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Information and Information Management

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Outline

- **Background**
  - Purpose
  - Methods
- **What's the Problem?**
  - Information Indicators
  - Major Data Gaps
- **What's Causing the Problem?**
  - Information Management Issues
- **What's the Good News?**
- **Where Do We Go From Here?**

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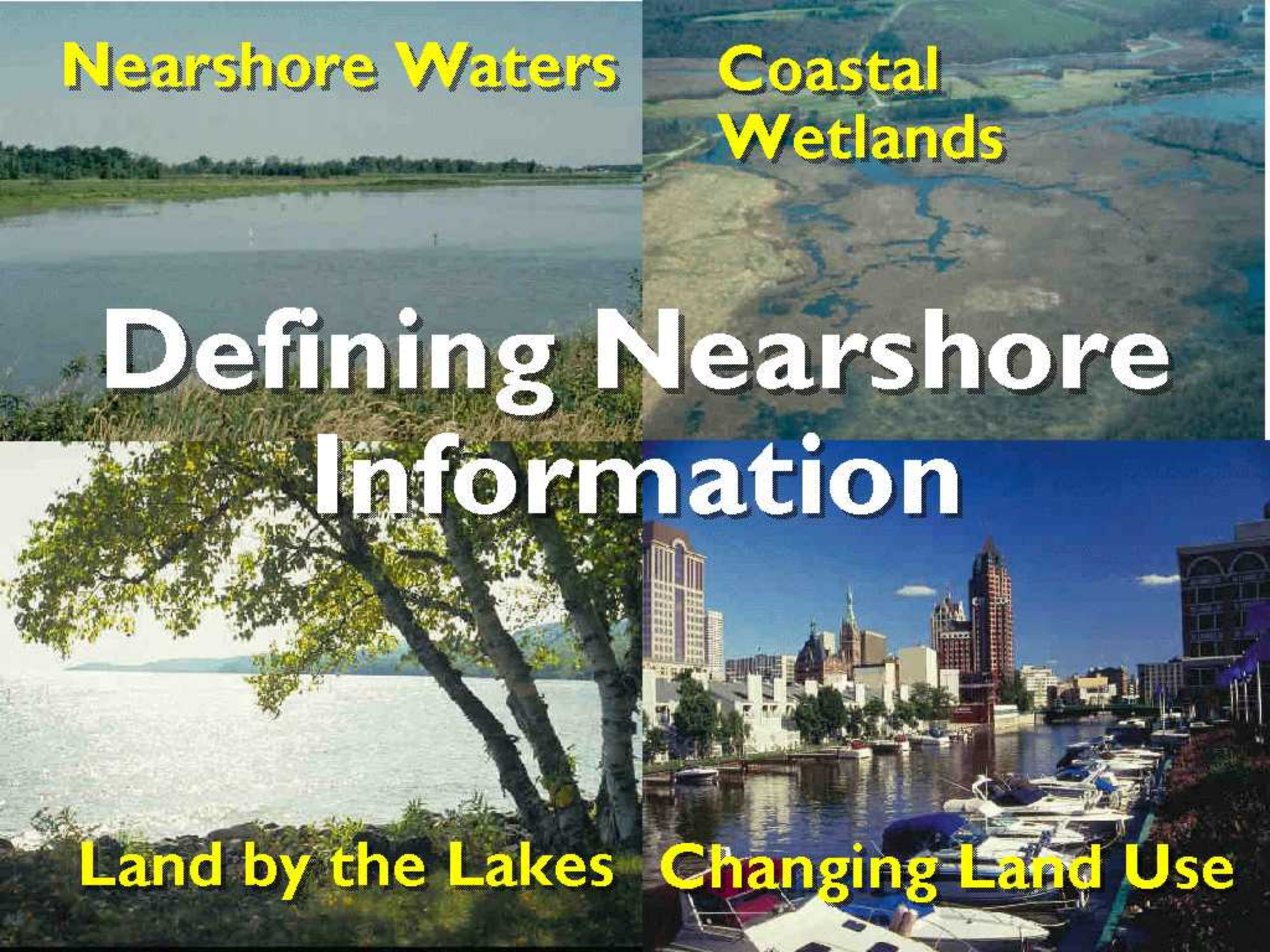
Background

Purpose

Report on the State of Nearshore Information Holdings

Examine Information Management


Nearshore Waters
Coastal Wetlands
Defining Nearshore Information
Land by the Lakes
Changing Land Use

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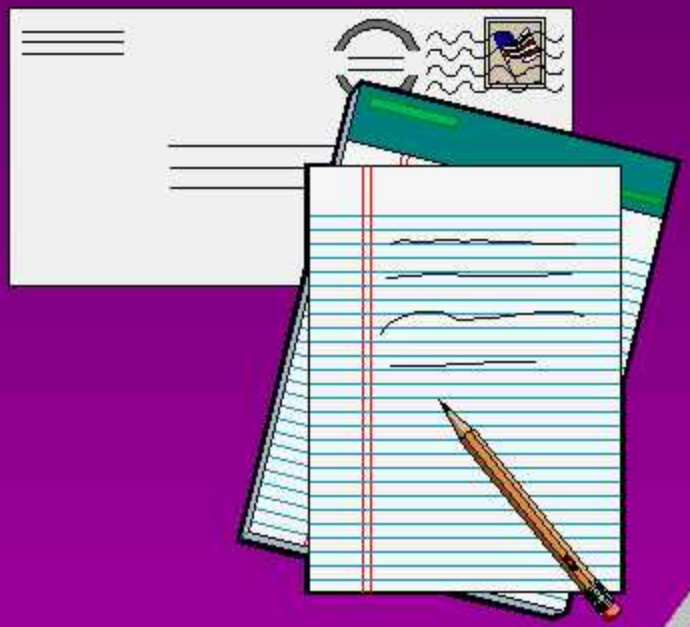
Methods

