

S.C. Coastal Water Monitoring Network: Let's go SCCWMN!

Andrea Sassard





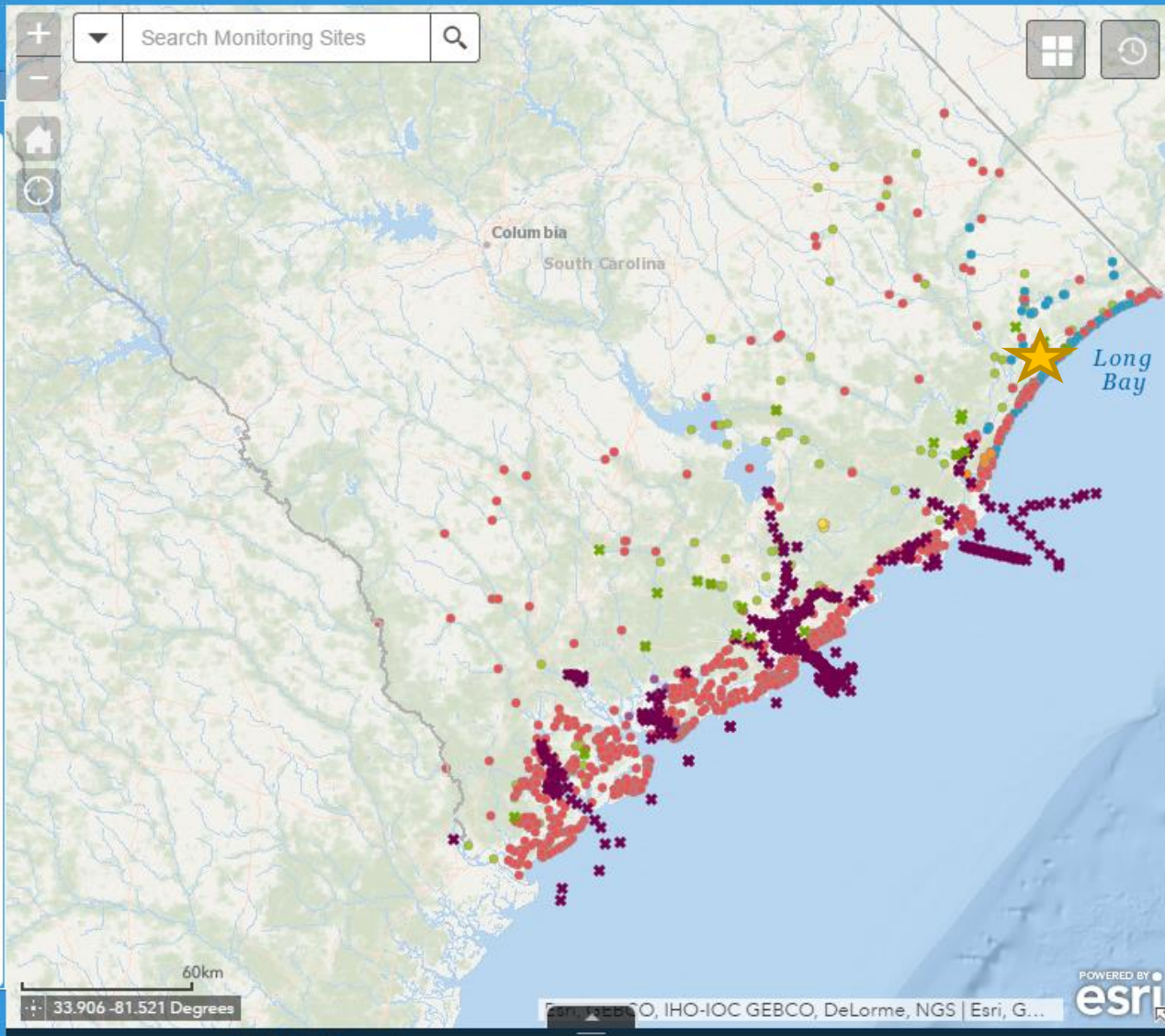
Legend

October 2015 Flooding

- ✱ SC Department of Natural Resources
- ✱ United States Geological Survey

Long-Term Monitoring

- SC Department of Health and Environmental Control
- Coastal Carolina University
- United States Geological Survey
- SC Department of Natural Resources
- North Inlet-Winyah Bay NERR
- US Forest Service





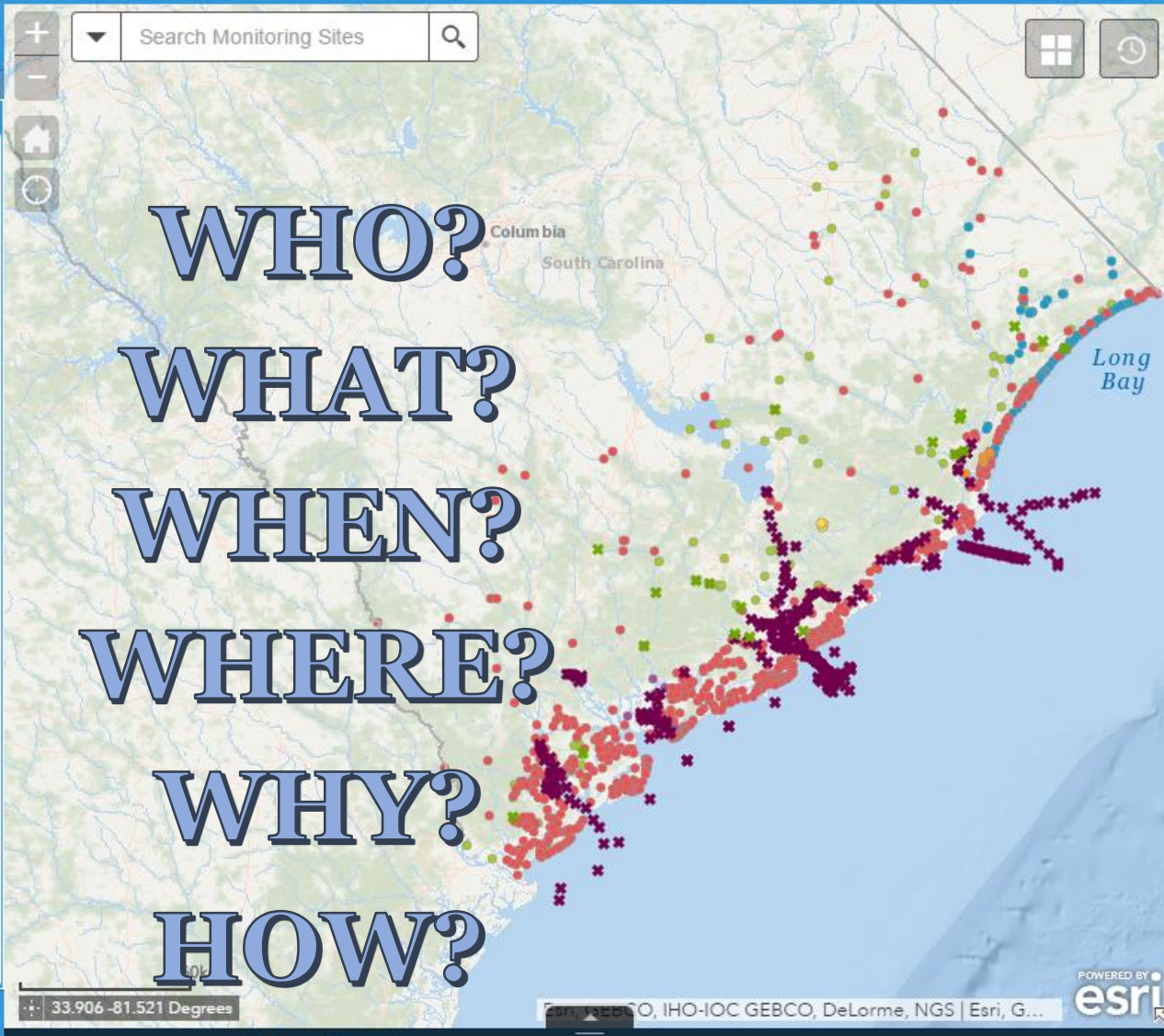
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Background

