# great lakes observing system

LCA Captains Committee Meeting

Cleveland, OH

February 2018

# Overview

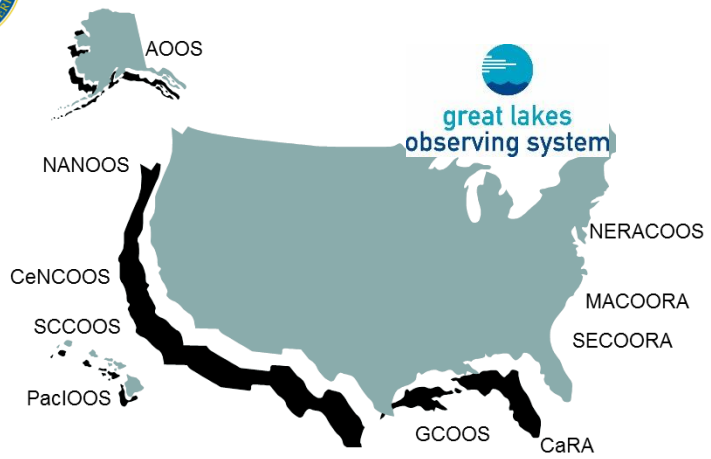
- Background on GLOS
- Overview of GLOS capabilities
  *~Examples of GLOS tools and services*
- Opportunities

