The International Coastal Atlas Network (ICAN)

Overview and Recent Activities

Ned Dwyer

Dawn Wright

Started with Complementary Projects (2003)

Decision to organise two workshops

- Issues of regional maritime governance
- Significant expertise, varying approaches
- Little done to compile/assess efforts
- Best approaches to atlas implementation
- Widespread solutions needed
  - Access to and documentation of data
  - Integration of tools
  - Decision support for coastal management via atlases
  - Making atlases interoperable

Aims of Workshop 1, Cork, 2006

- To create and strengthen **relationships** between experts in the field in marine and coastal mapping in North America and Europe

- To identify **state of the art** approaches to coastal mapping and informatics

Report on
Coastal Mapping and Informatics
Trans-Atlantic Workshop 1:
Potentials and Limitations of Coastal Web Atlases

24th - 28th July 2006

University College Cork
Cork, IRELAND

Co-sponsors:

Experience from many atlas developers

Magic UK

De Kustatlas, Belgium
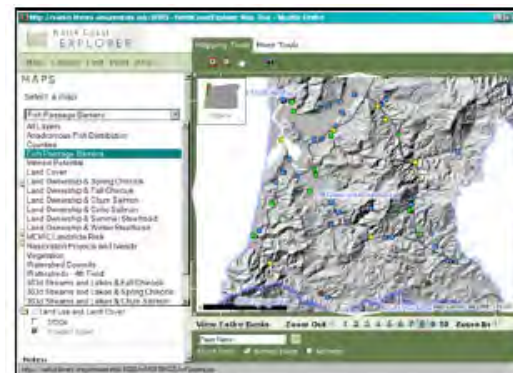
North Coast Explorer, US

Oregon Coastal Atlas, US

MIDA, Ireland

Discussion focussed on atlas characteristics

- Atlas purpose

- Distinguishing features

- Target audience

- Atlas support (financial/institutional)

- Atlas design & useability

- Technology used

- Functionality/Tools available

What is a Coastal Web Atlas?

"….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, and all of which are **accessible via the Internet**"

Key Workshop 1 Recommendations

ser community

ation of knowledge and experience

DISSEMINATION **y** development

to proper **cataloguing** – us

PROMOTION

update systems

- Employ efficient, flexible and easy to use **data management** systems

- Evaluate atlas **impact**

ONTOLOGIES

Atlas X

- Offer analysis **tools**

- Acknowledge the impo **otion**

- Build on lessons learned and use **existing knowledge**

- Implement **ontologies** to improve data discovery, sharing & integration

- Be innovative in approaches to **funding**

Aims and Outcomes of Workshop 2, Corvallis, 2007

Aims

- Improve searches between atlases
  - Controlled vocabularies & ontologies
- Semantic interoperability
- Linkages to use cases, communities

Outcomes

- Establish International Coastal Atlas Network (ICAN)
- Implement proof-of-concept ontologies & web-based demo prototype
- Hold further workshops
- Discussion document & workshop report

Report on Coastal Mapping and Informatics
Trans-Atlantic Workshop 2:
Coastal Atlas Interoperability

16th - 20th July 2007

Oregon State University
Corvallis, Oregon, USA
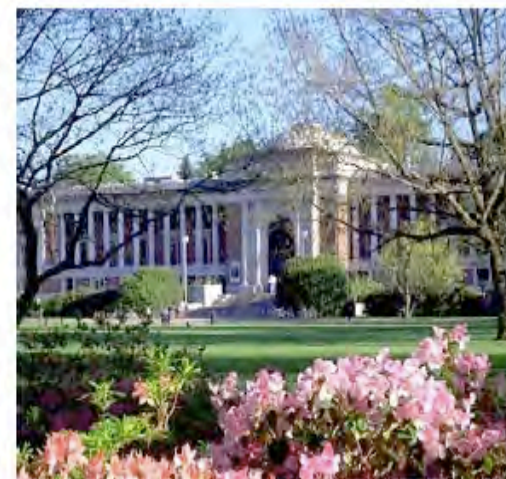
Co-sponsors:

Objectives of ICAN

- Ensure network has **wide representation** (developers/users)
- Develop technical & policy **guidelines** for atlas developers
- Highlight benefits of **interoperability** & **standards** based systems
- Develop **collaborative projects** for sharing know-how, atlas implementation and demonstration
- Align atlas efforts to facilitate **interoperability**
- Engage with **other relevant projects** and developments
- Involve representatives of the **user** communities

Activities at Workshop 3, Copenhagen

- Reviewed interoperability prototype
- Consolidated strategic directions
- Proposed a governance structure
- Welcomed new members
- Linked to relevant European activities
- Set out a 2008-09 action plan
- http://ican.science.oregonstate.edu/ican3_final_rpt

ICAN now has over 35 member organisations
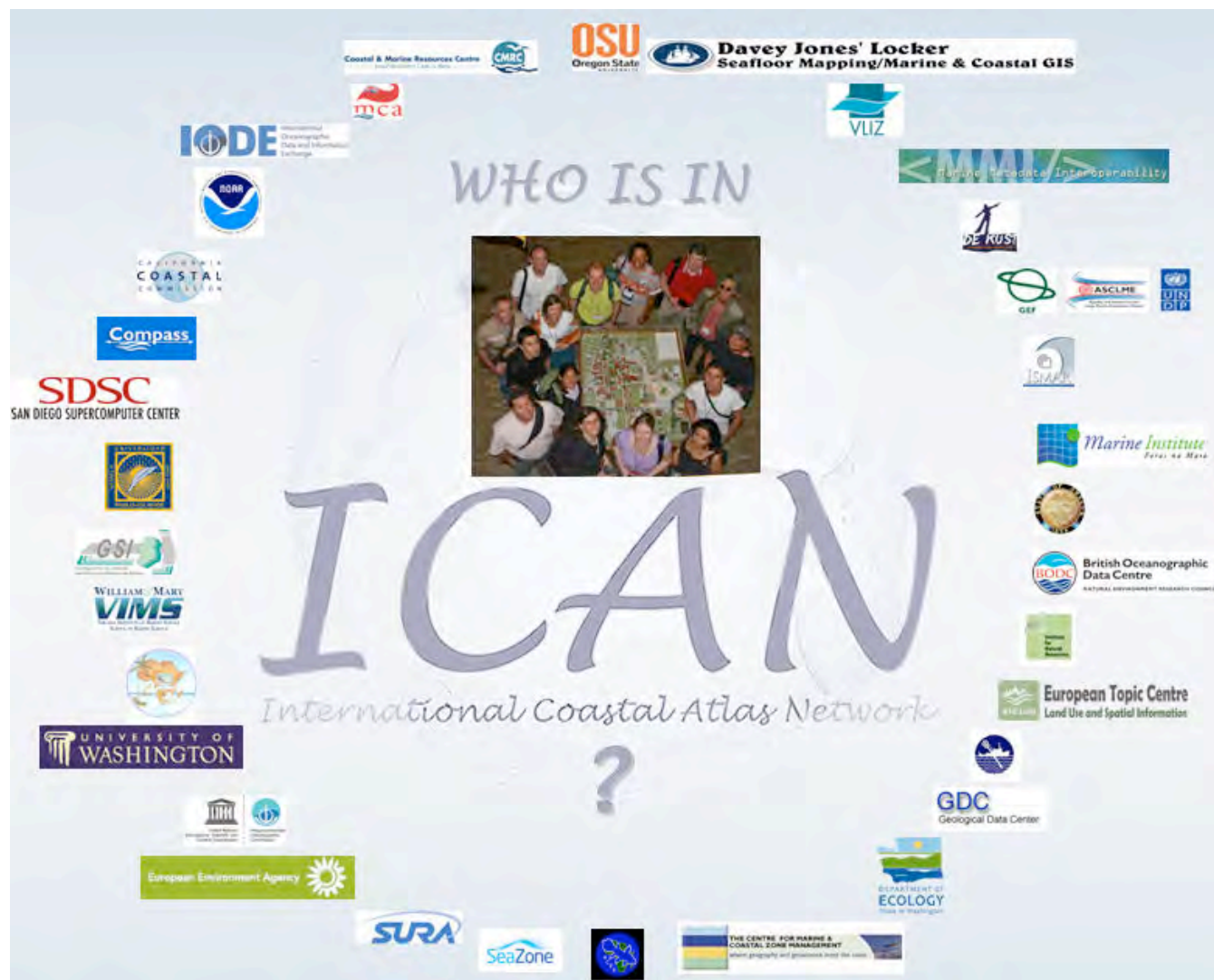
The "parent" Atlases of ICAN
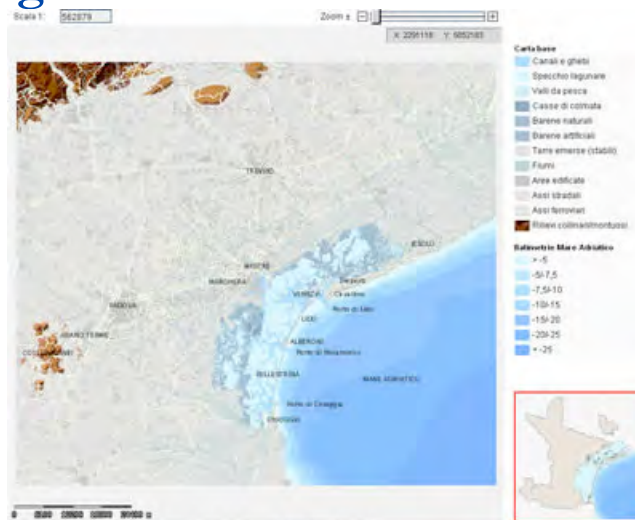
Marine Irish Digital Atlas (MIDA)