- 2015 October Floods impacted water quantity AND quality



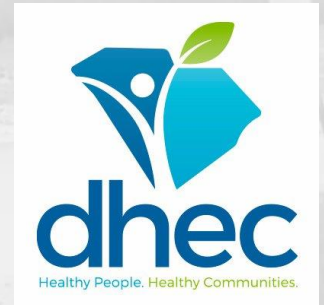
Image: Kyle Buck



Image: David Stillwell, USGS South Atlantic Water Science Center

Background

- SCSGC hosted call with water quality scientists to document post-flood activities



Background

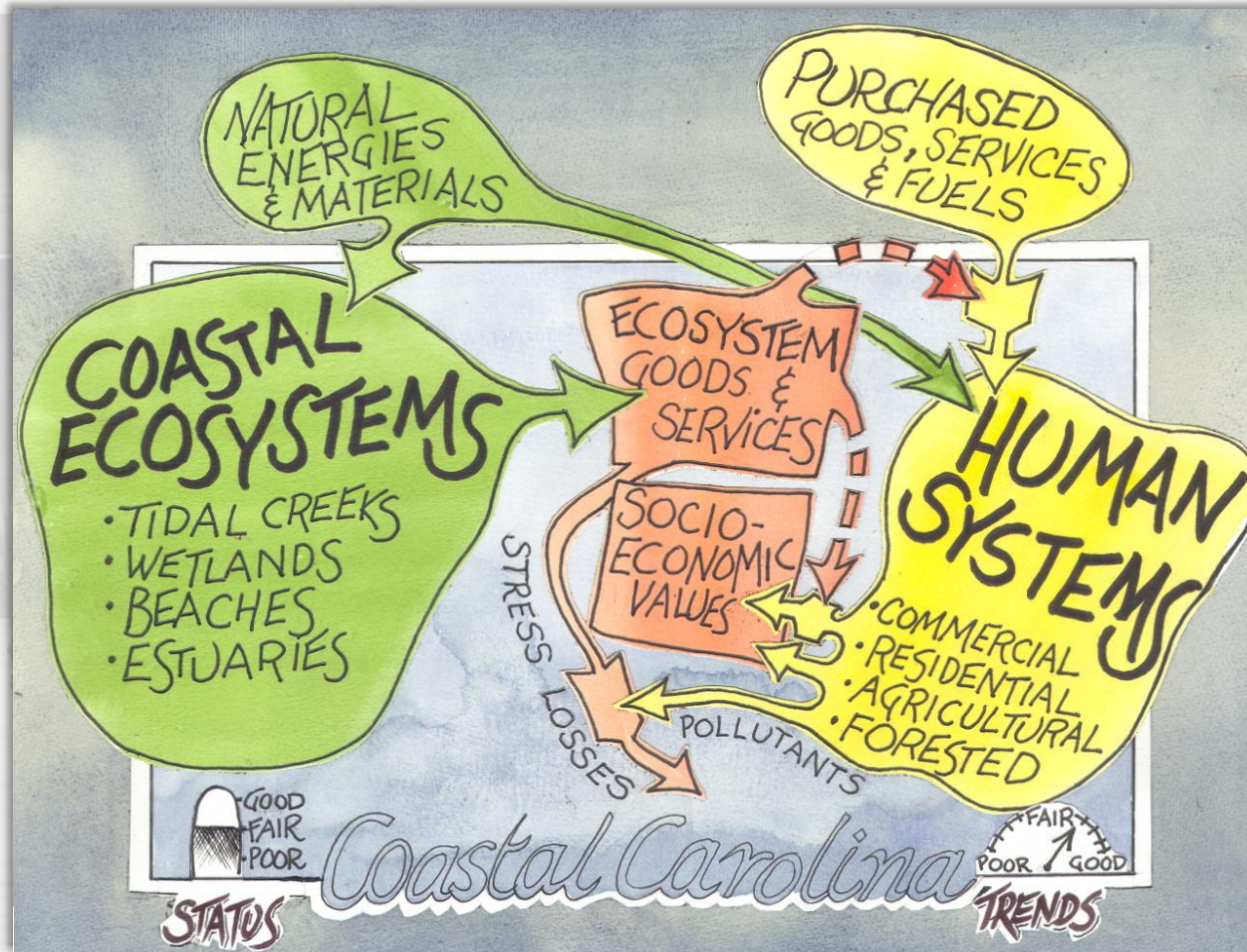


Image: SCSGC, CI-DEEP Report (2009)