Survey



Literature Search

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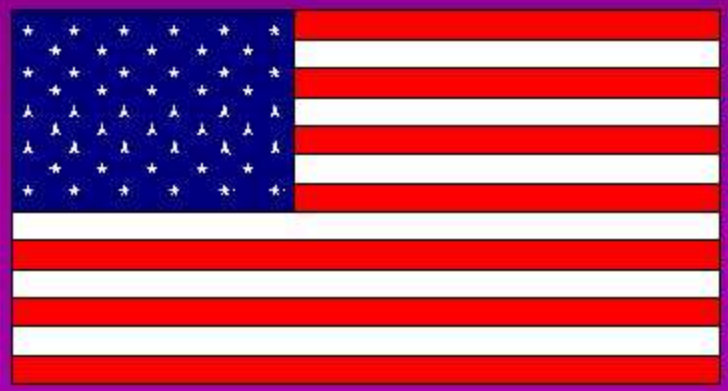
Database of Information Holdings

150 Canadian Entries

80 U.S. Entries



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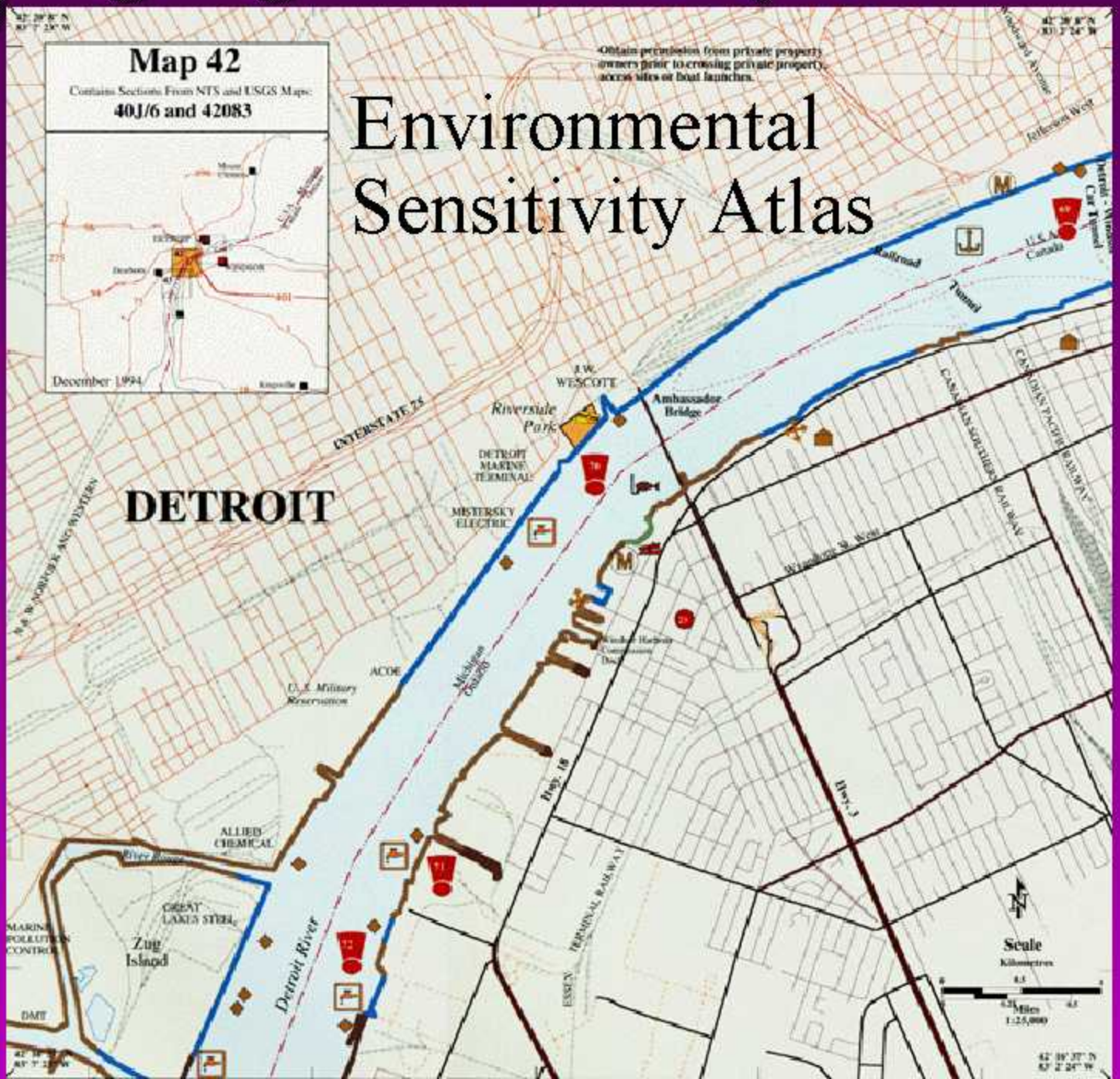
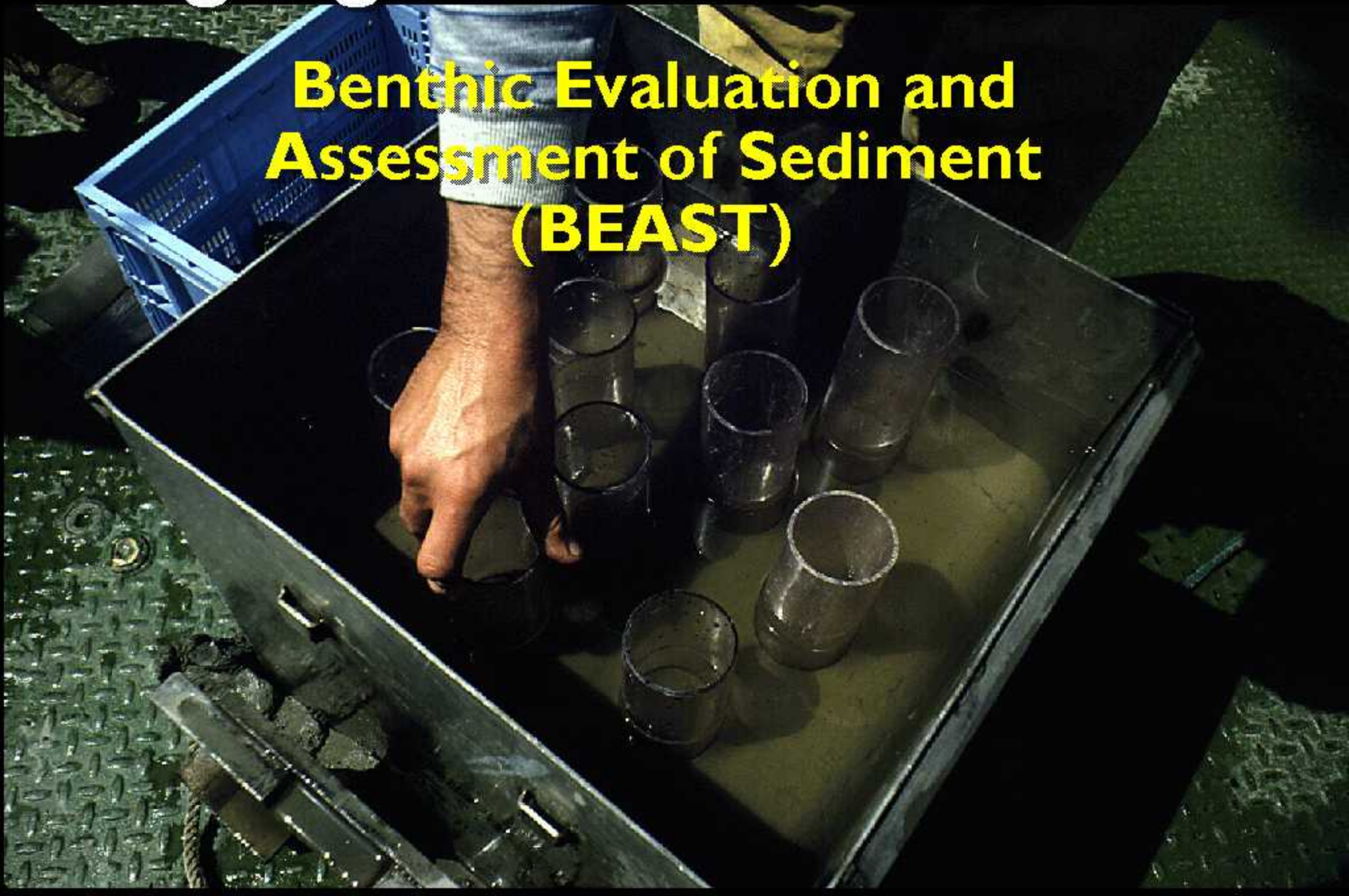
Highlight - Land by the Lakes