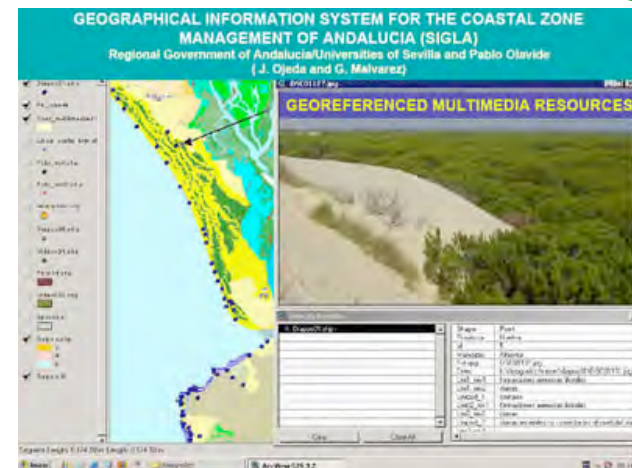## Oregon Coastal Atlas (OCA)

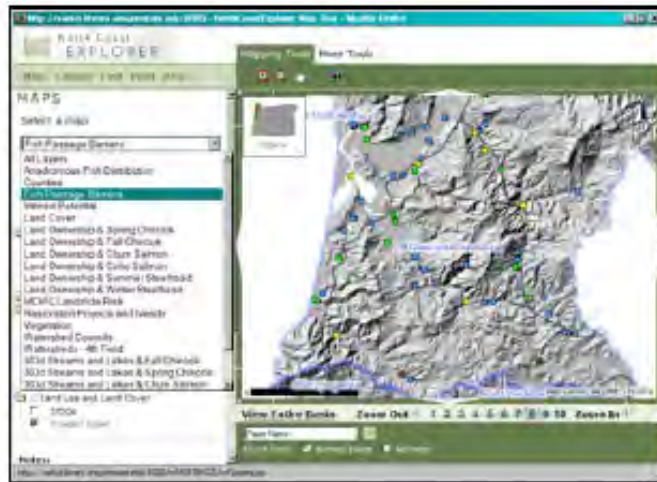# Some European Atlases and Initiatives in ICAN