Background

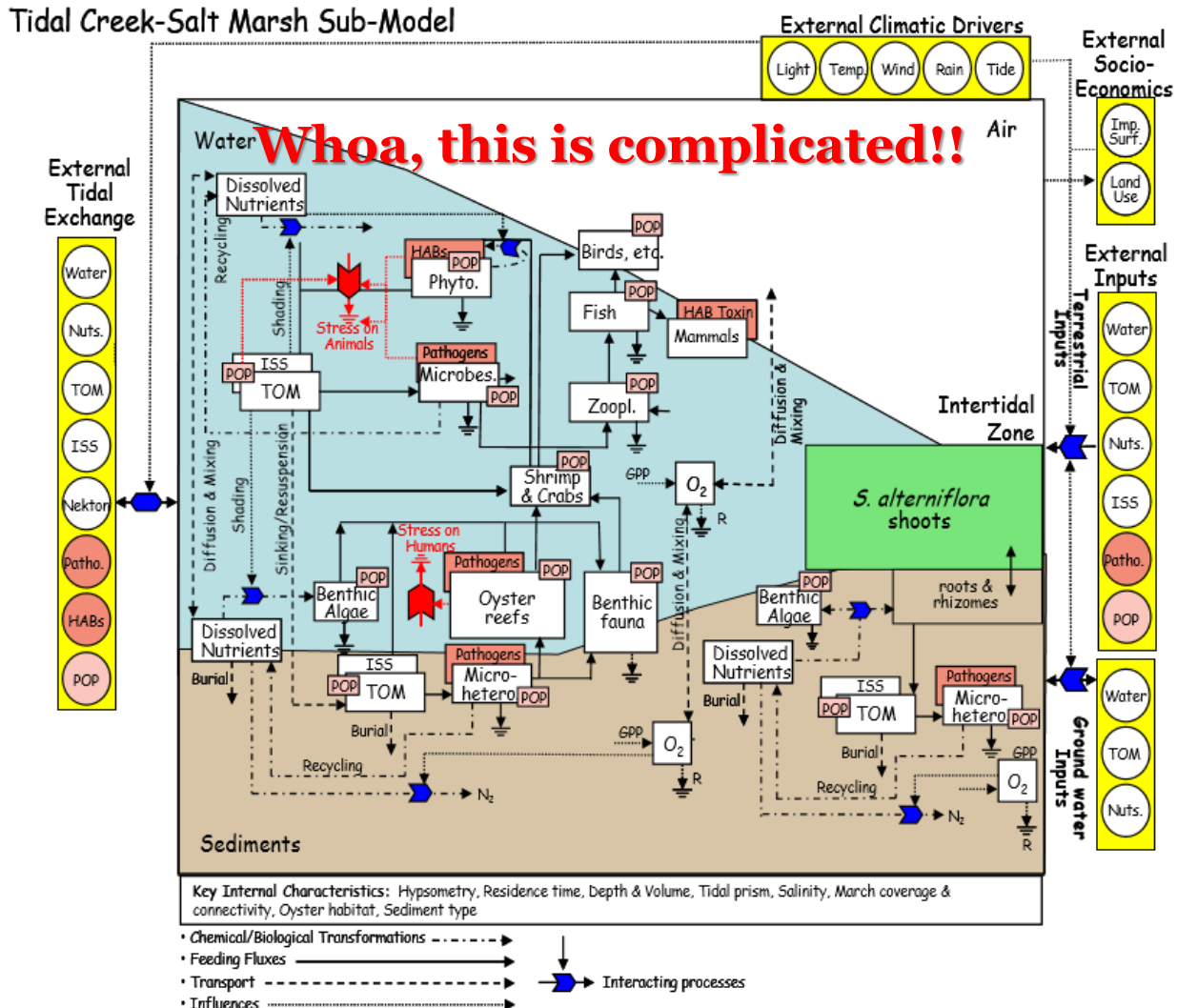


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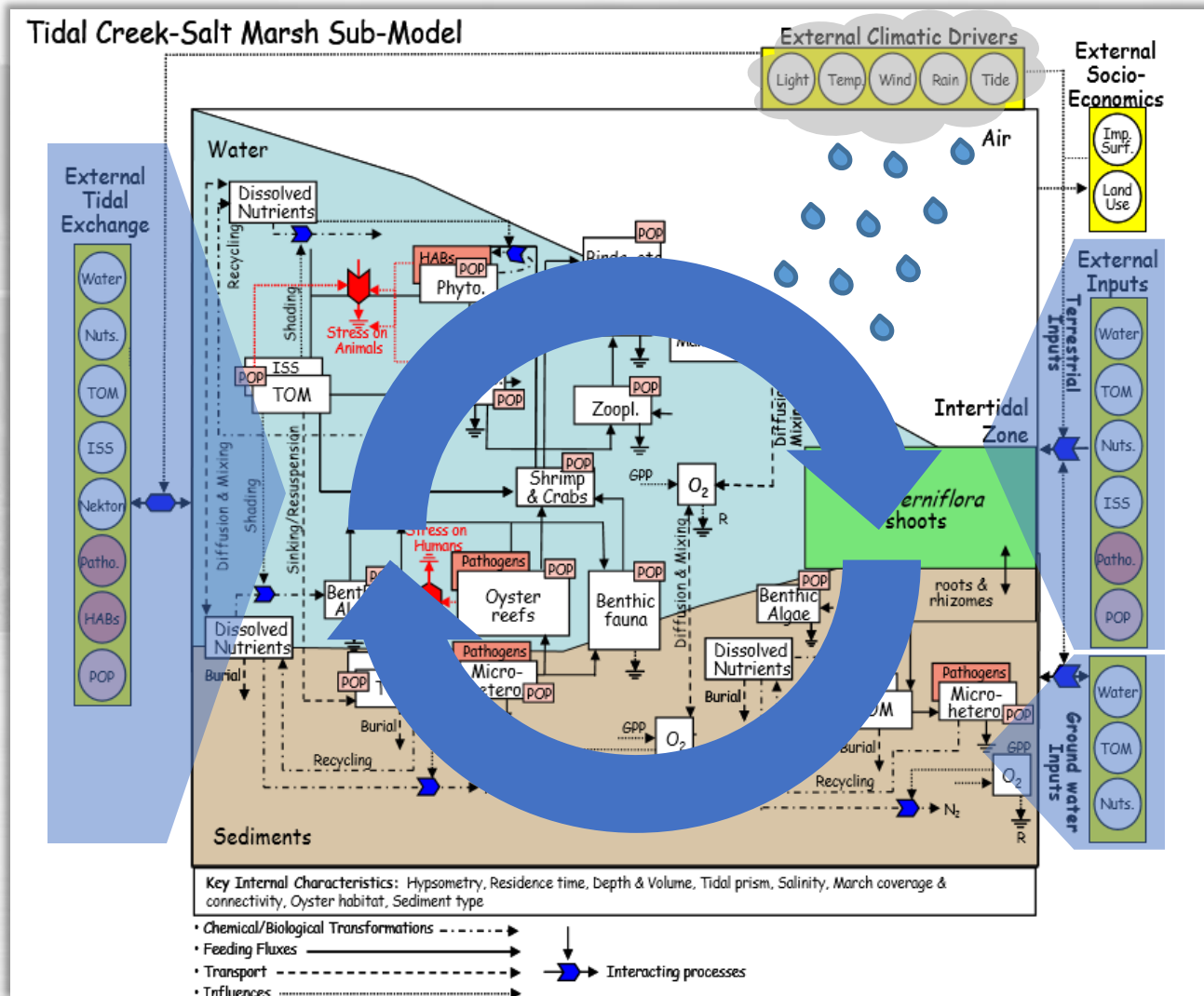


Image: SCSGC, CI-DEEP Report (2009)

How?

- Mechanism:
 - Handle diverse water monitoring work
 - Quality and Quantity
 - Information sharing
 - Interactive visualization
 - Integration of multiple temporal and spatial scales
 - Information for the public/resource managers/policy-makers/researchers

How?

- What platform?
- What monitoring sites?
- What events?
- Maintenance?
 - Platform and Sites

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ACCESSABILITY

How?

- What platform?
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- What events?
- Maintenance?
 - Platform and Sites

SUSTAINABILITY

Information Needs

- Metadata Framework:
 - National Water Quality Monitoring Council Water Quality Data Elements
 - For each site:
 - Contact Information
 - Location Information
 - Date/Time Information
 - Sampling Program Information
 - Sample Collection and Analysis

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HOW?

Platform Needs

Features (Layers)

- Long-Term Monitoring Locations
- Event Monitoring Locations
 - October 2015 Floods
 - Hurricane Matthew???

Tools (Widgets)

- About - NEW!
- Instructions
- Legend
- Layer List
- Search
- Filter/Query
- Data Download

A grayscale photograph of a coastal wetland. In the foreground, a wooden structure with a ladder-like top is partially submerged in water. A person is visible on the structure. The background shows a wide expanse of water and a line of trees under a cloudy sky.

USING SCCWMN!

Sea Grant S.C. Sea Grant Consortium **SCCWMN beta**

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BETA TESTING VERSION

Welcome to the SC Coastal Water Monitoring Sites Visualization Portal. This visualization portal was created by the SC Sea Grant Consortium, featuring information on water resource monitoring programs from academic institutions and state and federal agencies within the state. These initially include: Coastal Carolina University; SC Department of Natural Resources; US Geological Survey; US Forest Service; SC Department of Health and Environmental Control.

To get started, use the time slider in the upper right-hand corner of your screen to select the range of years you are interested in.

To access site or monitoring program information, click on any site. You can also search for sites or programs. Selected sites can be downloaded as a .csv file. For additional instructions, click on the *i* in the upper left-hand corner of your screen.