Highlight - Nearshore Waters



Benthic Evaluation and Assessment of Sediment (BEAST)

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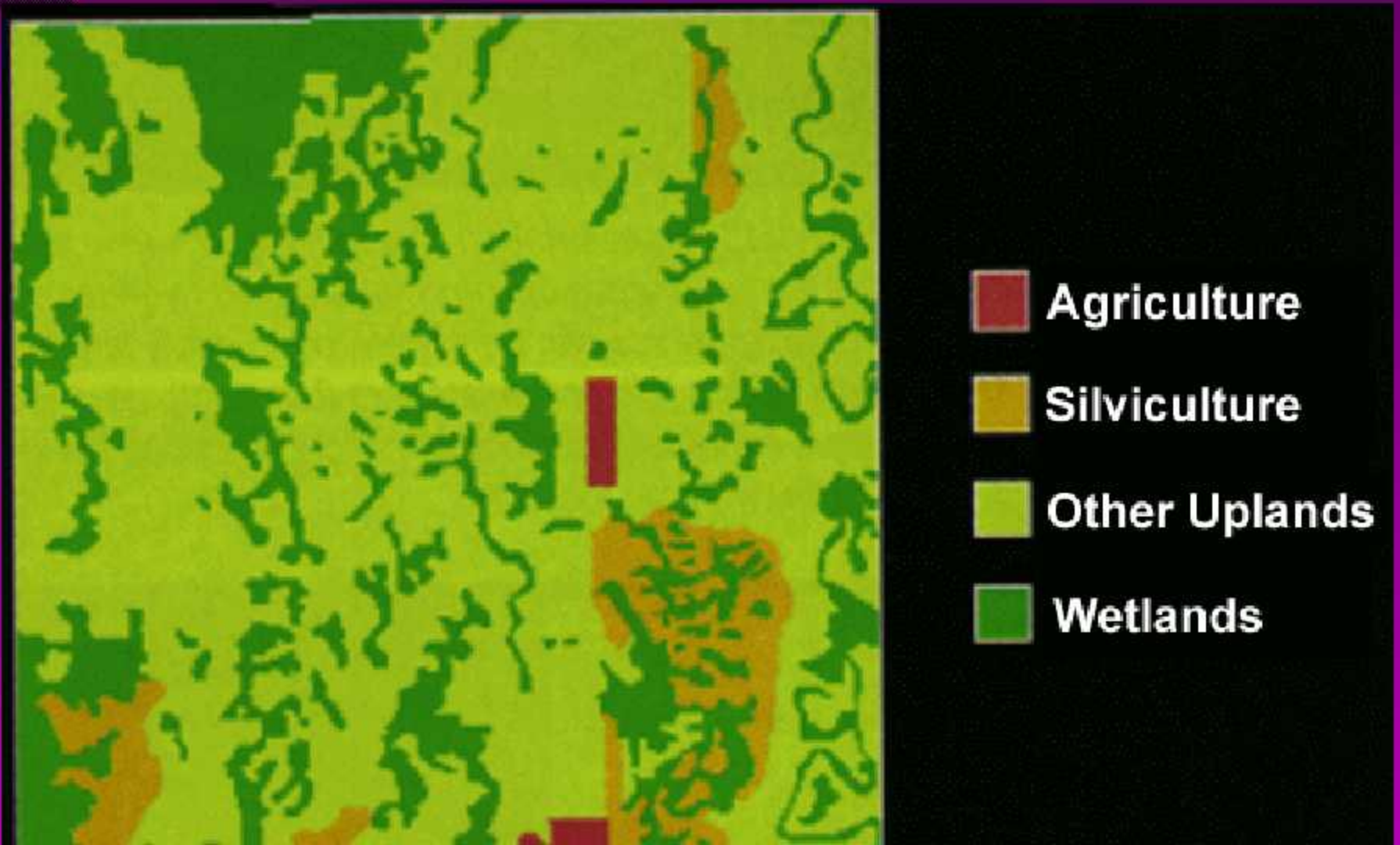
Highlight - Coastal Wetlands