# Elevating Great Lakes Data

GROUP ON EARTH OBSERVATIONS

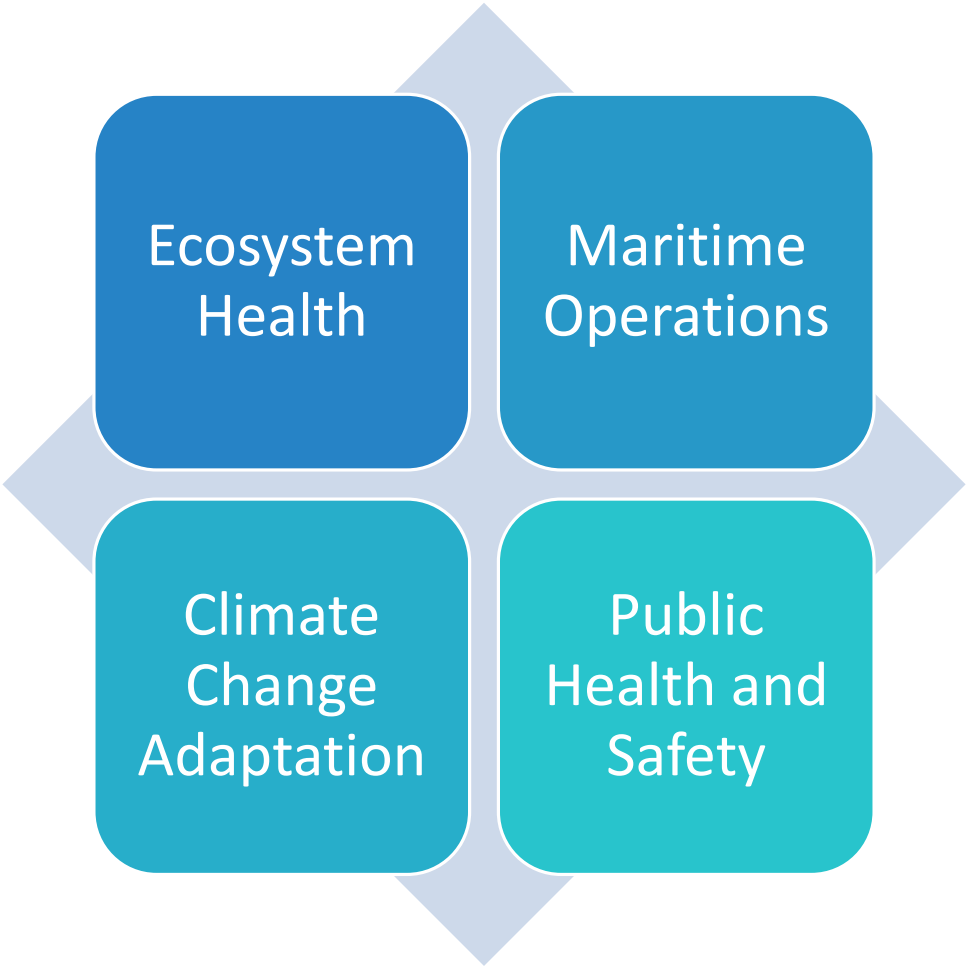

2009 ICOOS ACT

LARGER SCALES OF DATA INTEGRATION



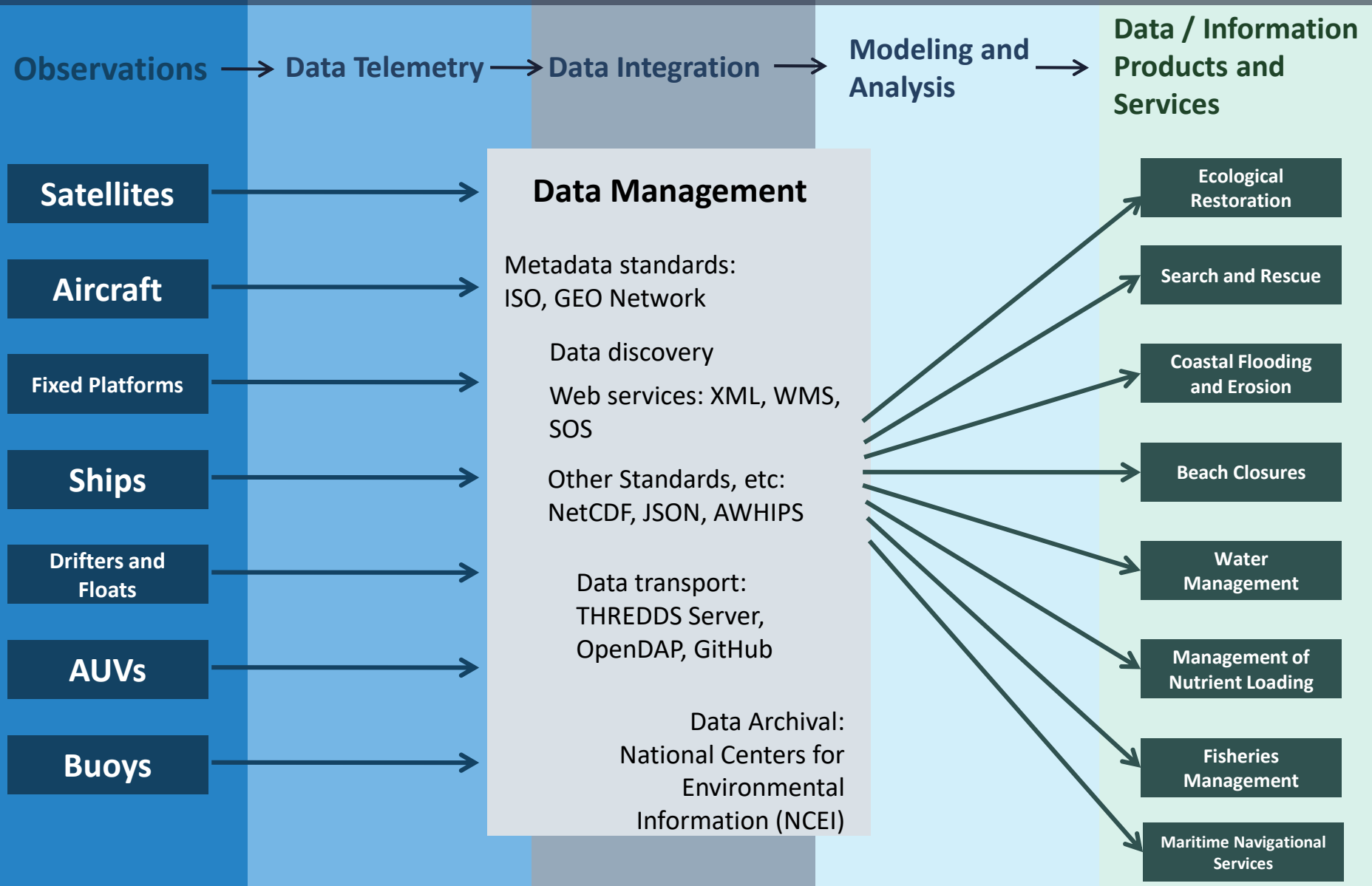

1. **Coordinate** the **network** of Great Lakes information stakeholders
2. Support and enhance the operation of Great Lakes **observation** capability
3. Improve access to high-quality, **integrated data**
4. Develop and enhance data products and **decision-support tools**