I agree to the above terms and conditions

OK

A S.C. Sea Grant Consortium Project

0, 1908

1X

Lake Murray

Columbia

378 ft

SOUTH CAROLINA

Walter's River

North Fork Edisto River

Edisto River

La Ma

POWERED BY esri

me, FAO, USGS, EPA, NPS



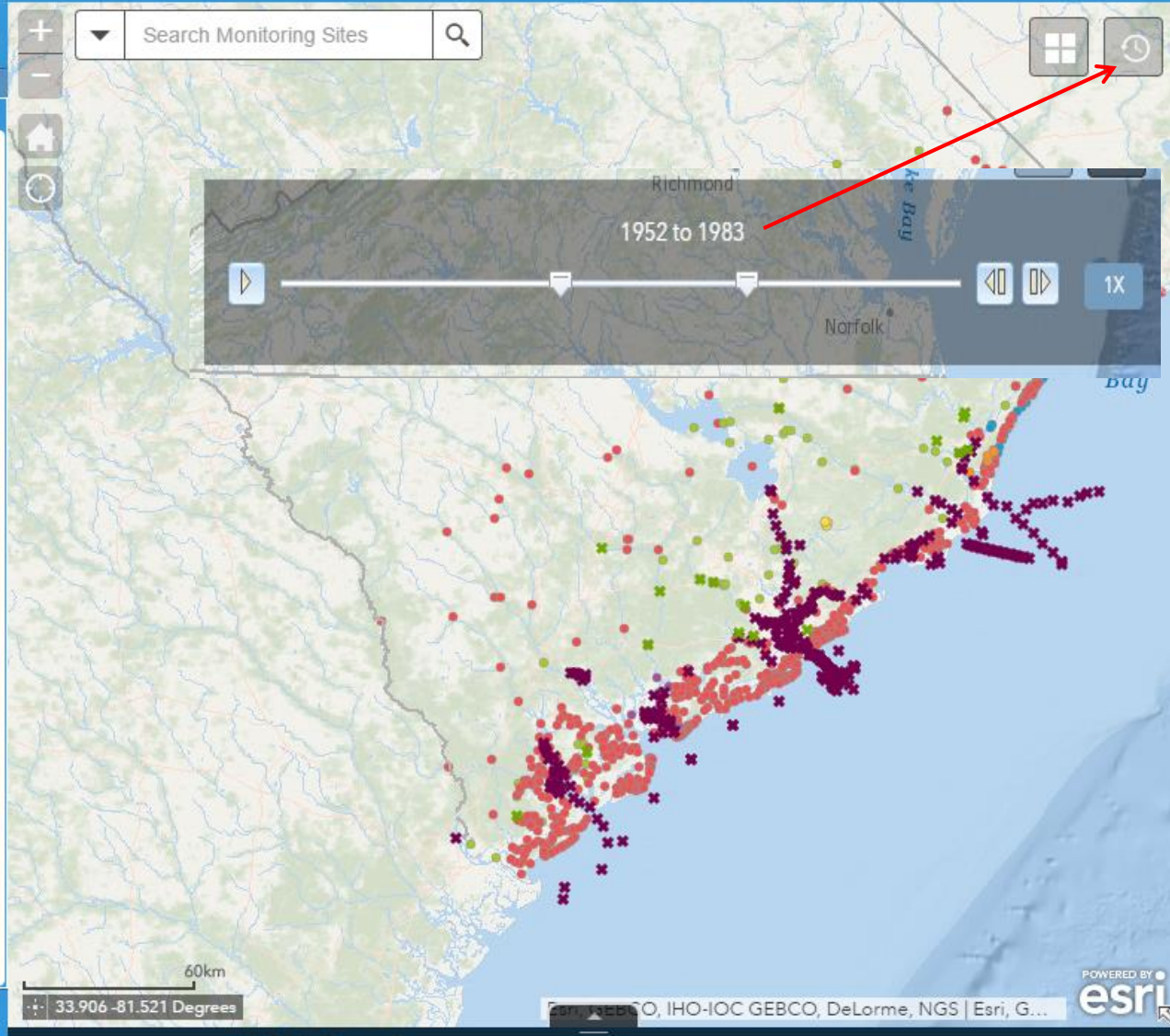
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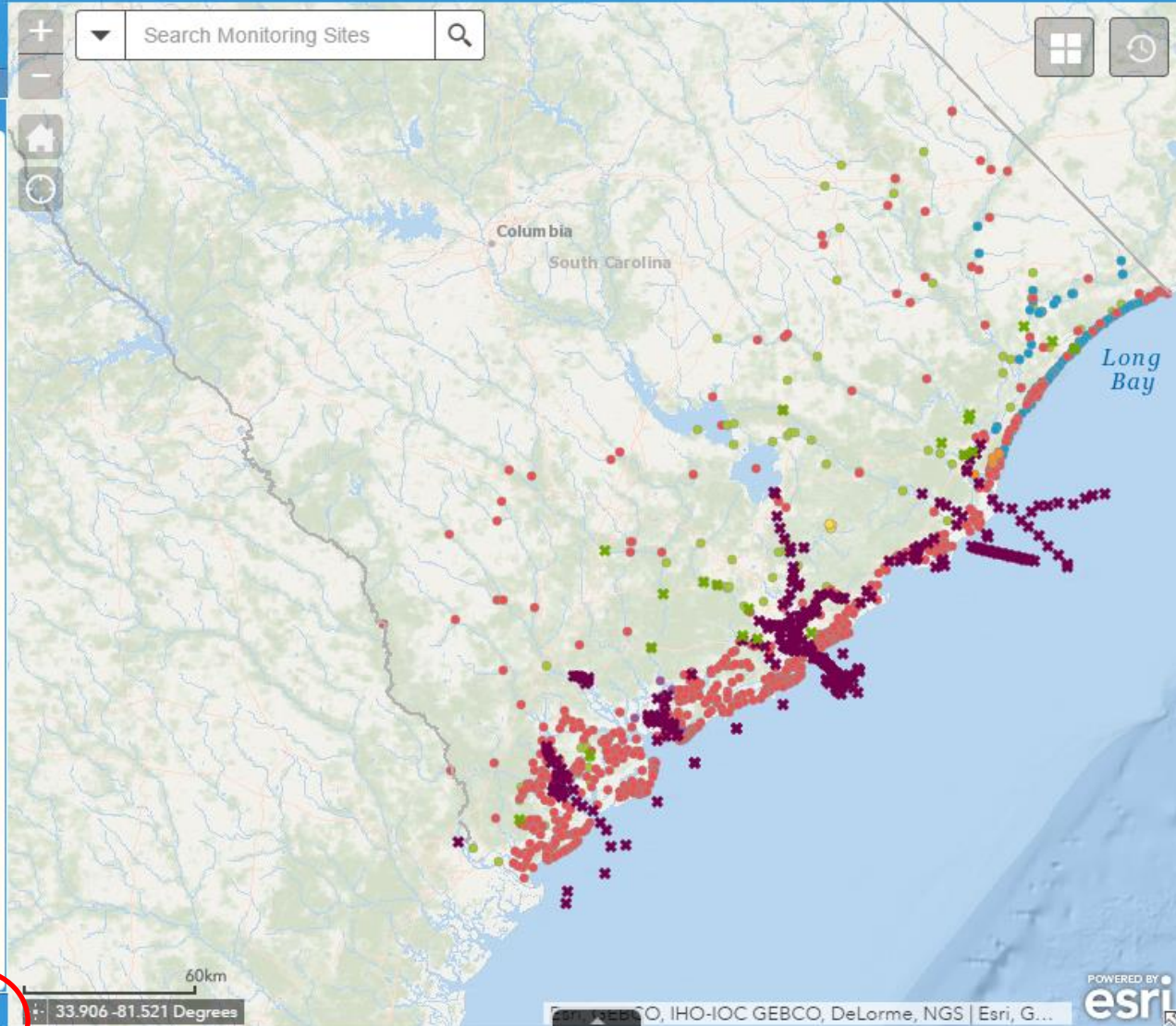