National Wetlands Inventory



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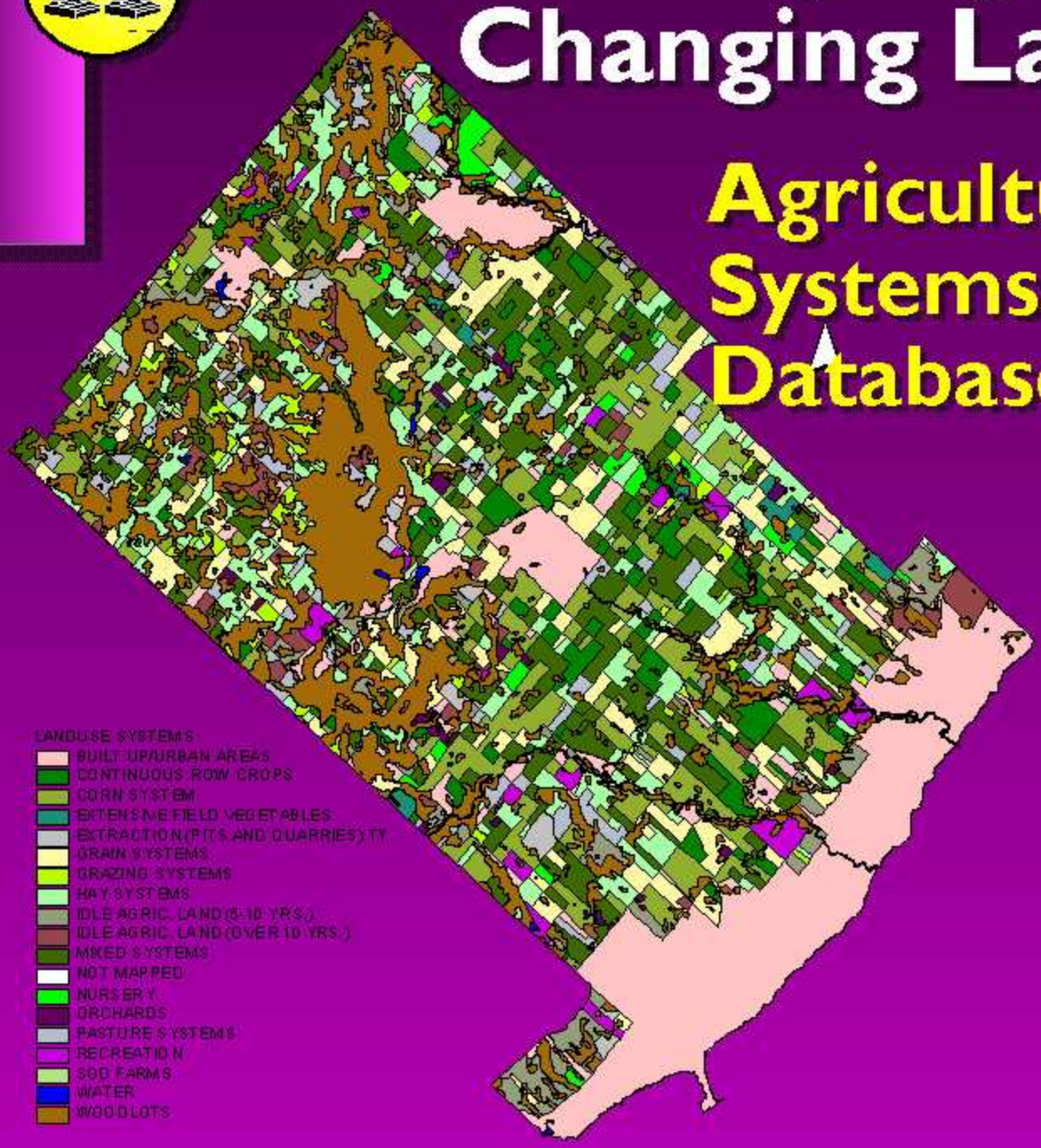
Highlight - Changing Land Use