# Driven by User Needs

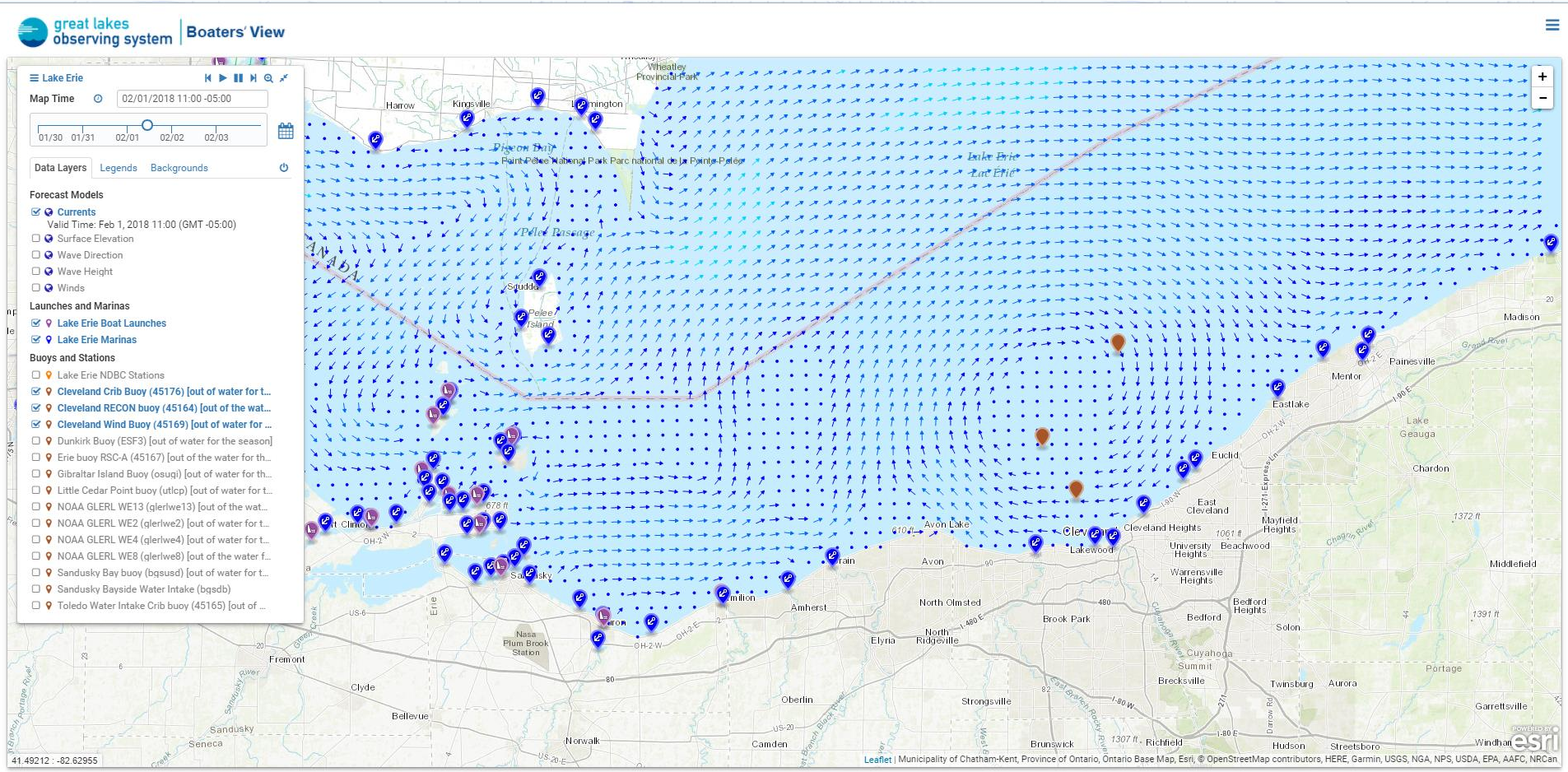


# The GLOS Enterprise

## Integrated Technology / Data / Applications Architecture in the IOOS Framework



# Example:
# GLOS Data Portal, Boater's View



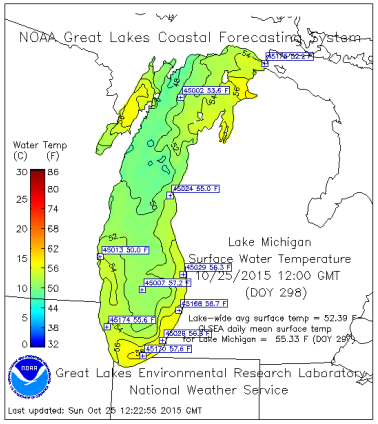
# Example:
# Great Lakes Coastal Forecasting System