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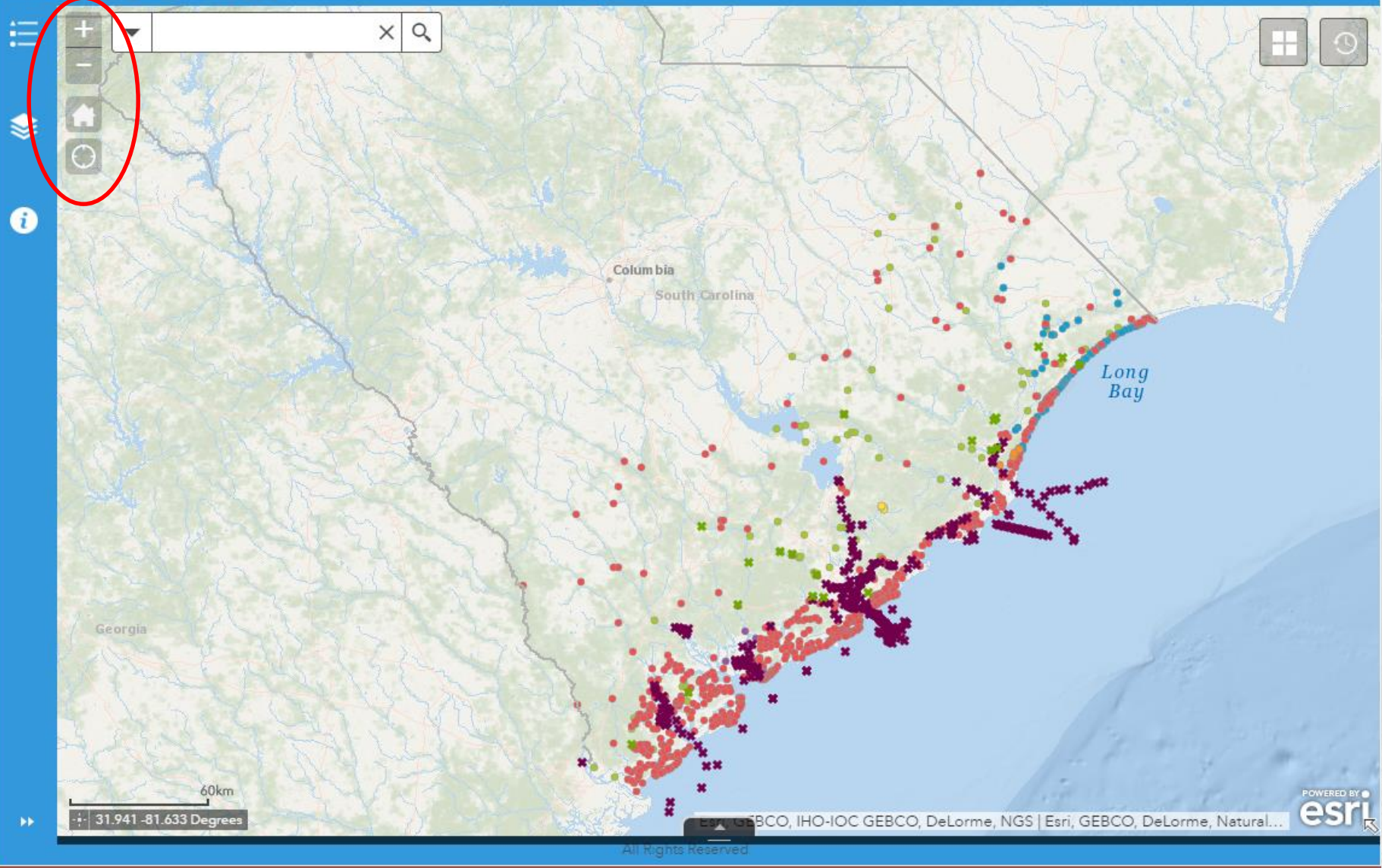
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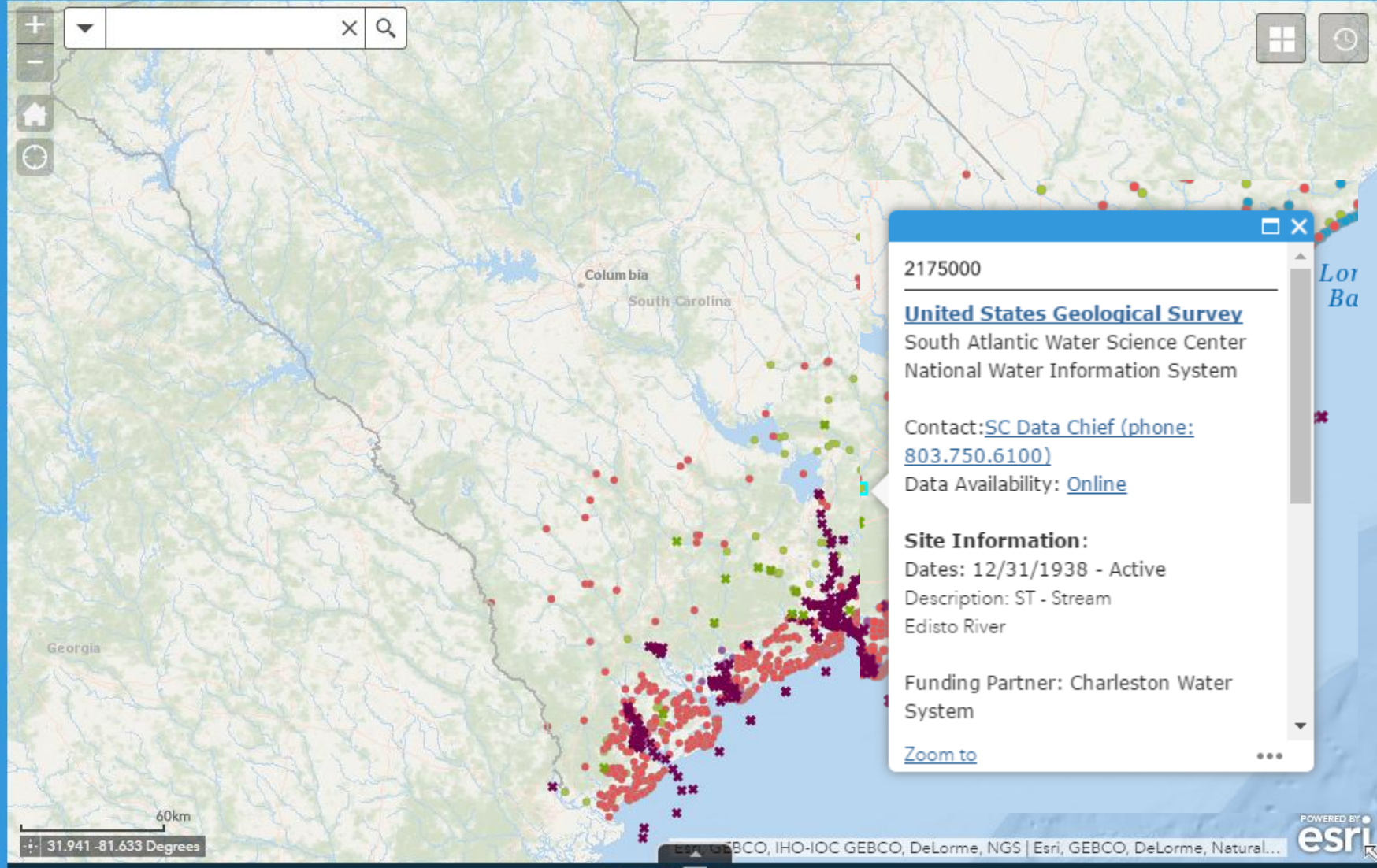
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Map navigation controls: Home, Refresh, Legend, Info, Scale, and navigation arrows.