Magic UK

De Kustatlas, Belgium

Venice Lagoon Atlas

SIGLA, Andalucia, Spain

Some USA Atlases and Initiatives in ICAN

North Coast Explorer, Oregon

Mapping Tools, Virginia

Washington Coastal Atlas
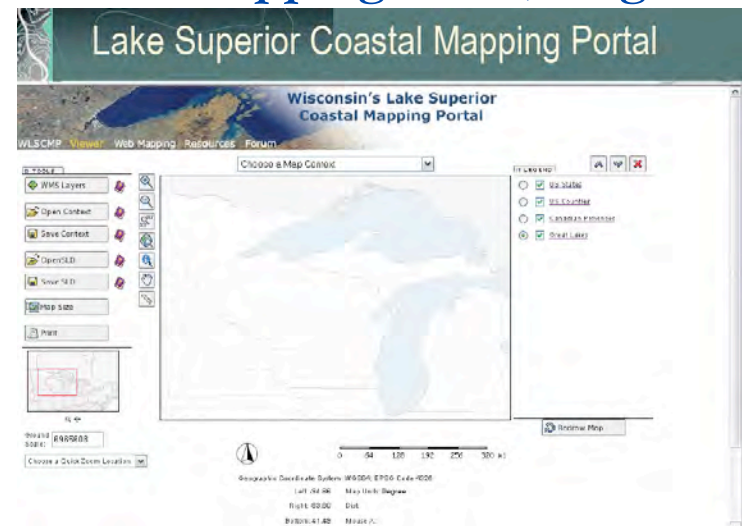
Wisconsin Mapping Tools

Some International atlas Projects
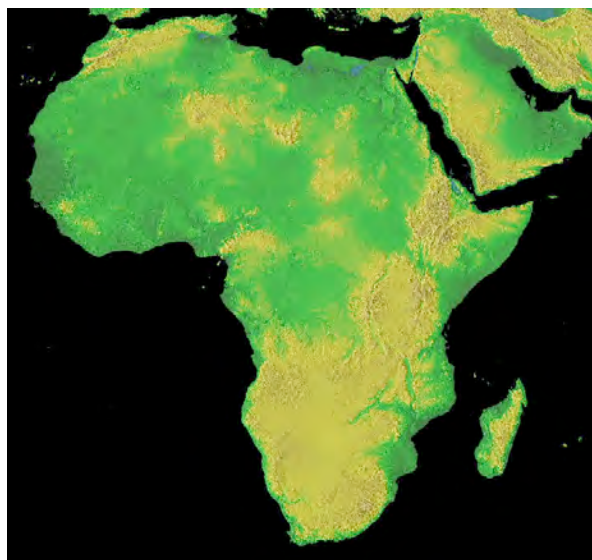
African Marine Atlas

Caribbean Marine Atlas

Supported by the IODE

Handbook of Research on Coastal Informatics

Part I - Principles

☺ Chapter 1 - Introduction: Coastal Web Atlas Defined (Dawn, Val

✓ Chapter 2 - Coastal Web Atlas Features (coordinated by Liz) [
    2.1. Introduction
    2.2. Map Area
    2.3. Geographic Data
    2.4. Map Legend/Layer List
    2.5. Atlas Tools
    2.6. Attribute Tables
    2.8. Information/Extras
    2.9. Technology
    2.10. Conclusion

✓ Chapter 3 - Coastal Web Atlas Implementation (coordinated b
    3.1. Getting Started

Publication: 2010

Interoperability Demonstrator:

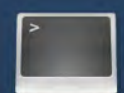# Examples of Practical Outcomes

Interoperability Demonstrator: http://ican.ucc.ie
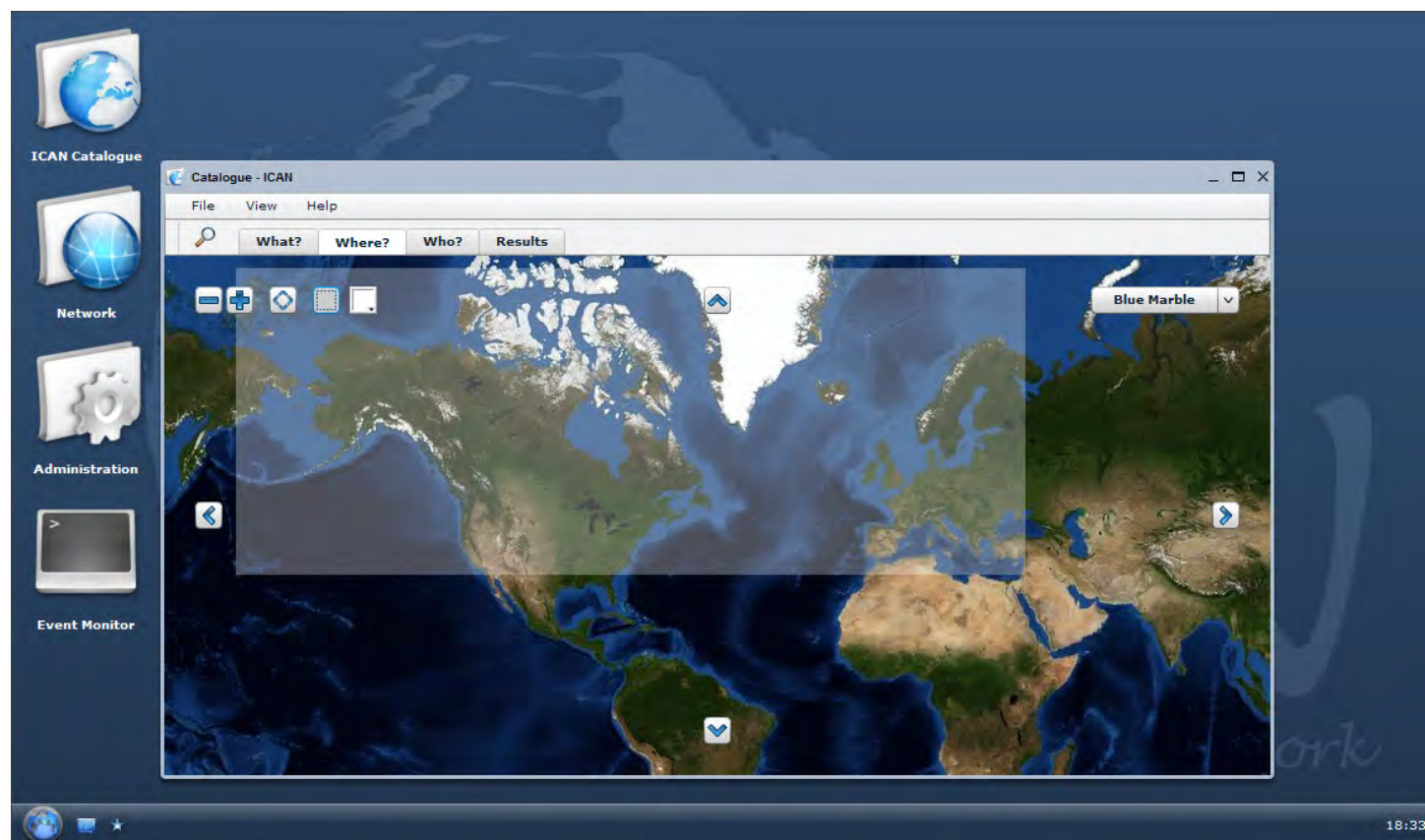
Key Benefits of ICAN

ICAN is leading the way in demonstrating best practice for coastal atlas development

Demonstrates how integration of distributed coastal information systems can be achieved