Agricultural Landuse Systems Digital Database



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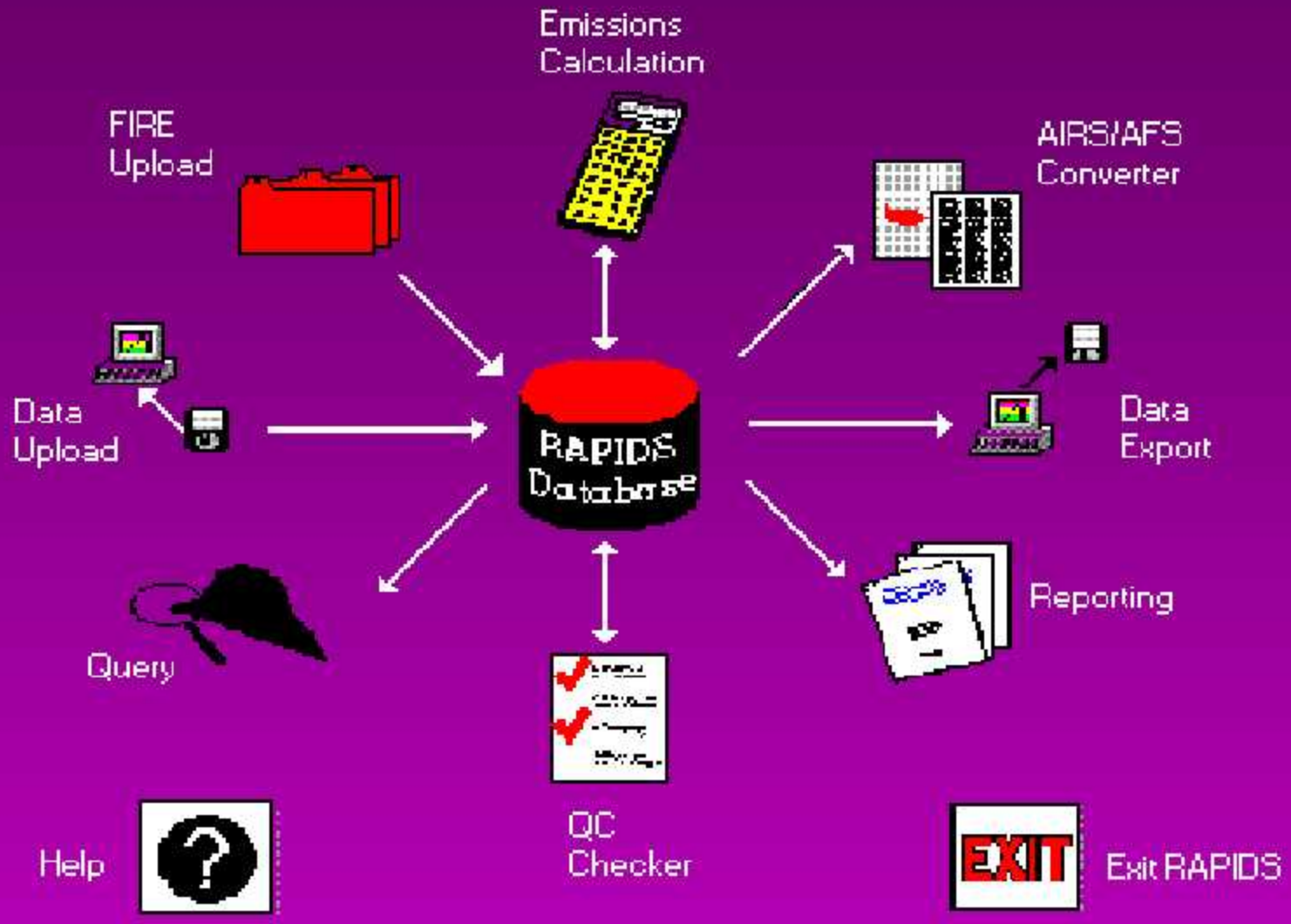
Highlight - Air

Regional Air Pollutant Inventory Development System (RAPIDS)



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What's the Problem?

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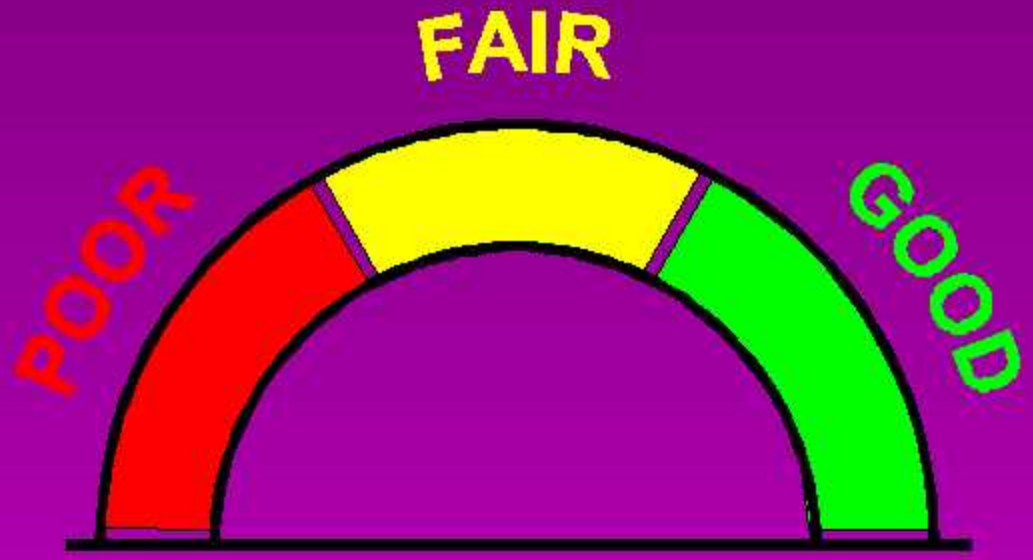
Value of Data for Assessing the Nearshore