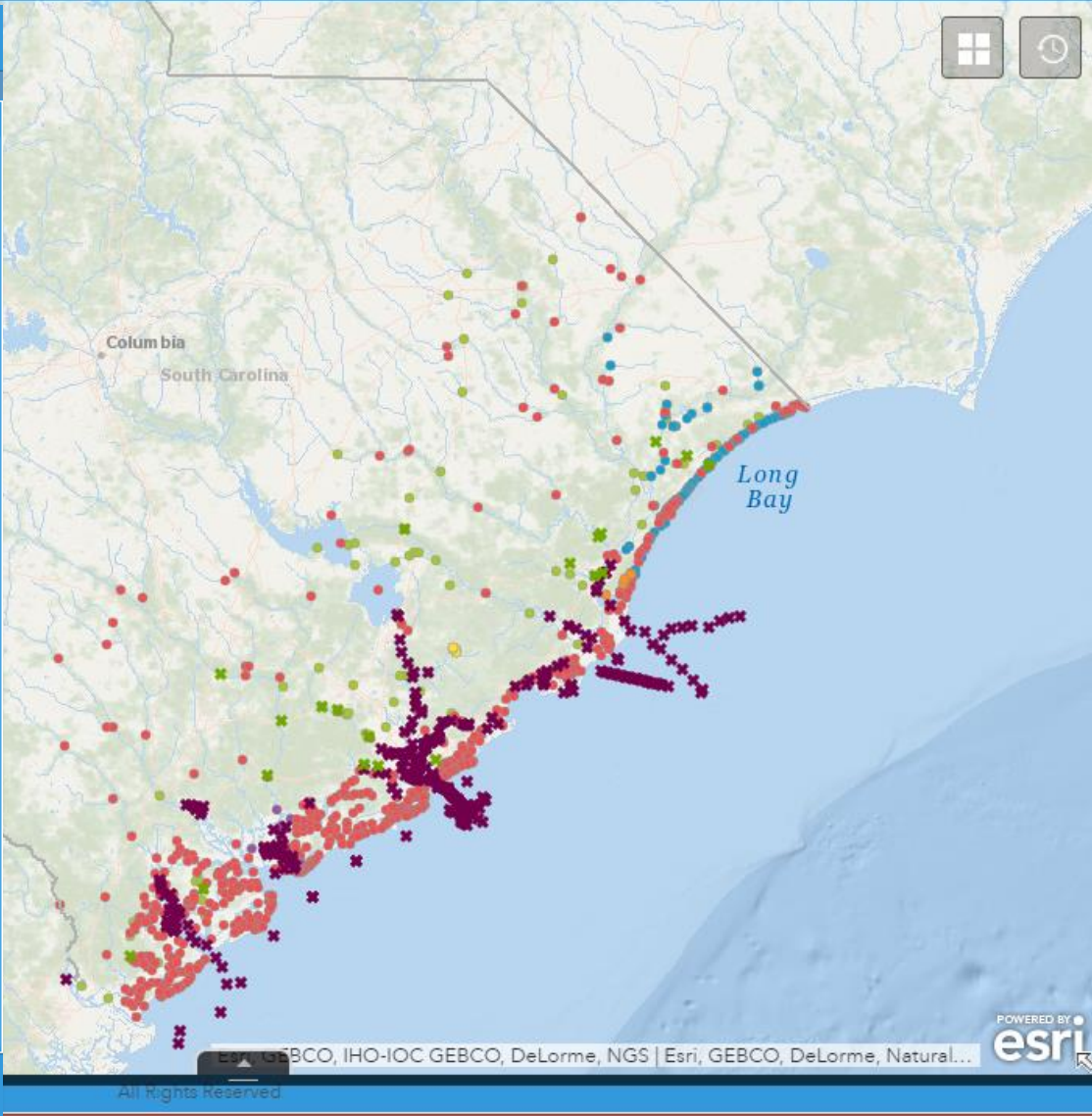
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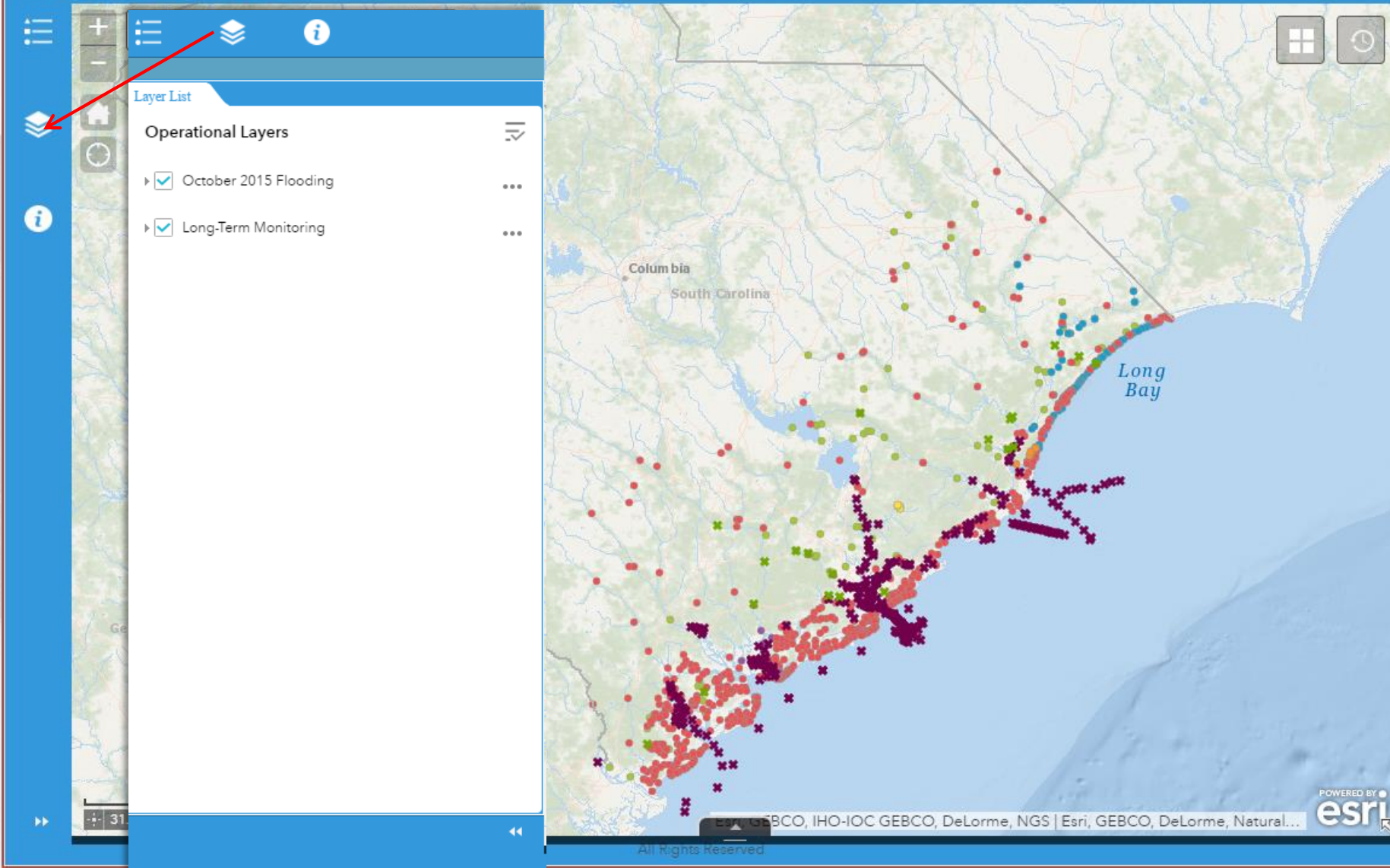
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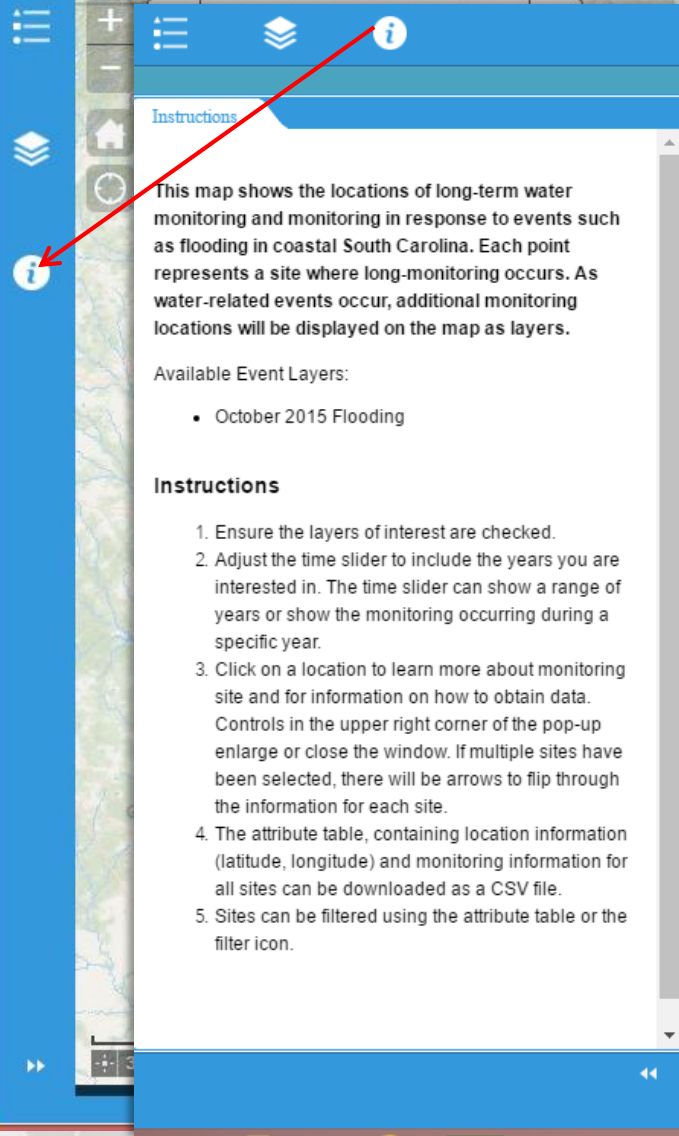
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Instructions

