2014 CRMS Roadshow

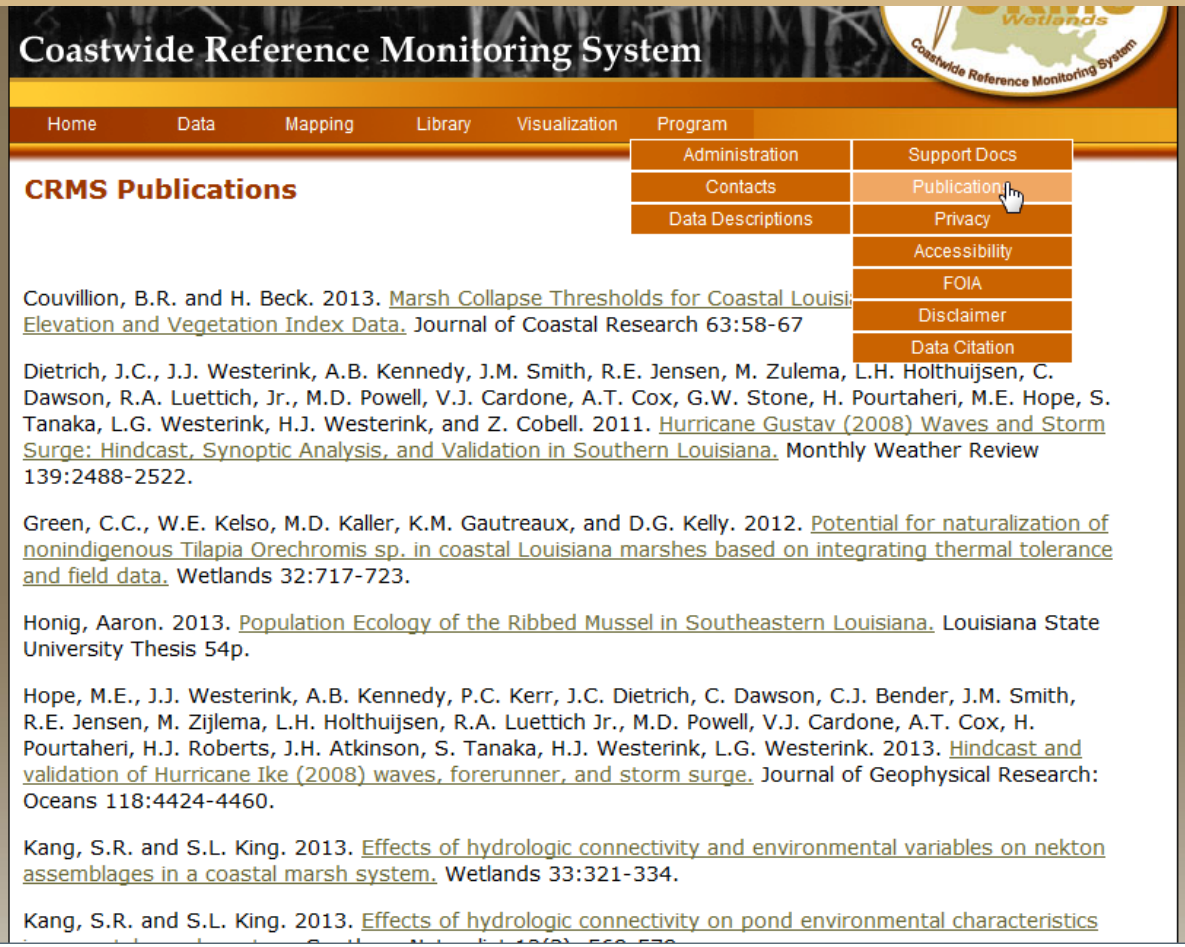
March 27, 2014 - NOAA
April 1, 2014 - USFWS, EPA, NRCS
April 3, 2014 - USACE