- Proposed Indicators
- Data Needs
- Data Gaps
- Rating



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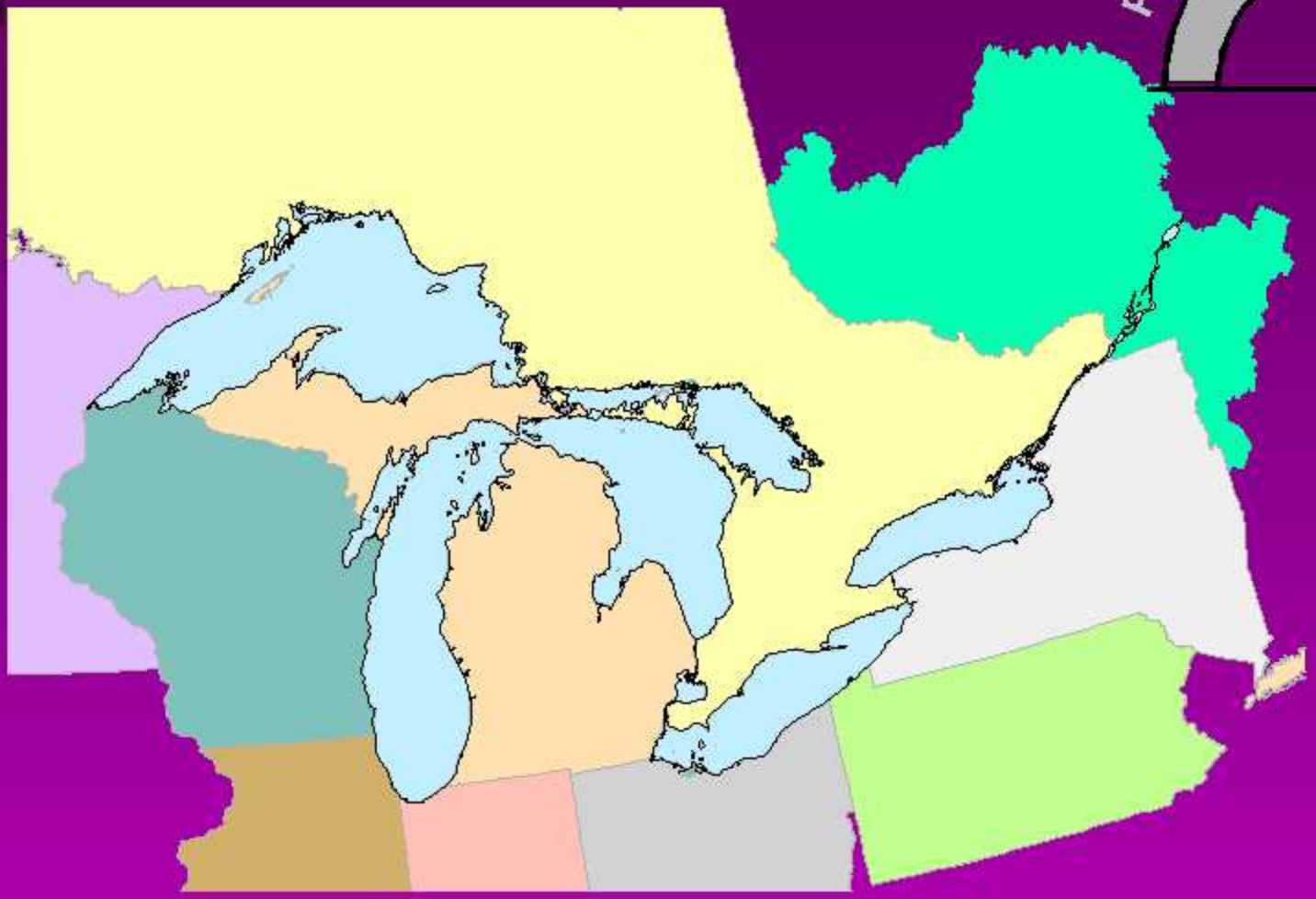
Information Indicators

Data Coverage



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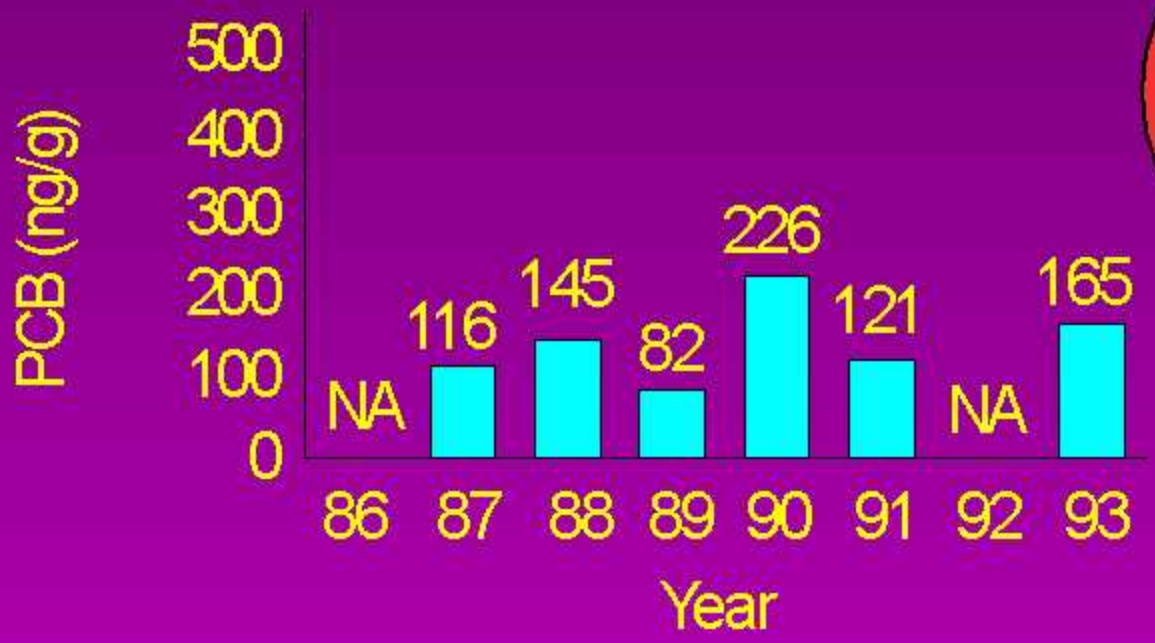
Information Indicators

Data Time Frame

Niagara-on-the-Lake

Spottail Shiners



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Information Indicators

Data Applicability

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Information Indicators

Data Usability

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Data Gaps
(Nearshore Waters Example)