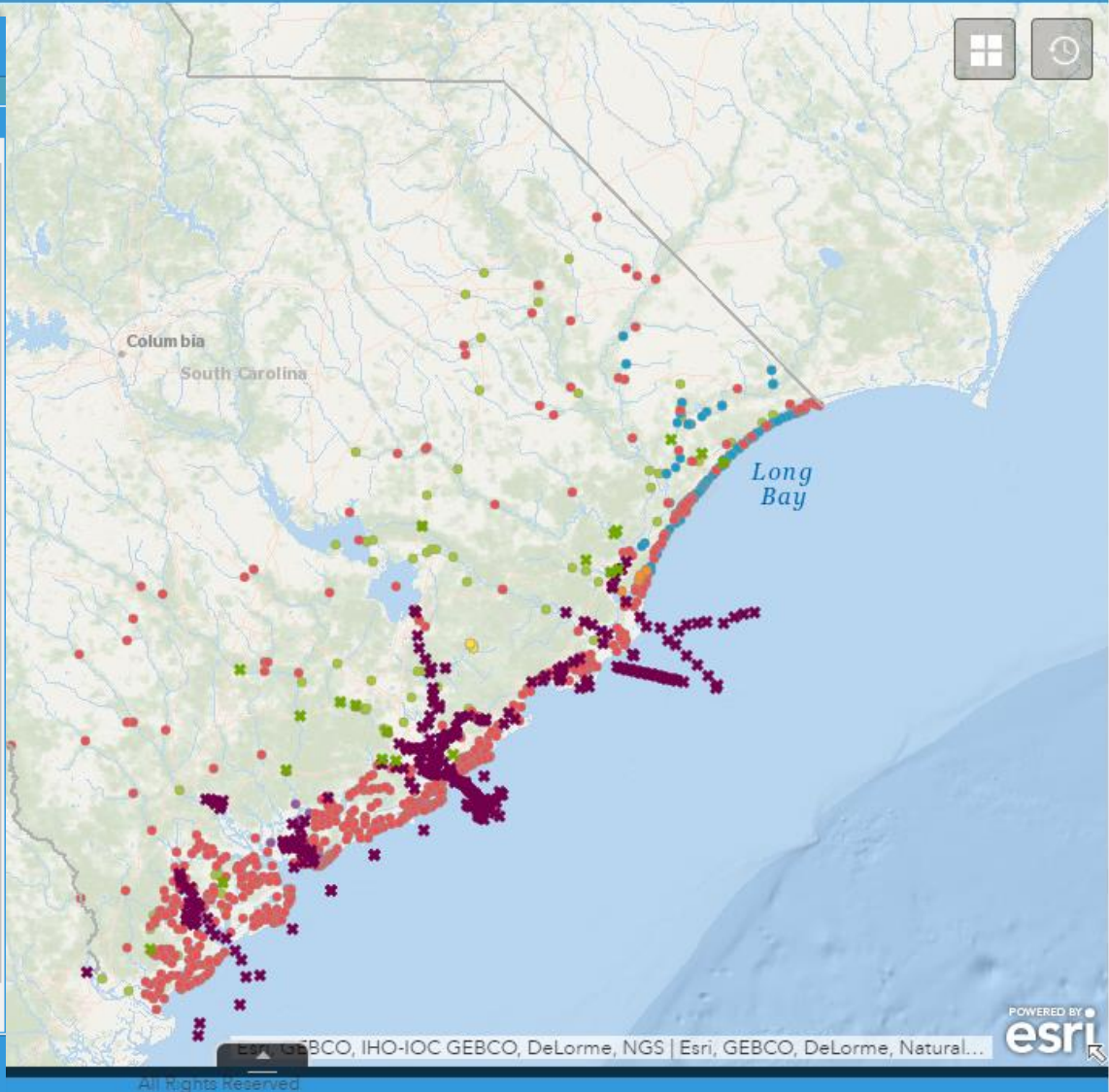
This map shows the locations of long-term water monitoring and monitoring in response to events such as flooding in coastal South Carolina. Each point represents a site where long-monitoring occurs. As water-related events occur, additional monitoring locations will be displayed on the map as layers.