http://www.lacoast.gov/crms

CRMS Publications Page

Web

- **Released to Production**
  - New Page: CRMS Publication Page

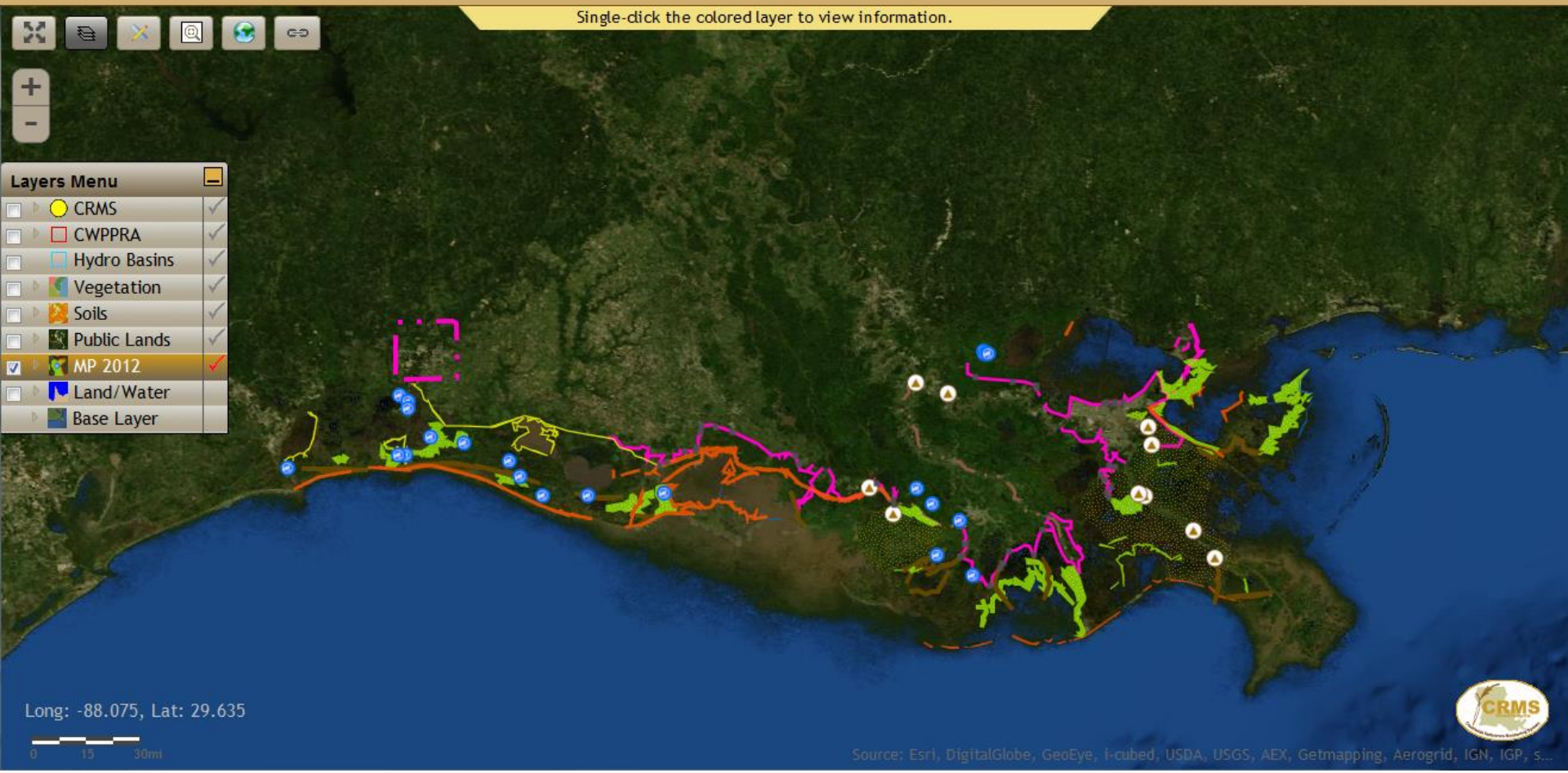


Mapping

- **Released to Production**
  - Map Layer: 2012 Master Plan Layer
  - Map Layer: 2012 DOQQ
  - Map Tool: Save Map State
  - Map Tool: CEC and SVI CRMS Site Classification
  - Map: CRMS Floating Marsh Site Designation
  - Map Tool: Acreage Assessment using Custom Polygon
  - Map: CRMS Sites available as KML download

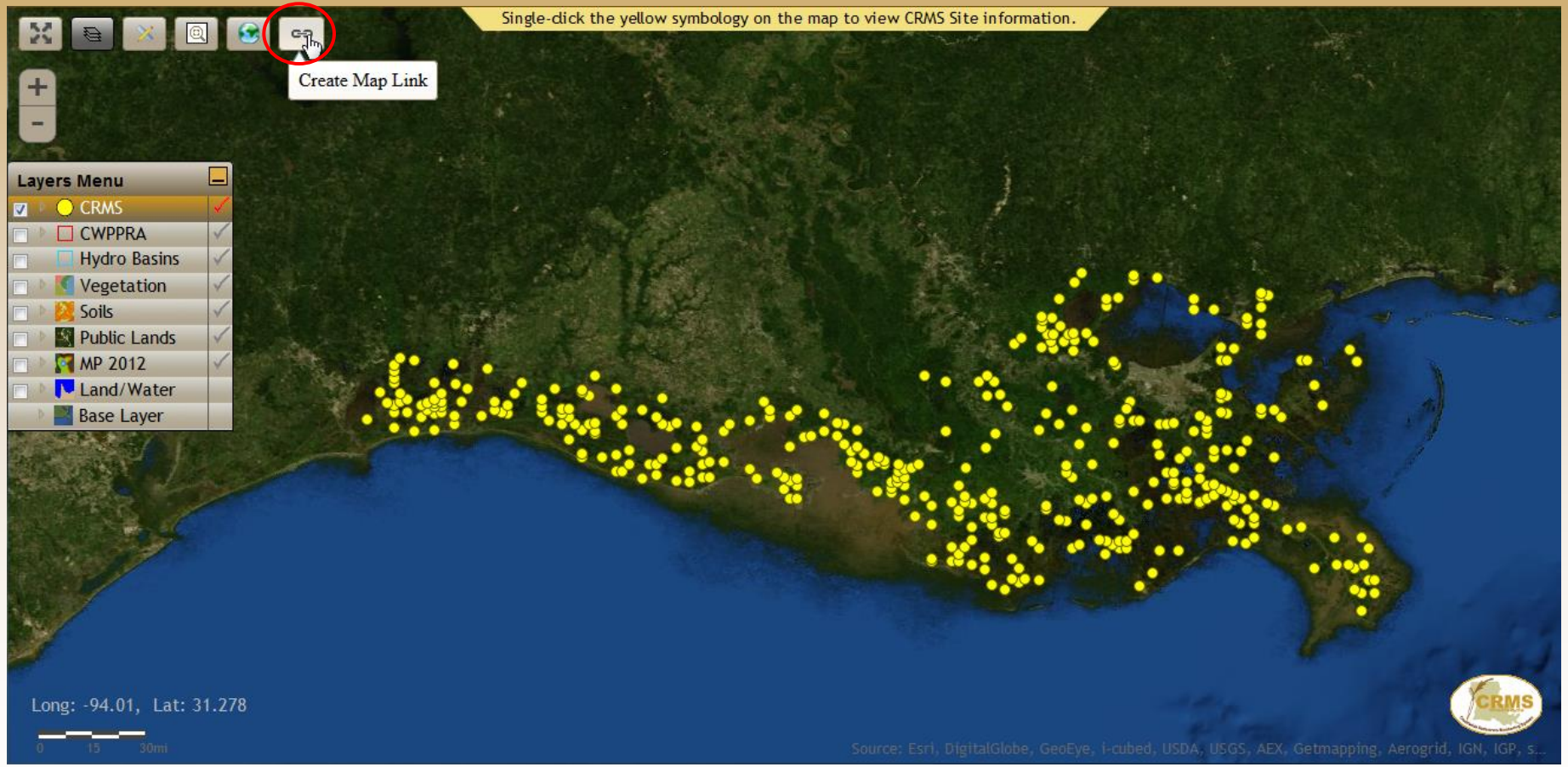
- **Staged for Release**
  - Map: 2013 Coastwide Vegetation

