

MONITORING ALLIANCE & DATA ENTERPRISE

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Integrating Monitoring Data Across the Chesapeake Bay Watershed

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Overview

- Why Have a Monitoring Alliance/Data Enterprise?
- What Should it Look Like?
- Who Should be Involved?
- Where Do we Develop it?
- How Do we Get it Done?
- STAC Involvement

Why?

Monitor Watershed Condition Over Time

- Track restoration progress
- Detect ecosystem shifts
- Adaptive Management

Meet Multiple Mandates

- Chesapeake EO
- Chesapeake 2000
- WIP
- NOC Mandates
- Others…

What?

Monitoring Alliance

- Basin wide information, track restoration progress, recognize ecological shifts
- Partnership of existing monitoring programs

Data Enterprise

- System to share data
- Relational database
- Built on pr
- Evolution of CIMS concept
- Chesapeake Earth Observatory

Who?

Inclusive Process

- Federal partners
- State partners
- Universities

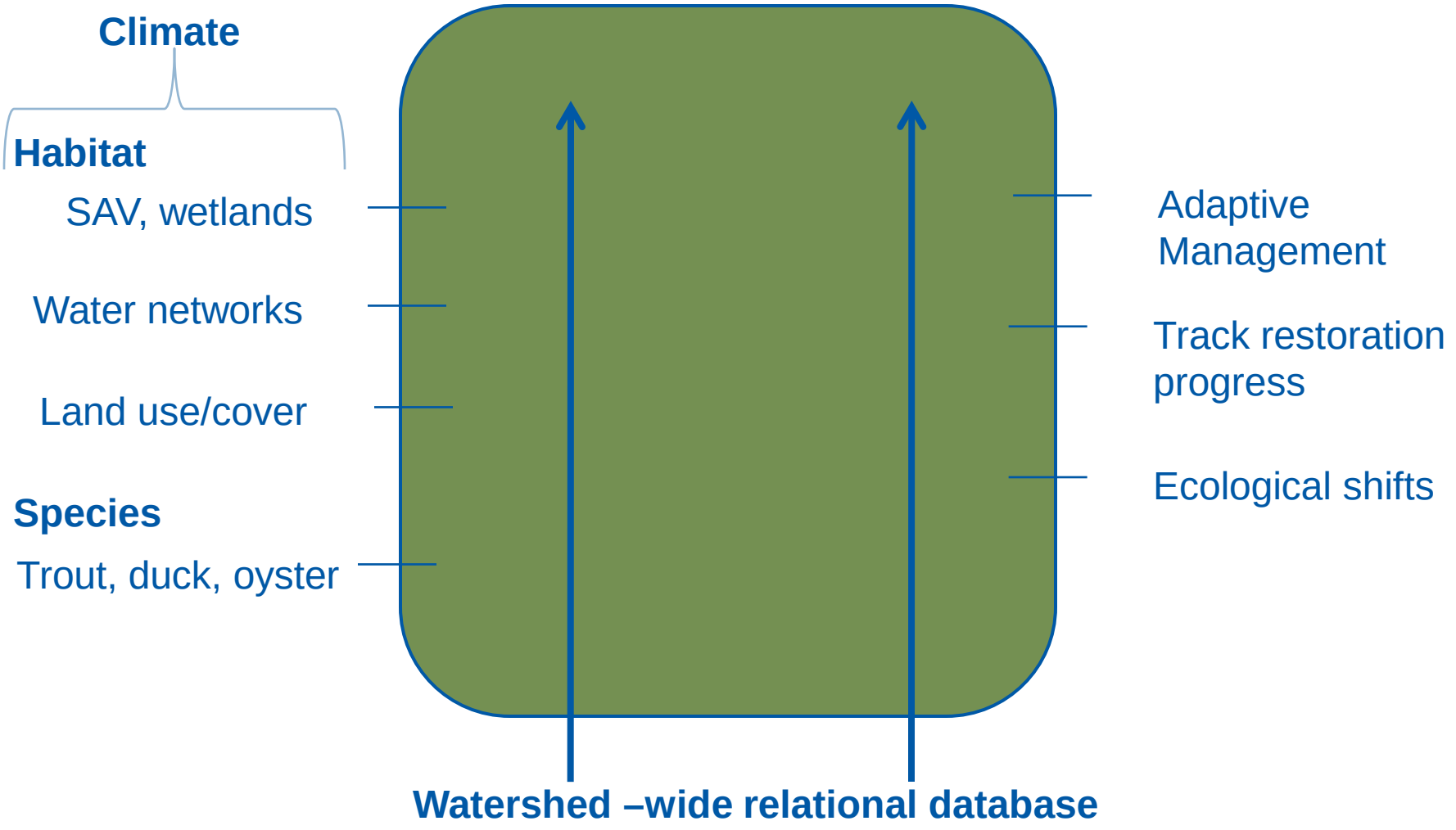
@ a minimum, likely others needed

Participation Driven by Data

- Availability
- Format
- Level of Interest

Field of Action

Monitor the condition of the Chesapeake Bay Ecosystem over time



Habitat

Tidal and non-Tidal Monitoring

Networks

- Chlorophyll, temp, 02, etc.
- TMDL, stream health

SAV

Wetlands

Land Cover/Use

Consider Climate Trends

Species

Brook Trout

Black Duck Food Sources

Oysters

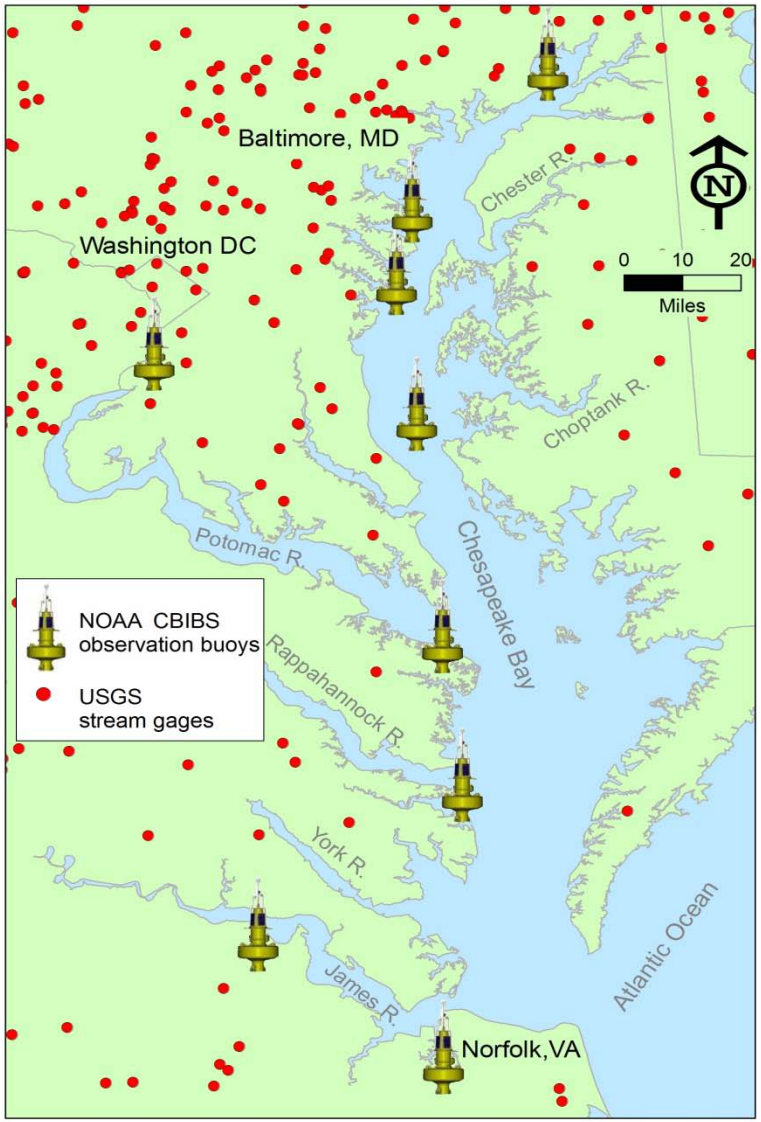
Consider Climate Trends

Common Framework

Chesapeake Bay Ecosystem Integrated Information System

- Tidal observations
  - CBOS, CBIBS, oyster data tool
  - ROMS model fields
- Low hanging fruit can be added
  - SAV, plankton
  - Benthic habitat