Available Event Layers:

- October 2015 Flooding

Instructions

1. Ensure the layers of interest are checked.
2. Adjust the time slider to include the years you are interested in. The time slider can show a range of years or show the monitoring occurring during a specific year.
3. Click on a location to learn more about monitoring site and for information on how to obtain data. Controls in the upper right corner of the pop-up enlarge or close the window. If multiple sites have been selected, there will be arrows to flip through the information for each site.
4. The attribute table, containing location information (latitude, longitude) and monitoring information for all sites can be downloaded as a CSV file.
5. Sites can be filtered using the attribute table or the filter icon.





Basemap Gallery



Dark Gray Canvas



Imagery



Imagery with Labels



Light Gray Canvas



National Geographic



Oceans



OpenStreetMap



Streets

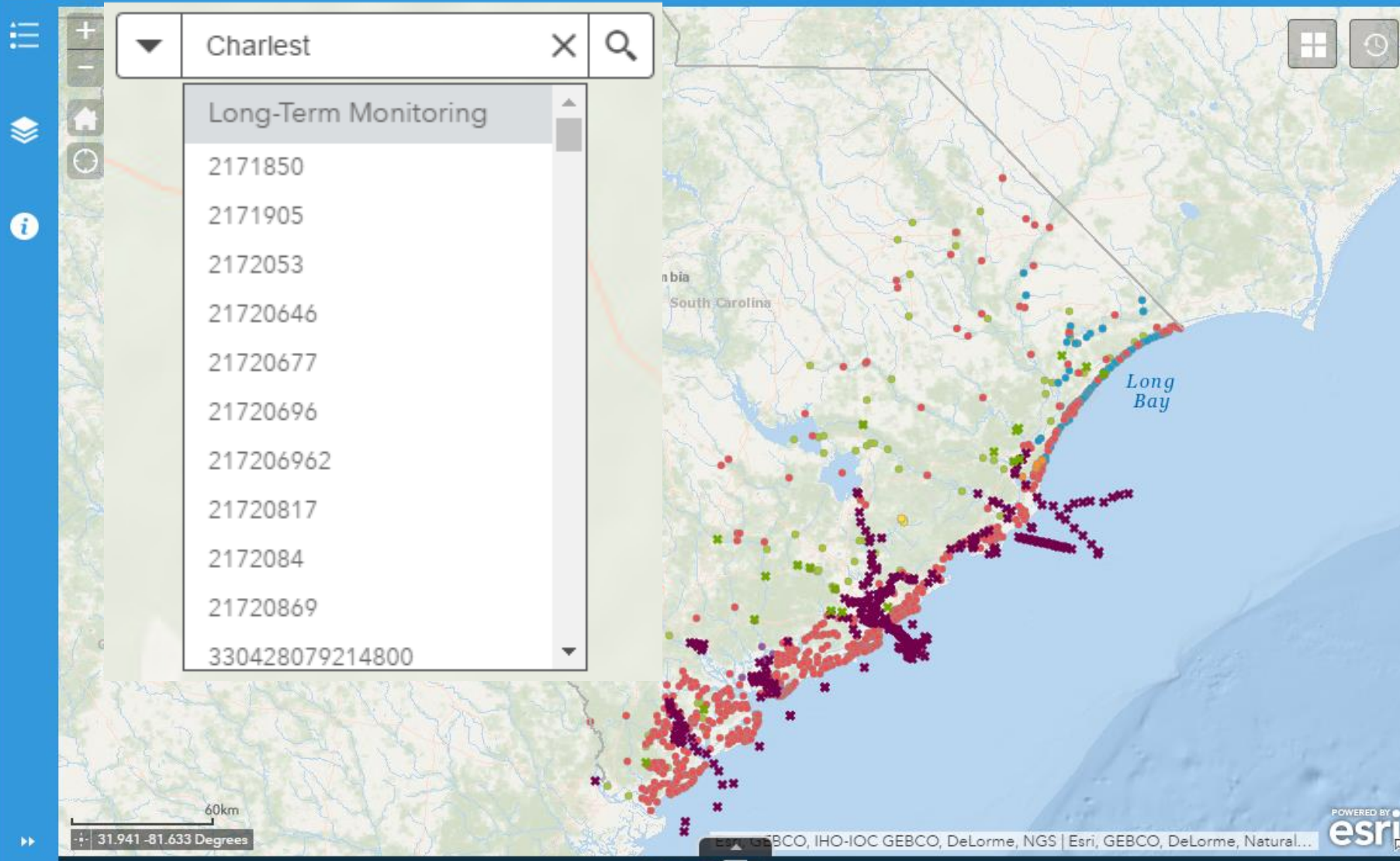


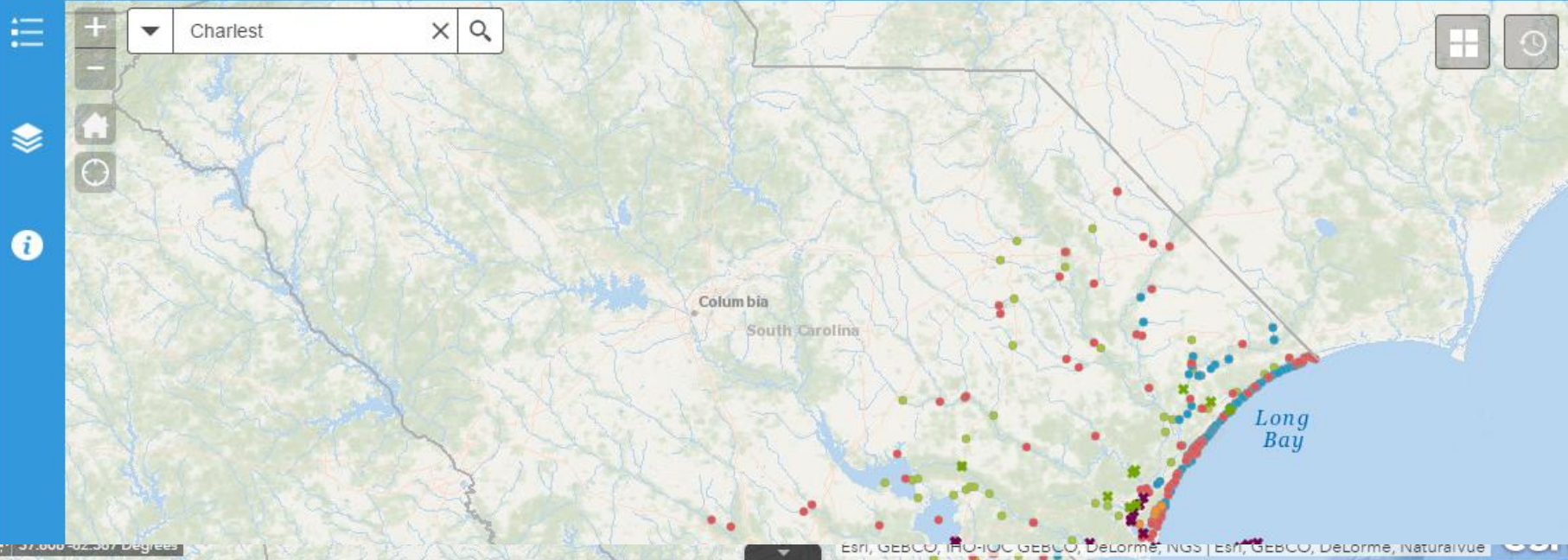
Terrain with Labels



Esri, GEBCO, IHO-IOC GEBCO, DeLorme, NGS | Esri, GEBCO, DeLorme, Natural...

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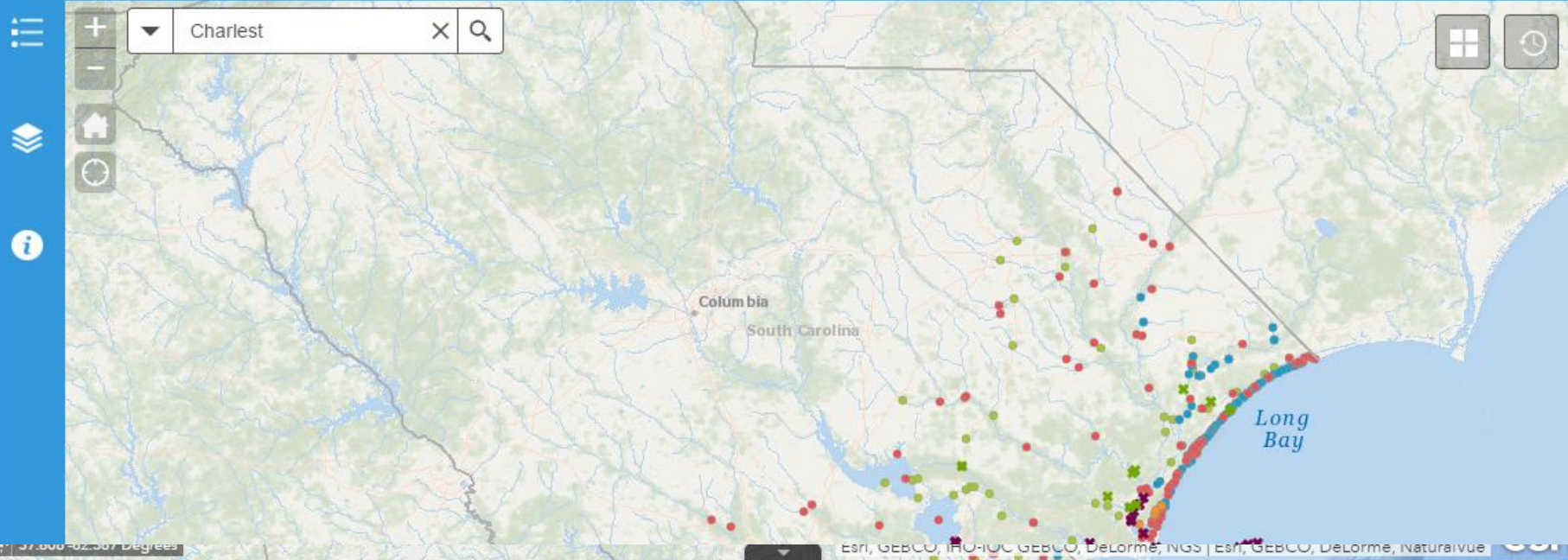
October 2015 Flooding | Long-Term Monitoring

Options Filter by Map Extent Zoom to Clear Selection Refresh

Event	Site_ID	Site_Name	Latitude	Longitude	H_Datum	H_Accuracy	Elevation	V_Accuracy	V_Datum	County	State
October 2015 Flooding	ERS_BBS_1		32.92	-79.63	NAD83					Charleston	SC
October 2015	ERS_BBS_2		32.90	-79.67	NAD83					Charleston	SC

317 features 0 selected





October 2015 Flooding | Long-Term Monitoring

Options Filter by Map Extent Zoom to Clear Selection Refresh

Options Filter by Map

Show Selected Records

Show Related Records

Filter

Show/Hide Columns

Export All to CSV

Latitude	Longitude	H_Datum	H_Accuracy	Elevation	V_Accuracy	V_Datum	County	State
32.92	-79.63	NAD83					Charleston	SC
32.90	-79.67	NAD83					Charleston	SC

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LIVE DEMONSTRATION

Status

- SCCWMN Beta is live on the S.C. Sea Grant website: www.scseagrants.org
- Collecting feedback from users and partners
- Adding organizations
- Assimilating other data types

Questions? Feedback?

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Visit SCCWMN: www.scseagrant.org!