No standardized reporting method of beach status

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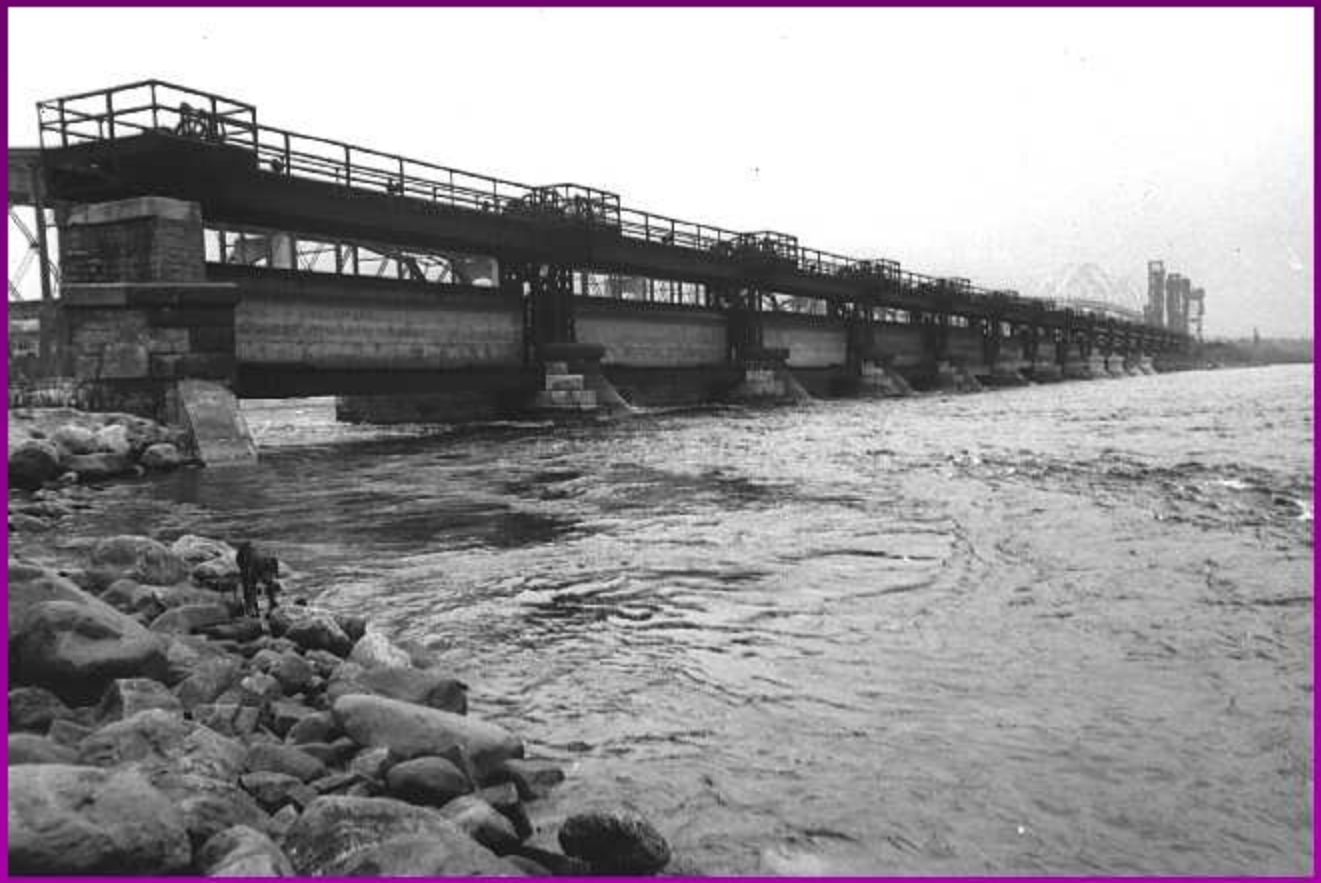
Data Gaps
(Land by the Lakes Example)

Identify the effects of human induced water-level changes on the functioning of shoreline natural ecosystems



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Data Gaps
(Wetlands Example)

Detailed nearshore bathymetry required (0- 2 metres)

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Data Gaps
(Land Use Example)

Information required on the area of roads and buildings

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What's the Problem? Summary

- Major Data Gaps
- Information is disjointed
- Lacks continuity
- Efforts are not coordinated
- No overall picture
- Not collecting information using a common set of indicators

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What's Causing the Problem?

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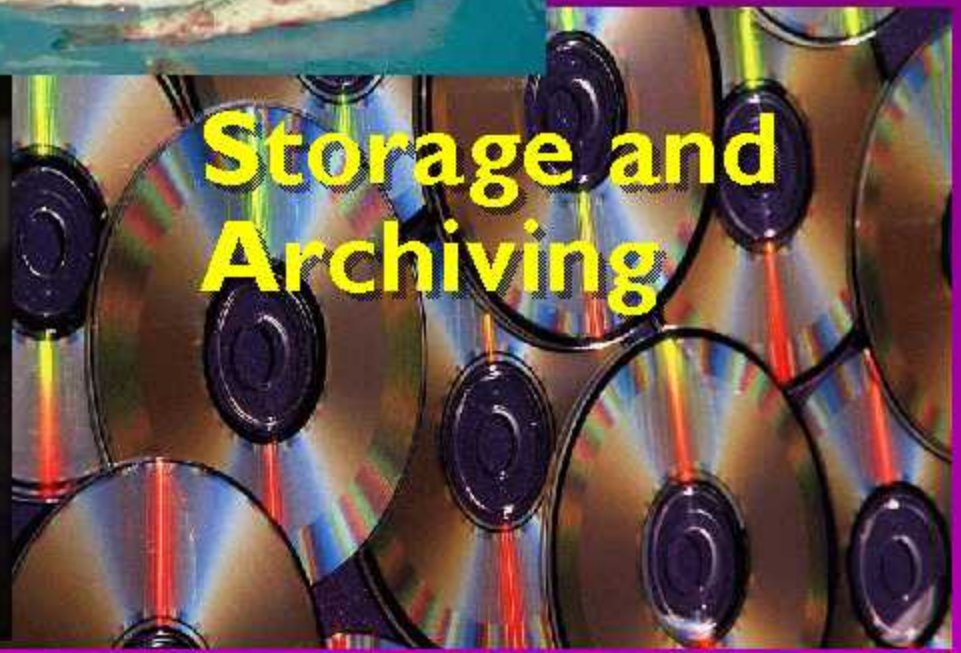
Nearshore Information Management Issues

Data Collection Issues

Documentation/ Cataloguing

Storage and Archiving



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Nearshore Information Management Issues

Data Integration

Availability and Access

Methods for Dissemination

Data Stewardship

Security and Protection

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What's the Good News?