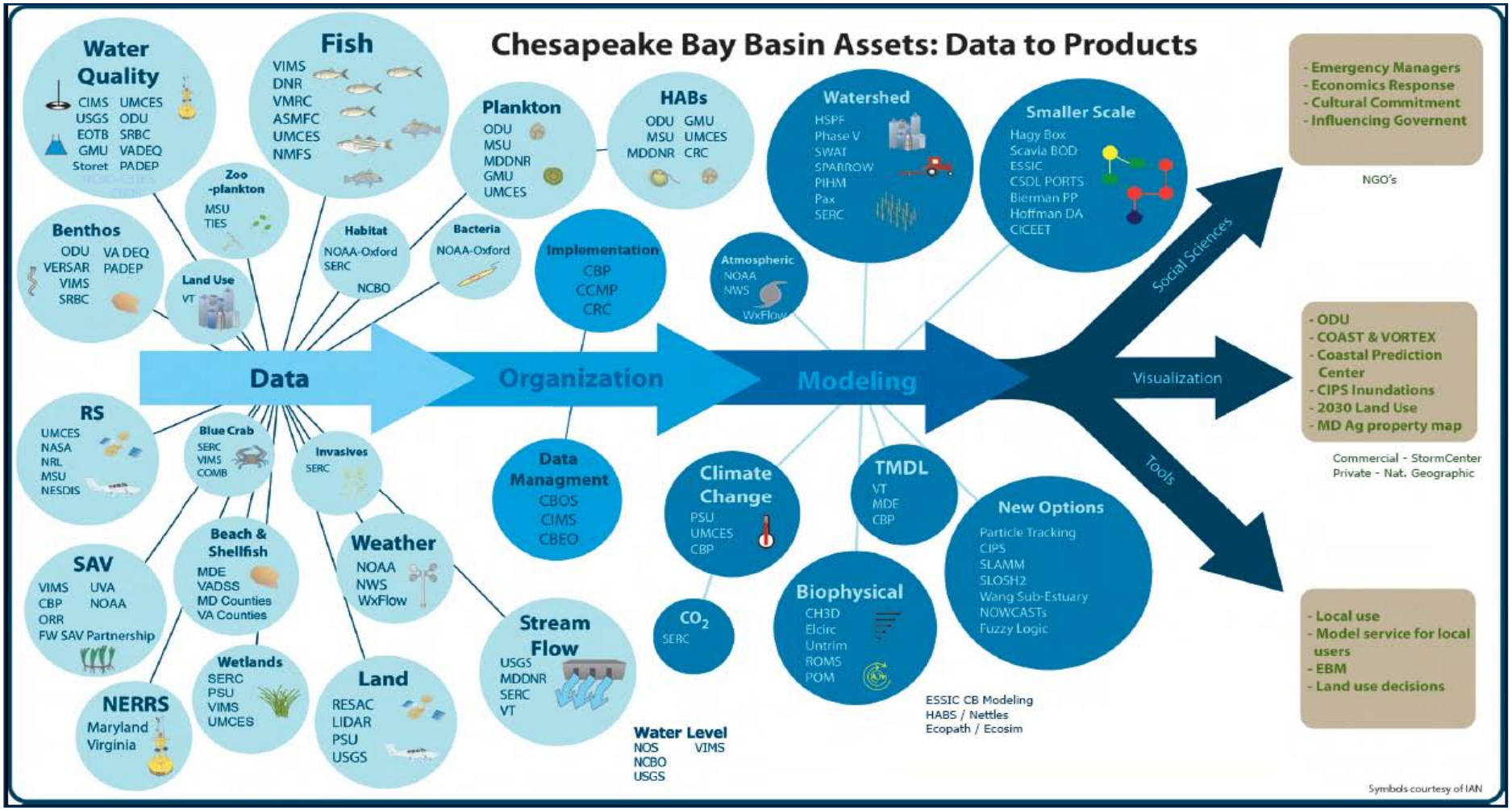
Common Framework



Example: Coordinate Chesapeake Tidal and Non-Tidal Networks with National Observation Systems.

- IOOS, NWQMN, etc.
- Include CBEIIS, CBOS, CBIBS, USGS gauging stations, etc.

Where Could This Take Us?



Where to Begin?

STAC

- Monitoring report, MRAT, small watershed designs
- Local, national, international reach
- Monitoring system design examples

STAR Action Teams

- Goal team representation
- Called for in EO
- All indications are FOD-MB will endorse
- Basis for a Monitoring Alliance
- Basis for Data Enterprise

How?

Architects

- System design
- Technical challenges

Data Providers

- Subject matter experts

Data Enterprise

Monitoring Alliance/Data Enterprise

Monitor the Condition of the Chesapeake Bay Ecosystem Over Time

Watershed –Wide Relational Database

Track Restoration Progress

Monitor Ecological Shifts

Contact Information

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