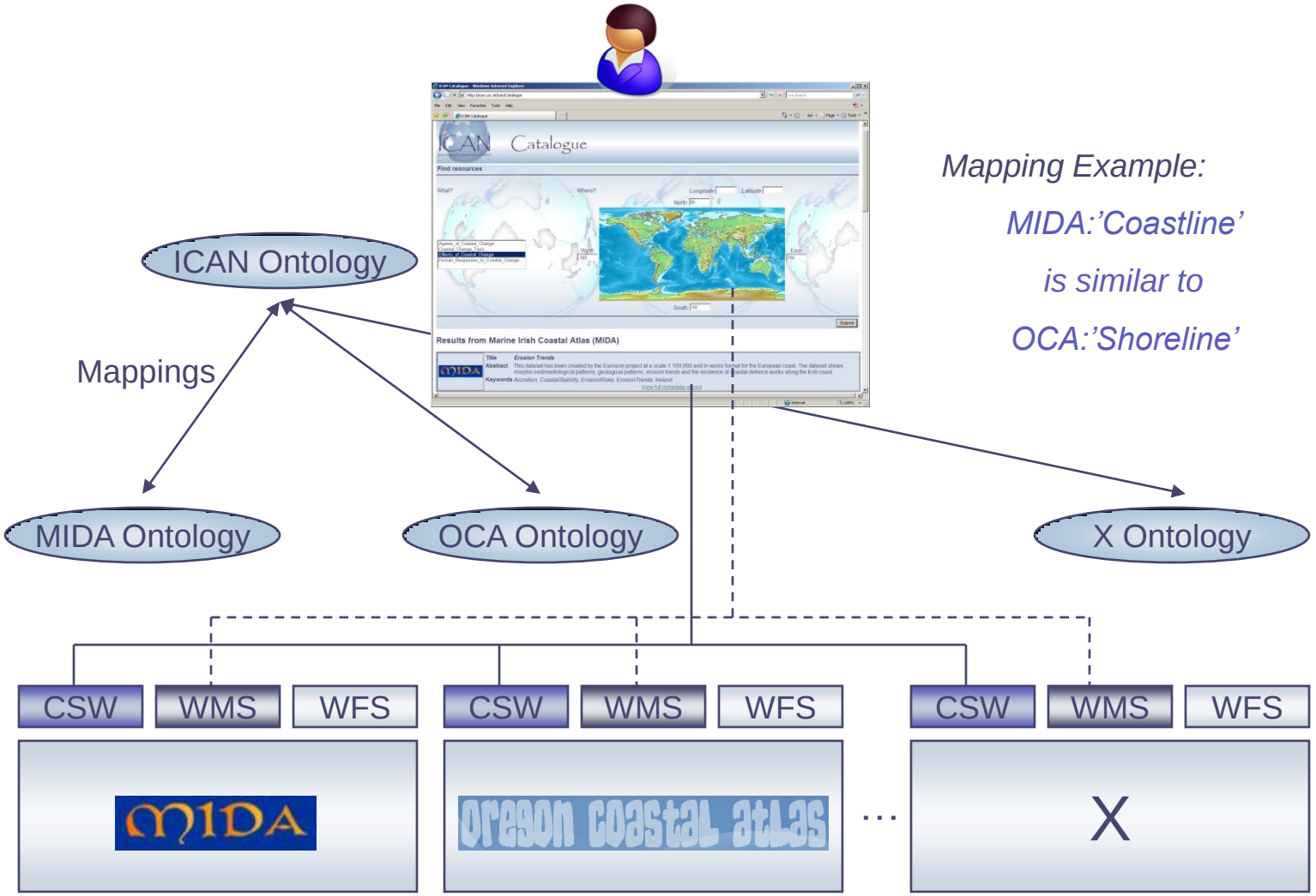
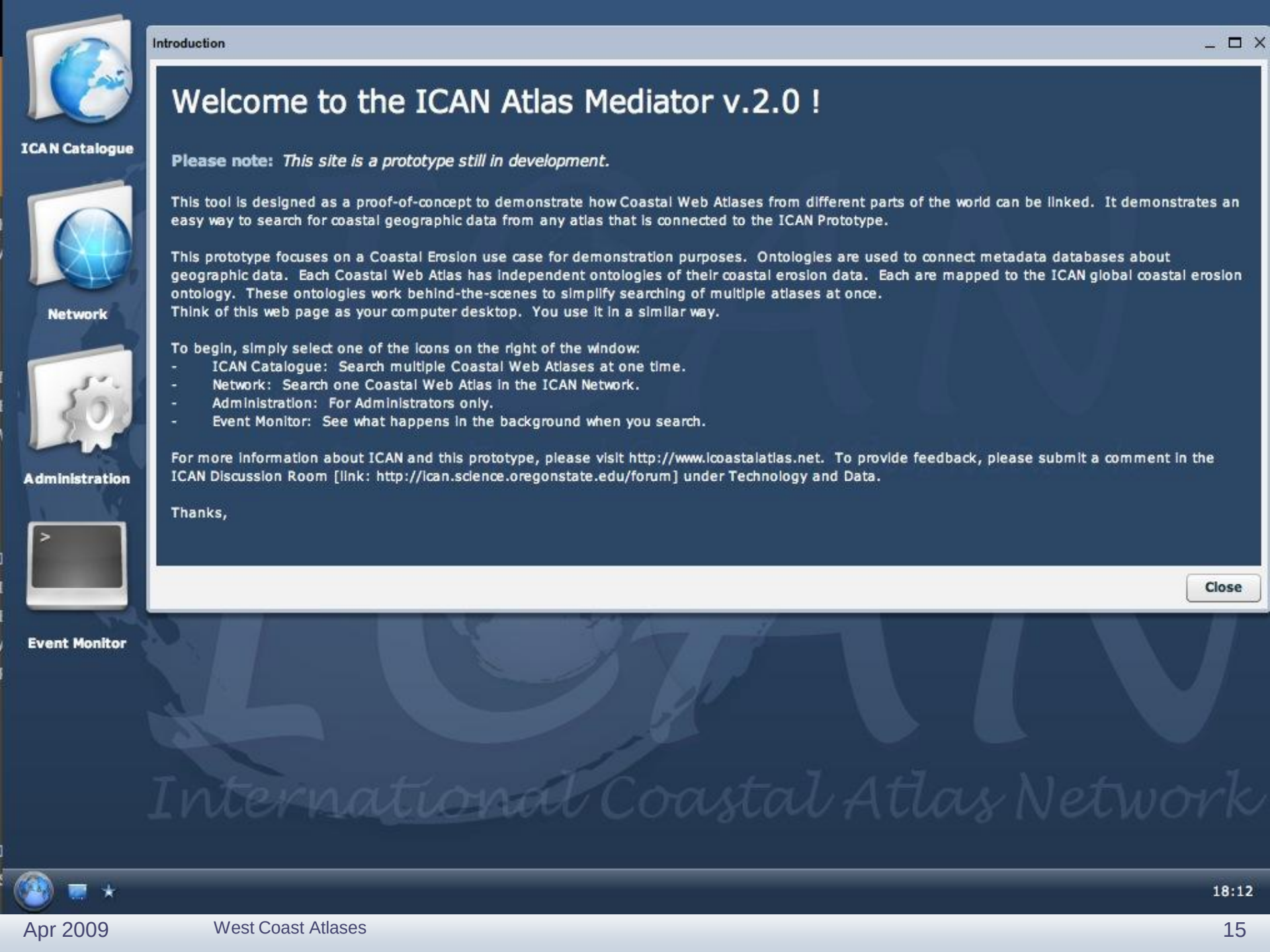