- A good amount of data already exists
- Some efforts are already underway to document existing databases
- Draft indicators are being developed
- Some partnership programs such as the Lakewide Management Plans are underway
- Technology is advancing

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Where Do We Go From Here?

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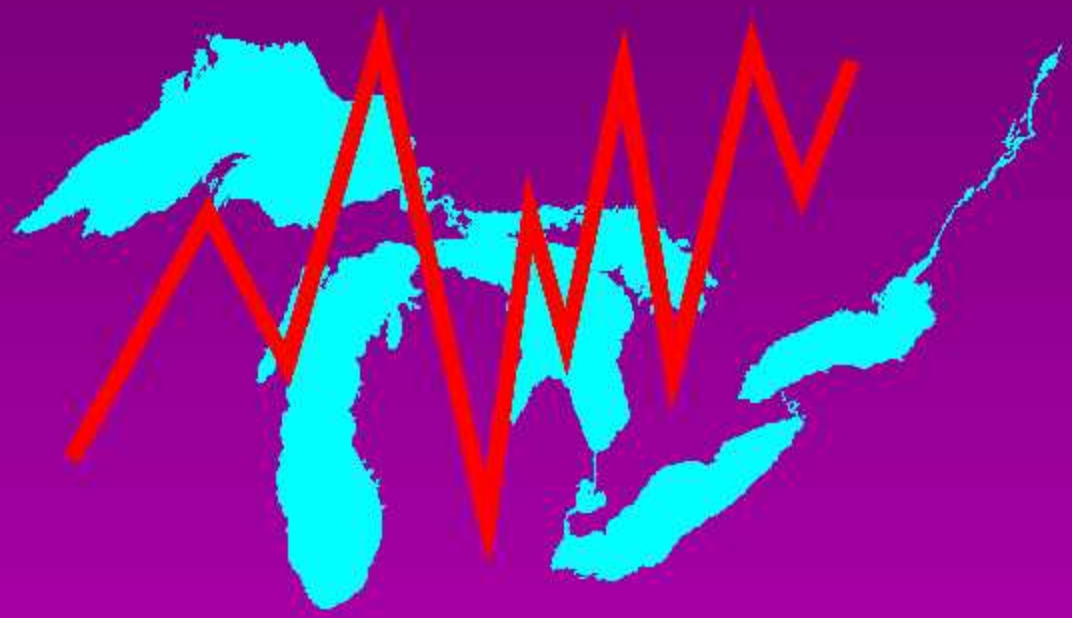
Challenges and Opportunities

① Adopt a set of common indicators.



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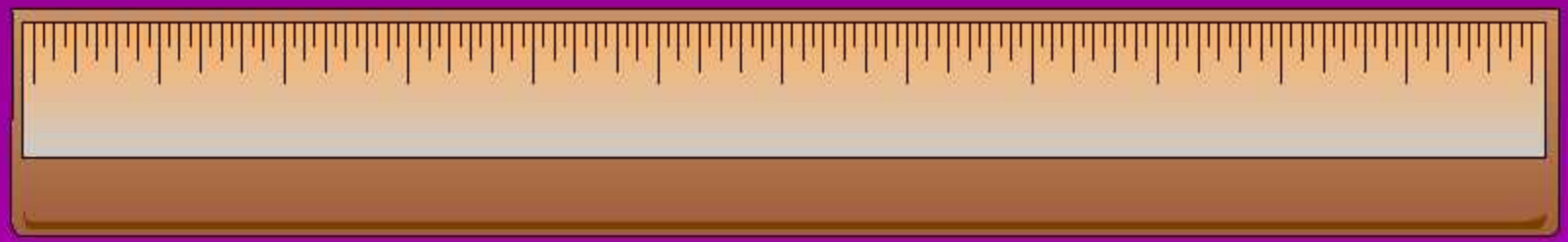
Challenges and Opportunities

② Develop some general guidelines and standards for collecting data on these indicators.



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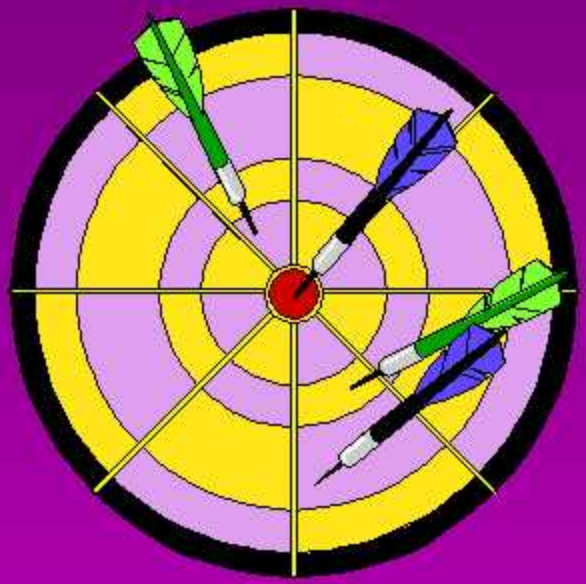
Challenges and Opportunities

③ Identify target areas for data collection.



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Challenges and Opportunities

④ Look for partnership opportunities for data collection and identify custodians for the long-term maintenance of that data.

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Challenges and Opportunities

⑤ **Agree to document nearshore data and information using some form of metadata standard.**

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Metadata Standards

- Title:
- Author:
- Originator:
- Date:
- Descriptions or Abstract:
- Subject List:
- Availability:
- Point of Contact:

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Challenges and Opportunities

⑥ Agree on a set of common data exchange formats.

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Challenges and Opportunities

⑦ Post metadata, and where possible, data, on the World-Wide Web.

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Challenges and Opportunities

⑧ **Set up a consortium of nearshore partners over the World-Wide Web.**

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Questions

- Do you have information on nearshore databases not included in our report?
- What do you view as the major gaps in nearshore information holdings?
- Do you agree with the challenges put forward?

END