Master Plan 2012 Layer

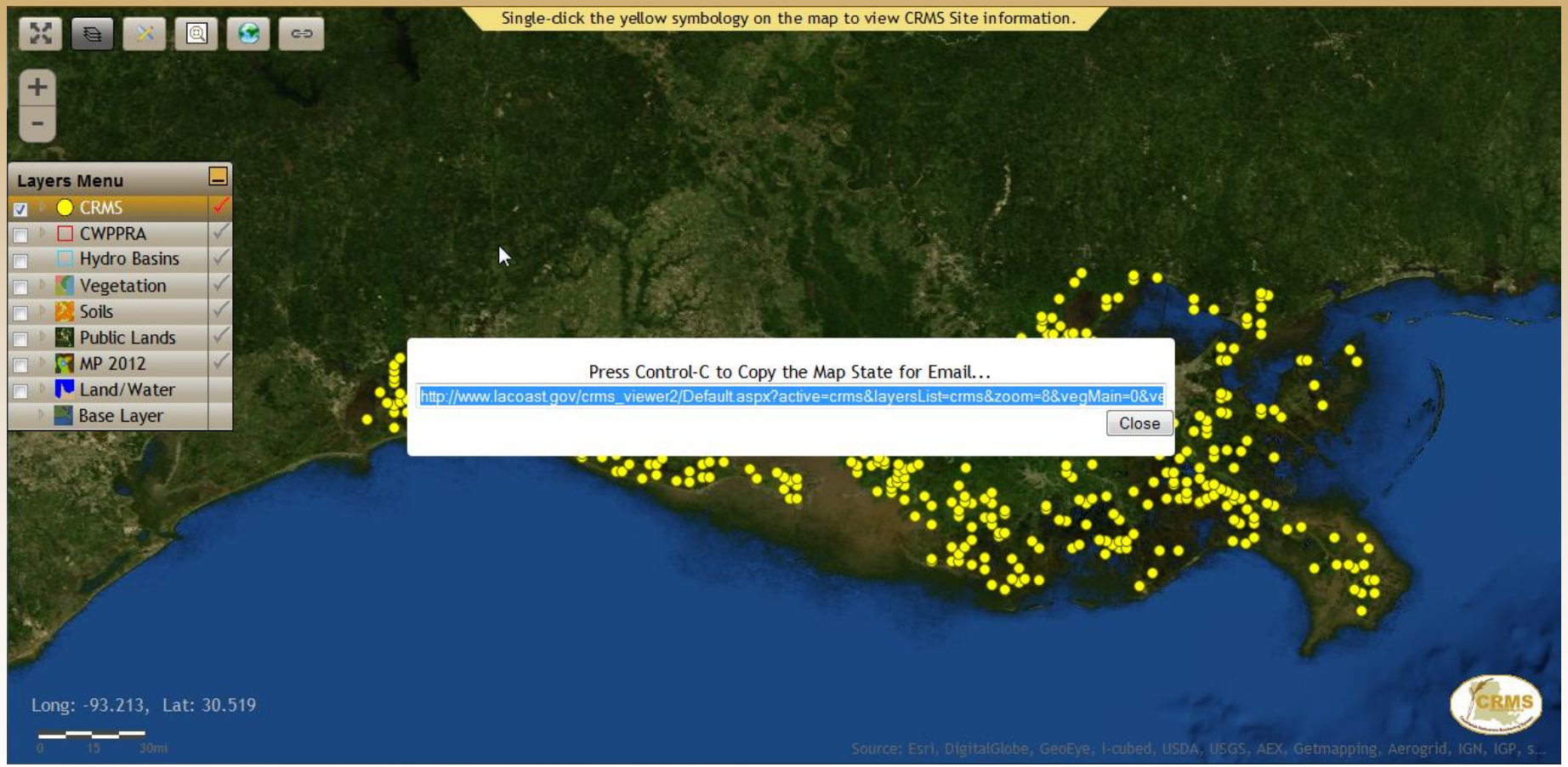


2012 DOQQ Added

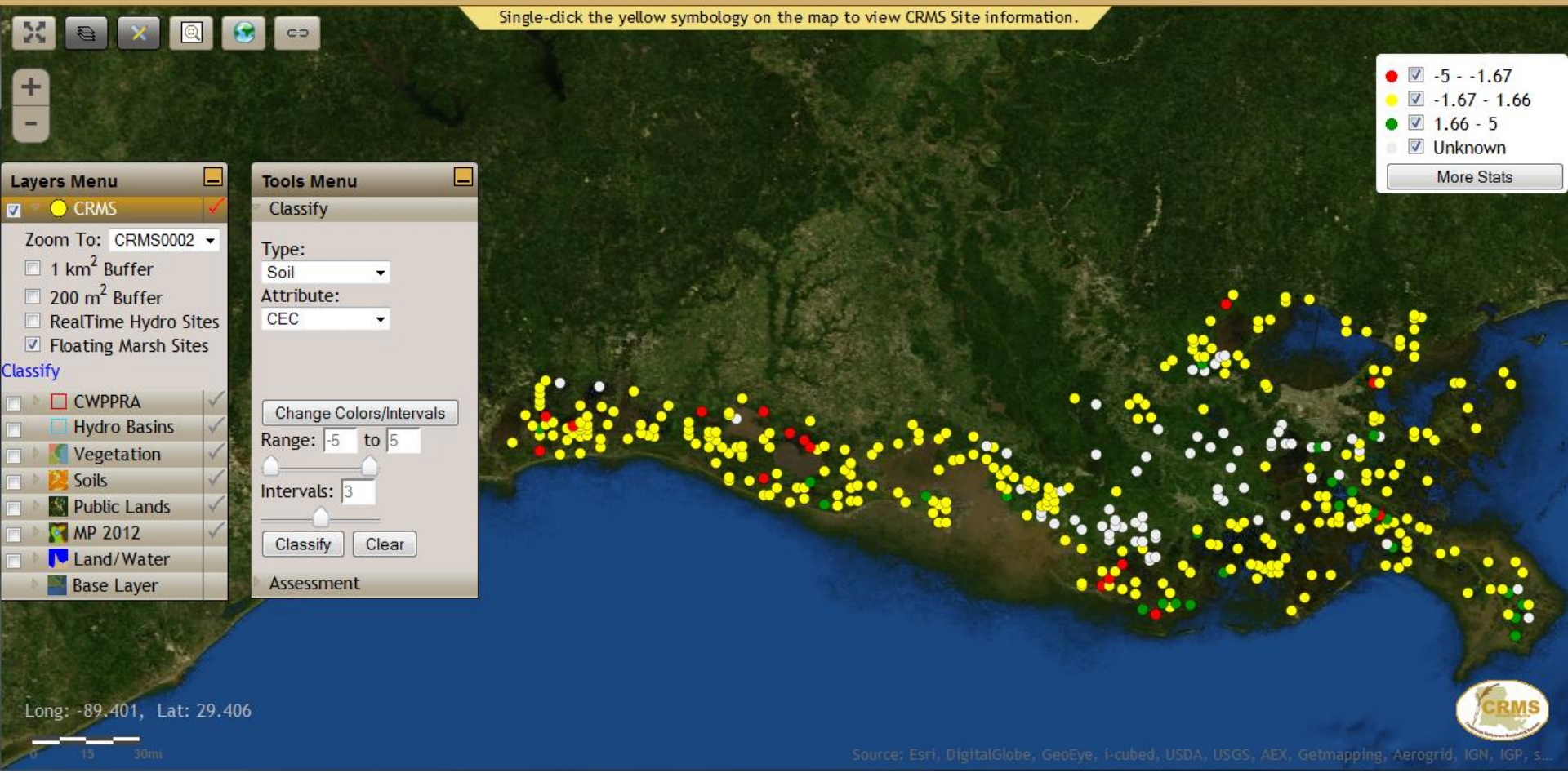
Save Map State



Save Map State