Mapping Example:

MIDA:'Coastline'

is similar to

OCA:'Shoreline'


ICAN Catalogue
Network
Administration
Event Monitor
Introduction
Welcome to the ICAN Atlas Mediator v.2.0 !
Please note: This site is a prototype still in development.
This tool is designed as a proof-of-concept to demonstrate how Coastal Web Atlases from different parts of the world can be linked. It demonstrates an easy way to search for coastal geographic data from any atlas that is connected to the ICAN Prototype.
This prototype focuses on a Coastal Erosion use case for demonstration purposes. Ontologies are used to connect metadata databases about geographic data. Each Coastal Web Atlas has independent ontologies of their coastal erosion data. Each are mapped to the ICAN global coastal erosion ontology. These ontologies work behind-the-scenes to simplify searching of multiple atlases at once.
Think of this web page as your computer desktop. You use it in a similar way.
To begin, simply select one of the icons on the right of the window:
- ICAN Catalogue: Search multiple Coastal Web Atlases at one time.
- Network: Search one Coastal Web Atlas in the ICAN Network.
- Administration: For Administrators only.
- Event Monitor: See what happens in the background when you search.
For more information about ICAN and this prototype, please visit http://www.icoastalatlas.net. To provide feedback, please submit a comment in the ICAN Discussion Room [link: http://ican.science.oregonstate.edu/forum] under Technology and Data.
Thanks,
Close
International Coastal Atlas Network
18:12

