

The background features a stylized illustration of a fish, possibly a salmon, swimming towards the right. The fish is rendered in a light teal color against a darker teal background. Scattered around the fish are several light-colored circles of varying sizes, representing bubbles. The overall aesthetic is clean and aquatic.

Summary Report for INV 13- Integrating Harmful Algal Bloom (HAB) Data Across Platforms and Demonstrating a Virtual HAB Information Center

By KJ Ayres and The IRL Council Staff

The Need to...

- Integrate and translate data on HABs into useful and usable products for a diversity of stakeholders.
- Develop and deliver a unified platform to enhance sharing and interpretation of trusted data from various types of monitoring.
- Access to information that will inform HAB conditions based on environmental parameters and assist HAB event response and decision-making.

What has been completed?

- Task 1
 - GIS Coordinator hired, GC licenses purchased, initial meeting and calls, QA Manual, and summary report for setup of instance demonstrations.
- Task 2
 - Two initial internal sessions, summary report of data providers and metadata, initial report detailing testing results and communication, and copy of subcontracts and stakeholders that received case studies.
- Task 3
 - Eight webinar sessions of two instances and summary report of outcomes.
 - HAB hindcast - <https://www.youtube.com/watch?v=Qy57UByBv3I>
 - Emergency Response: <https://www.youtube.com/watch?v=OpQwnCCHUN4>

Outcomes

Task 1:

- Output of QA manual – helped realize levels of trustability with datasets
- Lots of data is collected but not all data is available with geospatial components

Task 2:

- Identified gaps in WQ spatial and temporal monitoring within the IRL
- Used interpolation models to fill spatial gaps, but this technique may or may not be ideal depending on the situation

Task 3:

- Leader/follower instances are useful for inter-agency communication
- Project interested a variety of stakeholders

#1 Challenge: Data Acquisition and Access

- Data QAQC is a labor intensive and technical process, especially, with the interest to move to real time sensing.
- Agencies have defined QAQC processes, while others may or may not
- Differences in agency QAQC methodology for real-time sensing
- USGS, FDEP, NOAA, IOOS all have different standards depending on sensor type, sensor measurand, and manufacturer
- Data types are limited for input into GeoCollaborate

Strengths of GeoCollaborate

- Bringing data together in one platform
- The ability to view data from disparate sources without manipulations
- Unlimited user capabilities using any device with an internet browser
- Dashboard has ability to update applicable datasets continuously

Limitations of GeoCollaborate

- No analysis functions
- Cannot incorporate/display time enabled data
- Animation tool has limited functionality and cannot save created features
- Limitations in data types

GeoCollaborate Demo

<https://irl3.geocollaborate.com/follow/>

Datasets used in Task 3

- UF - Taxa
- FWC – Cell Counts, Fish Kill hotline
- DEP – Toxicology from Protecting Florida Together
- SJRWMD and SFWMD - Water Quality – Temp, Salinity, DO, vectorized and modeled CHLA, grab sample CHLA, pH
- Weather Data – Wind direction(NWS), wind speed (NWS), cloud cover (GOES), air temperature (NWS)
- Boat Ramps, dumpsters, and staging volunteers
- Photo data – citizen scientists

Next Instance

We want to make the next instance ideal for you. In a perfect world what would FDEP like to see for the statewide dashboard when communicating HABs?

Datasets?

Locations (Lake Okeechobee, Tampa Bay, Others) ?

Resources?

Links?

Looking Ahead – Final Report

- Project location, background, description and timeline, award amount and anticipated benefits
- Financial summary of actual costs vs. budget
- Discussion of project schedule
- Summary of activities completed
- Documentation of appropriate tables, figures, and data
- Discussion of whether anticipated benefits have or will be realized.
 - Preliminary Opinion: high value for interagency communication, media briefings and emergency response planning
 - QAQC of HAB data from SJRWMD, SFWMD, and HBOI

The background features a stylized illustration of a fish and seaweed. The fish is positioned horizontally, facing right, with its body and fins rendered in a light teal color against a darker teal background. The seaweed is depicted with flowing, ribbon-like shapes, also in a light teal color. The entire scene is set against a dark teal background that is decorated with numerous small, light teal circles of varying sizes, resembling bubbles or water droplets.

Questions?