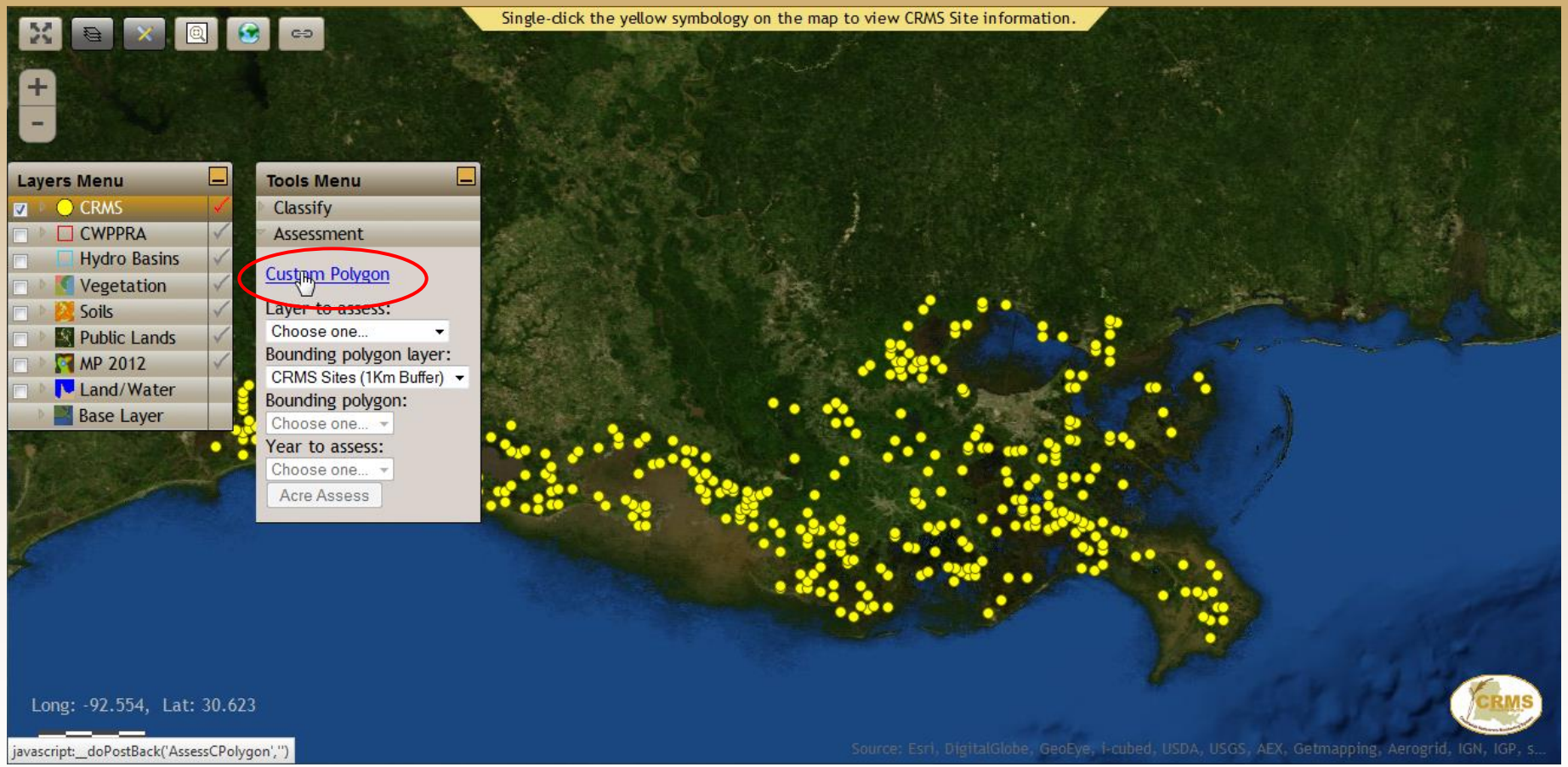


CEC added to CRMS Site Classification Tool

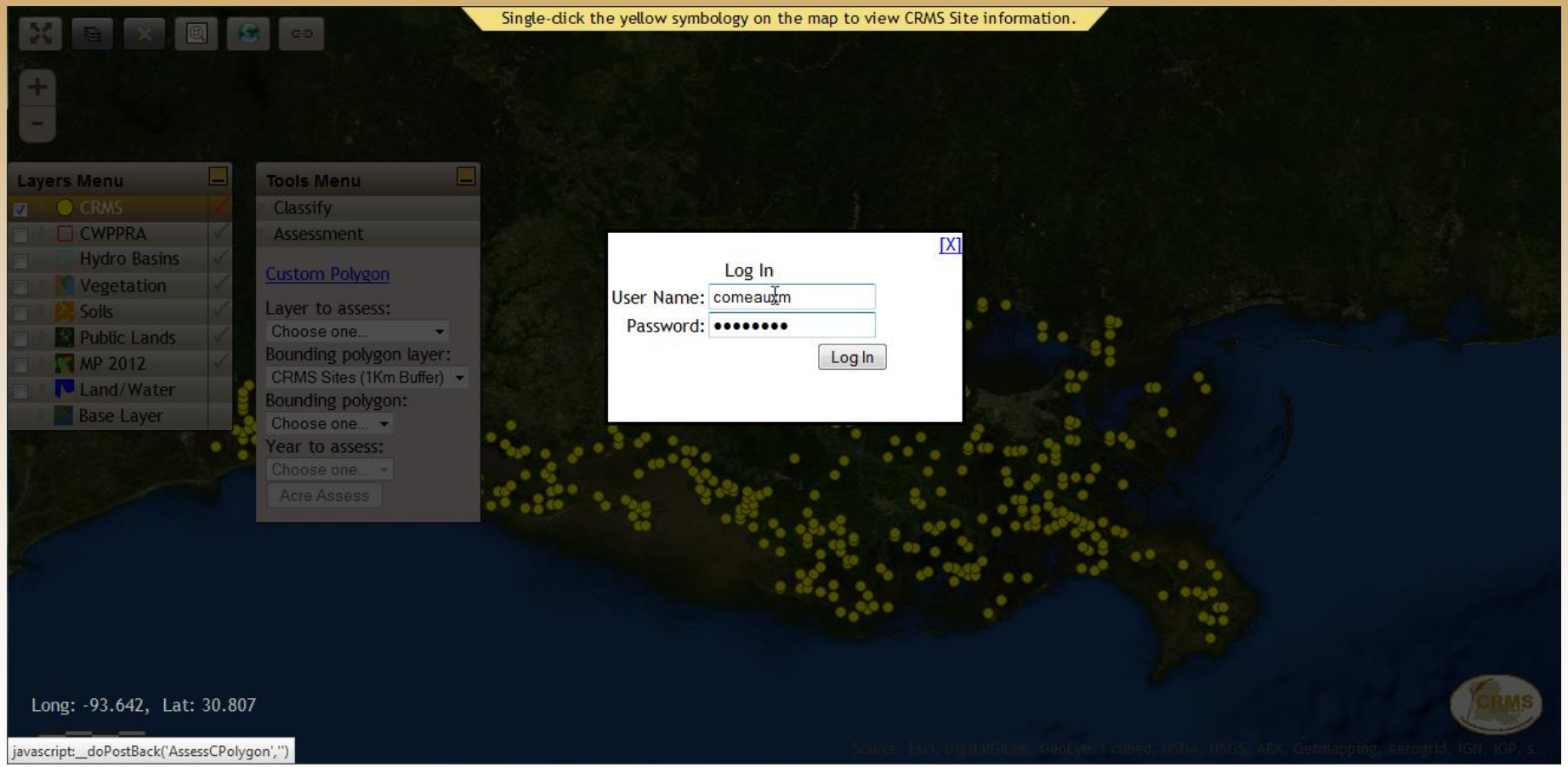


Users have the ability to highlight the floating marsh sites