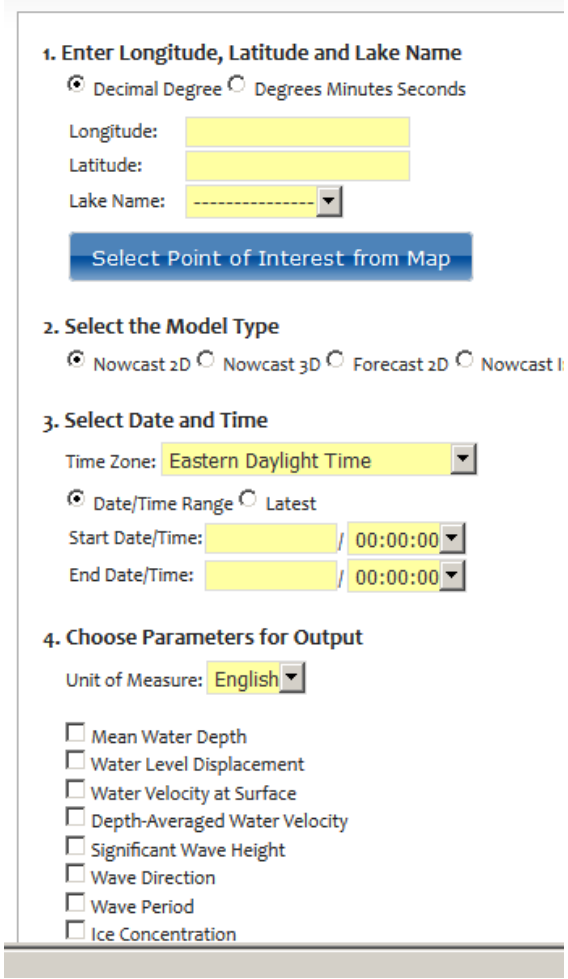
The NOAA GLCFS is a model that provides nowcasts and forecasts for waves, currents and temperatures in near-realtime

Data is updated on the GLOS THREDDS server (TDS) after each run of the model and archived from 2006

The GLOS **Point Query tool** provides quick access to GLCFS input data and model output for a given location and time period

http://data.glos.us/glcfs/
http://www.glerl.noaa.gov/res/glcfs/



# Example:
# [glbuoys.glos.us](glbuoys.glos.us)

## Buoy Location

41° 33.0096 -81° 45.9168

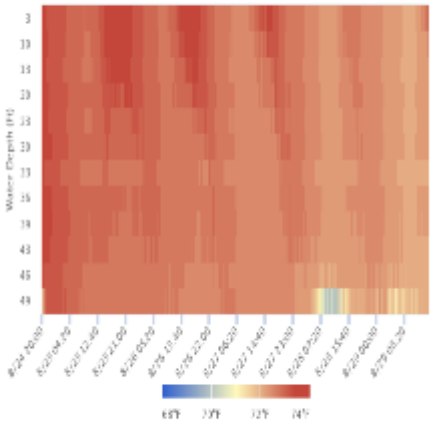

## Additional Buoy Information

This buoy is located offshore of Cleveland near the water intake crib. Funding for the station is provided by the City of Cleveland, funds are managed by the Great Lakes Observing System, and the station is owned and maintained by LimnoTech. The station monitors atmospheric conditions, waves, water temperature,


## Water Temperature Profile



## Water Temperature Profile



(Click image for interactive graph.)

## National Weather Service Forecast

| This Afternoon | Tonight | Wednesday | Wednesda Night |
|---|---|---|---|
| NNE 10kt | SSE 10kt | N 9kt | WSW 8kt |
| 10 | 10 | 10 | 10 |
| High: 75°F | Low: 64°F | High: 74°F | Low: 57°F |

**This Afternoon**: NNE wind 8 to 10 kt. A slight chance of showers and thunderstorms. Waves around 1 ft.

**Tonight**: ENE wind 8 to 10 kt becoming S after midnight. A chance of showers and thunderstorms before 1am, then a slight chance of showers after 5am. Waves around 1 ft.

**Wednesday**: SSW wind 5 to 9 kt becoming N in the afternoon. A chance of showers, with thunderstorms also possible after noon. Waves around 1 ft.

**Wednesday Night**: W wind 6 to 8 kt becoming SW in the evening. A slight chance of showers and thunderstorms after 3am. Waves around 1 ft.

Click here to visit the full National Weather Service

# Opportunities

- Year-round observation-cabled systems
- Data sharing
- Demos and tutorials
- Coordination with GLERL on ice cover/forecasting products

# Recap

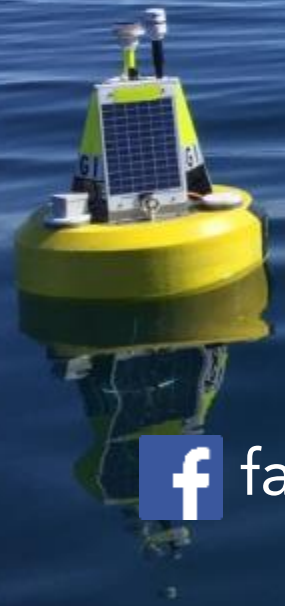
GLOS is a **network** of people and technology coordinated to provide easily-accessible data about the Great Lakes

- Provide coordination and support for observing
- Help to share and make data accessible
- Web portals to view, download data
- Data management facilitator
- Variety of data products and tools

GLOS is a resource to **leverage**

# What can we do for you?

# Questions?



www.glos.us

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