Atlas Assessment

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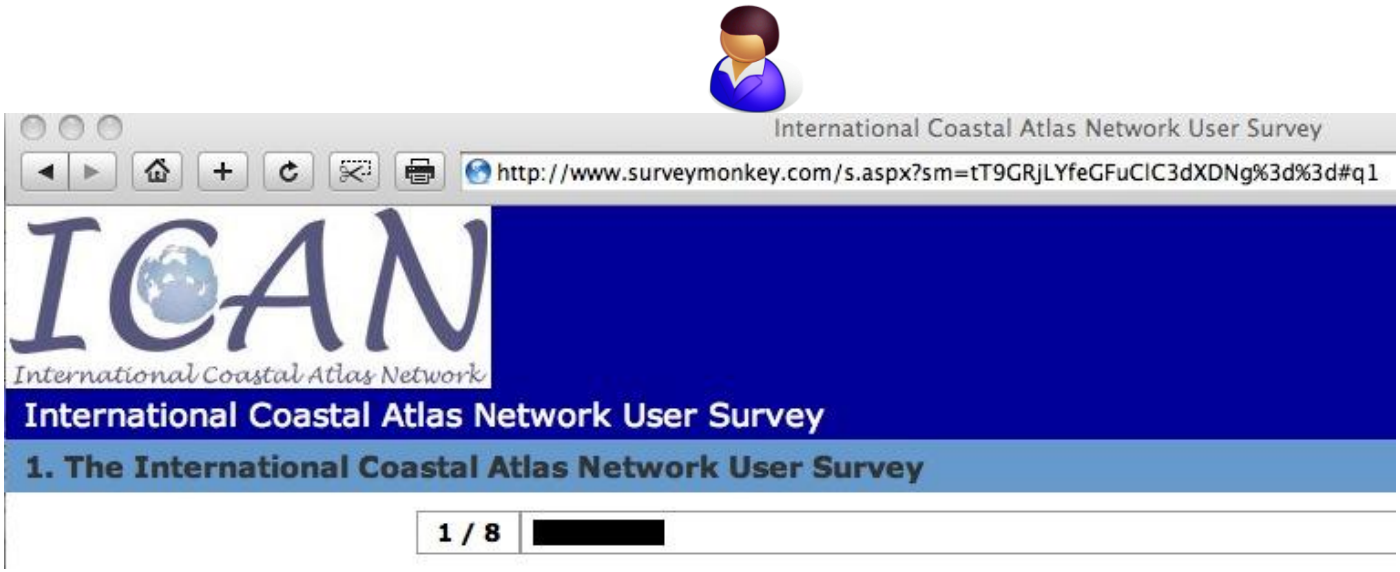

Reach survey from icoastalatlas.net

Strategic Directions

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- European Union Maritime Days Stakeholder Conf.
  - Rome, May 19-20, 2009
- GSDI 11/INSPIRE 3
  - Rotterdam, June 15-19, 2009
- Coastal Zone ’09
  - Boston, July 19-20, 2009
- CoastGIS ‘09
  - Florianopolis, Brazil, Sept 30-Oct 2, 2009
- ICAN Workshop 4
  - UNESCO University, Trieste, Italy
  - November 16-20, 2009

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- Governance activities
- Committee structures
- Pathways towards *sustainable* funding model
- Technical project development
- Awareness raising and publicity
- Outreach and training activities
- Documentation of resources, **tools**, expertise
- Further development of ICAN portal
- Google Earth/Ocean?

Acknowledgments

U.S. National Science Foundation

Irish National Development Plan

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European Environment Agency

Oregon Coastal Mgmt Program

NSF OCE-0607372 (MMI)

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icoastalatlas.net

or

ican.science.oregonstate.edu

ICAN Interoperability Prototype

- ican.ucc.ie

Marine Metadata Interoperability

- marinemetadata.org