Custom Acreage Assessment



Request Password:
E-mail: comeauxm@usgs.gov



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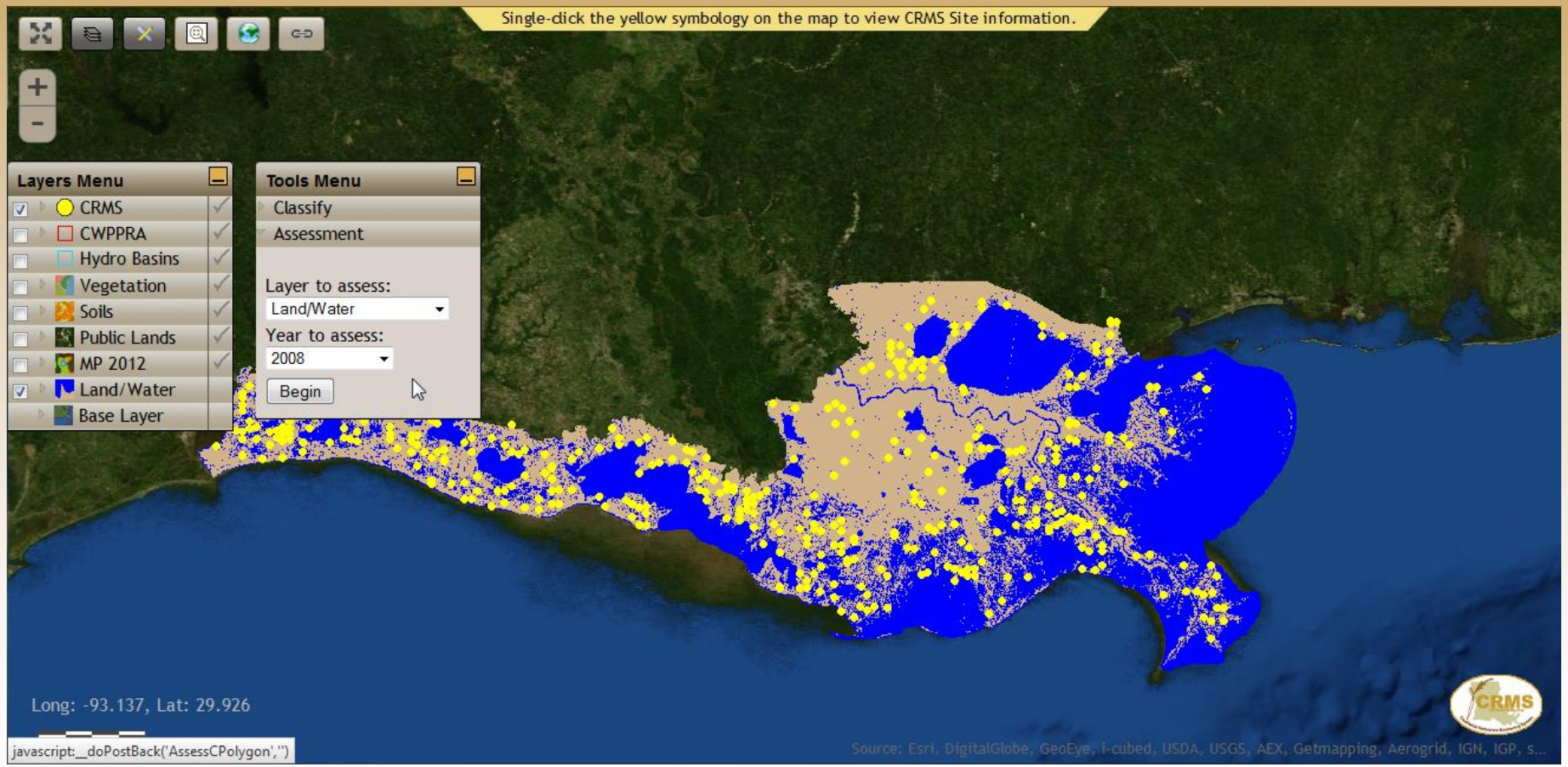

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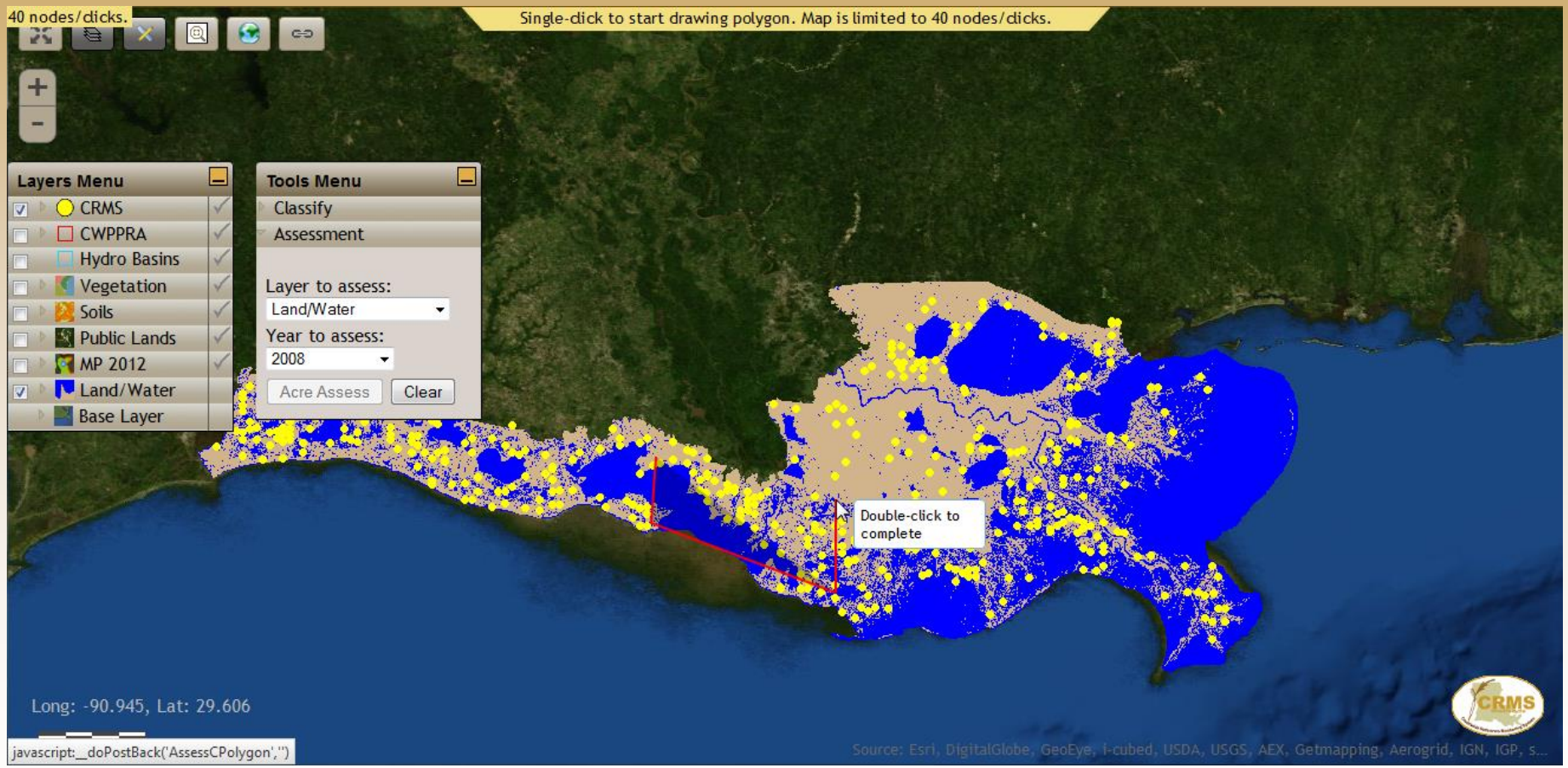

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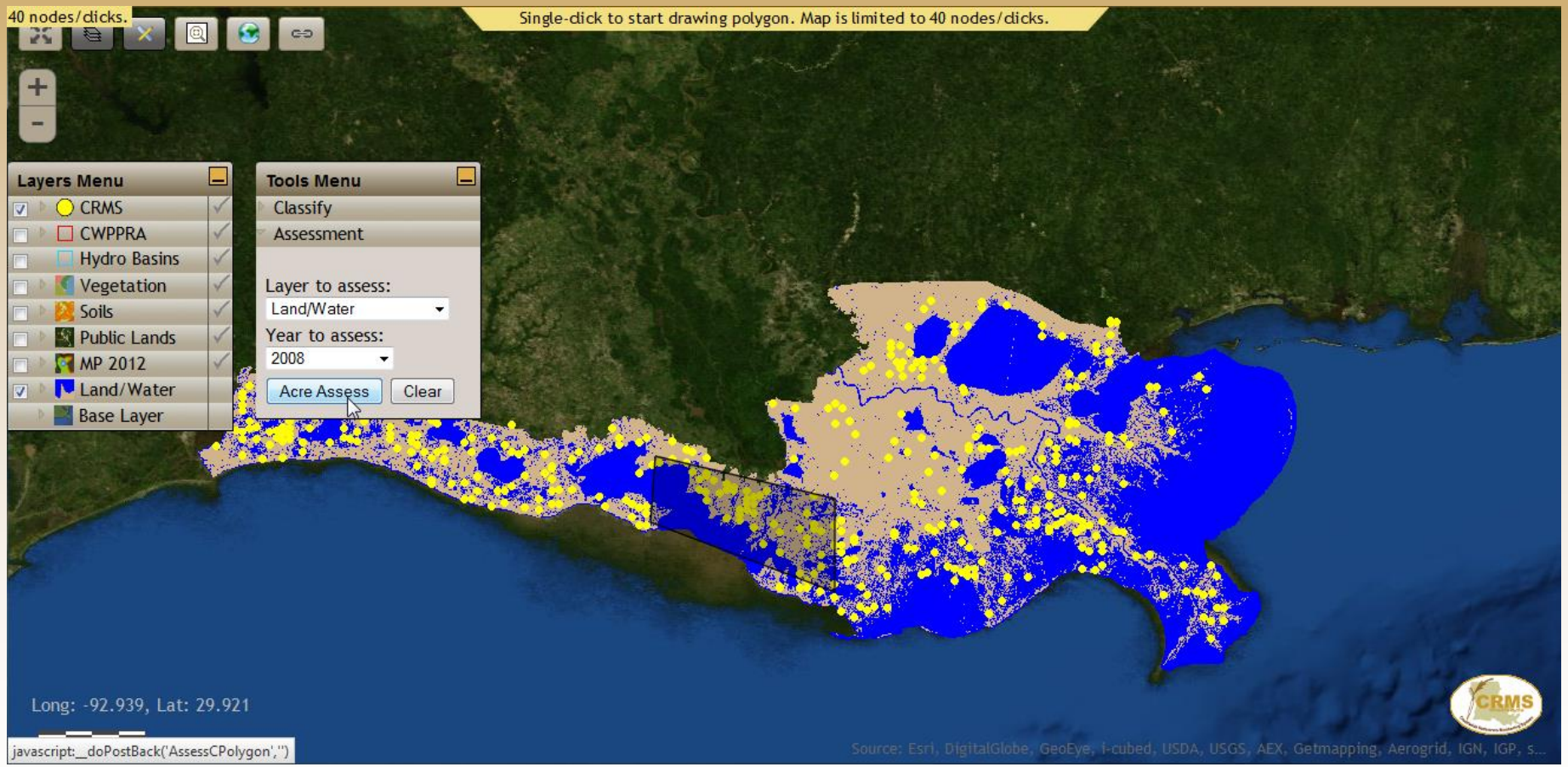

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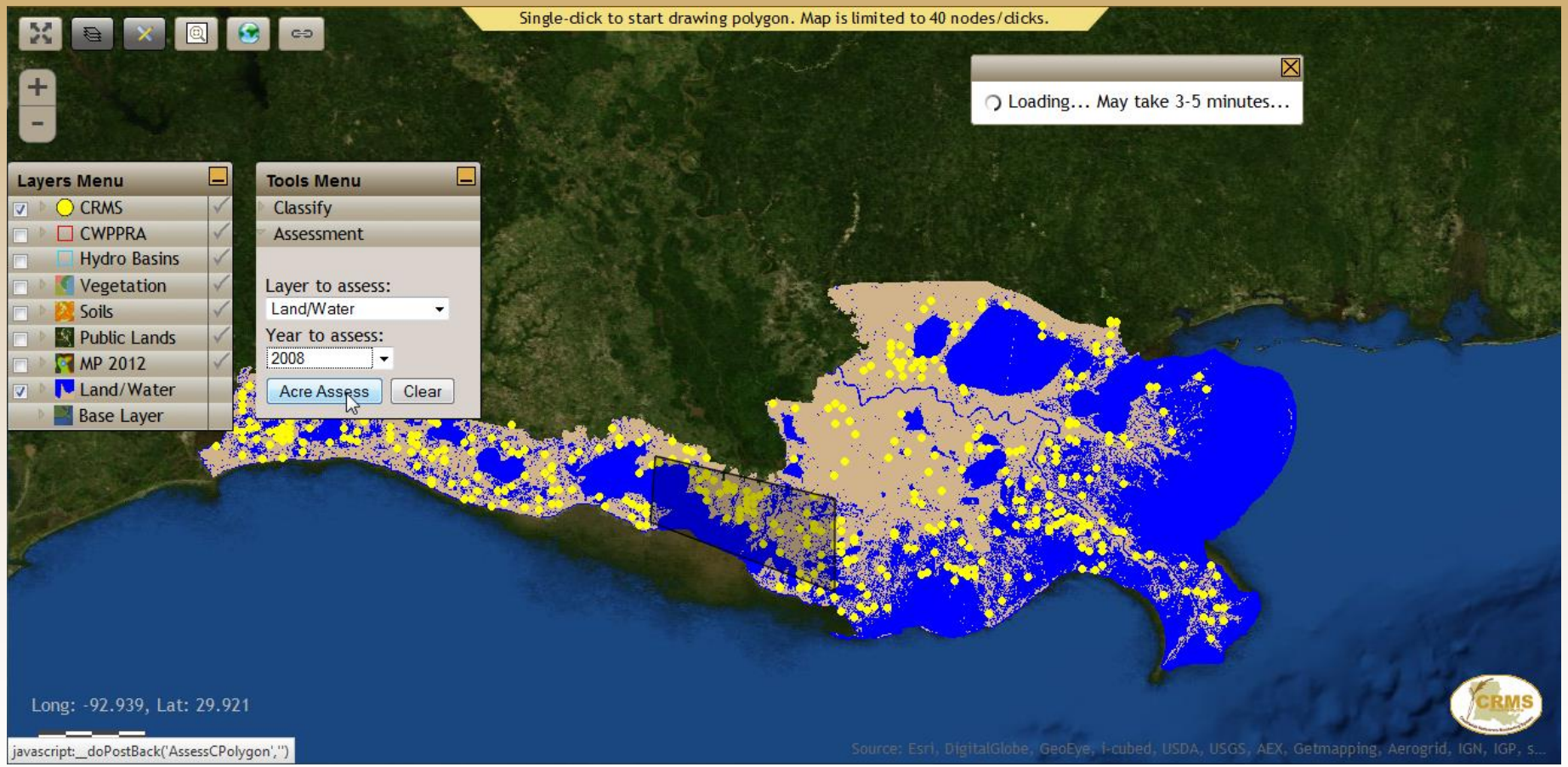

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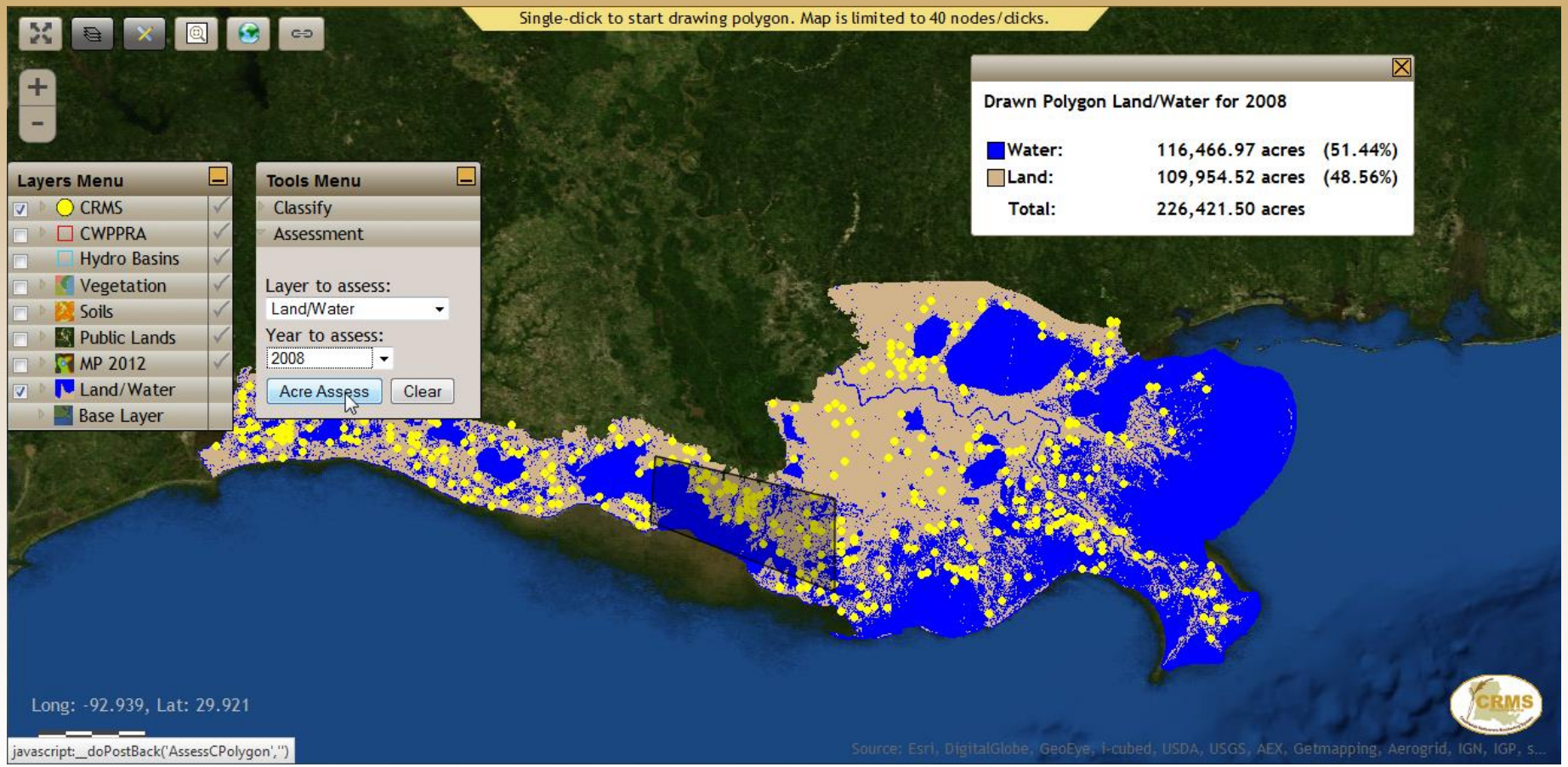
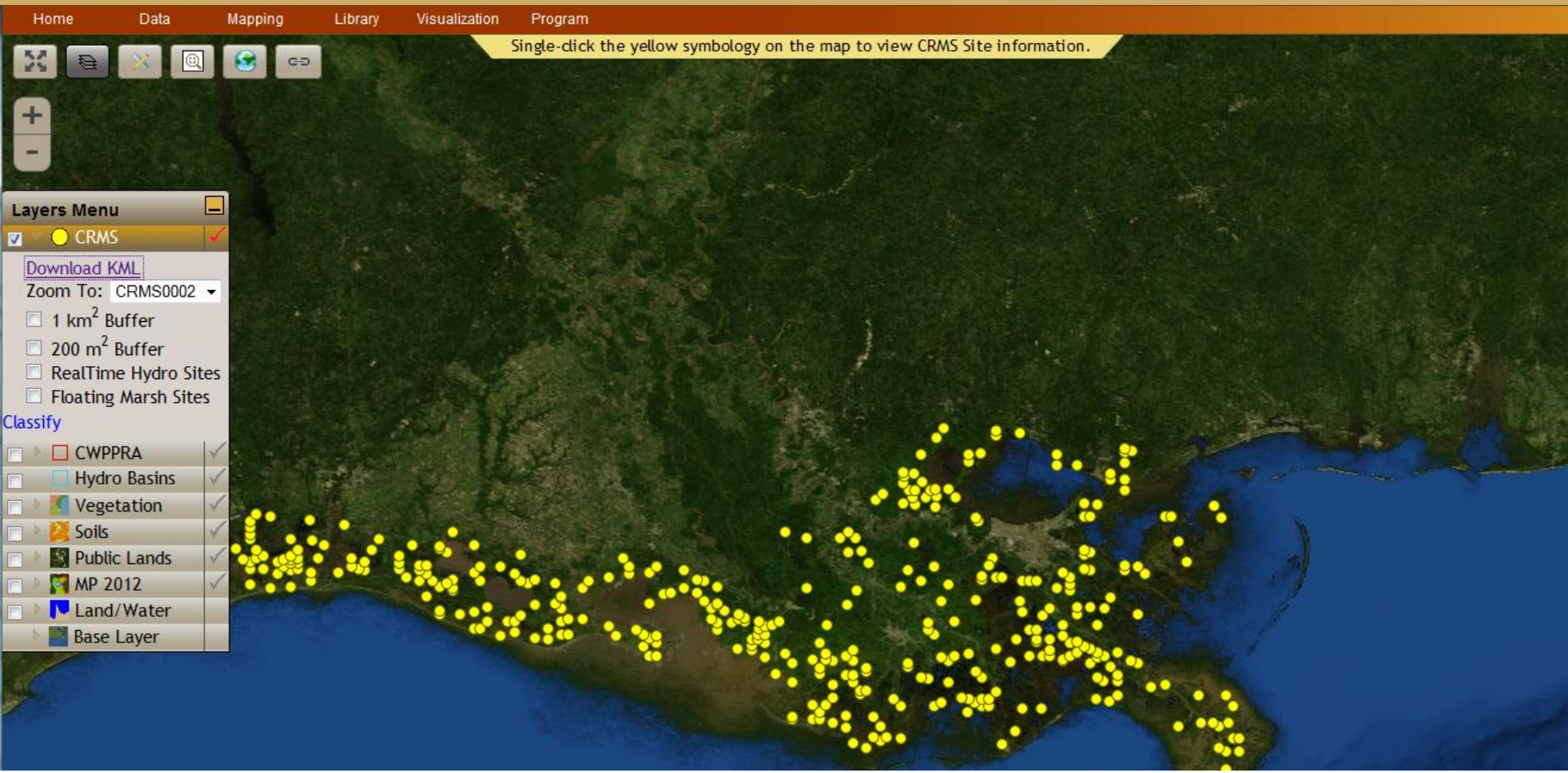


CRMS Points KML



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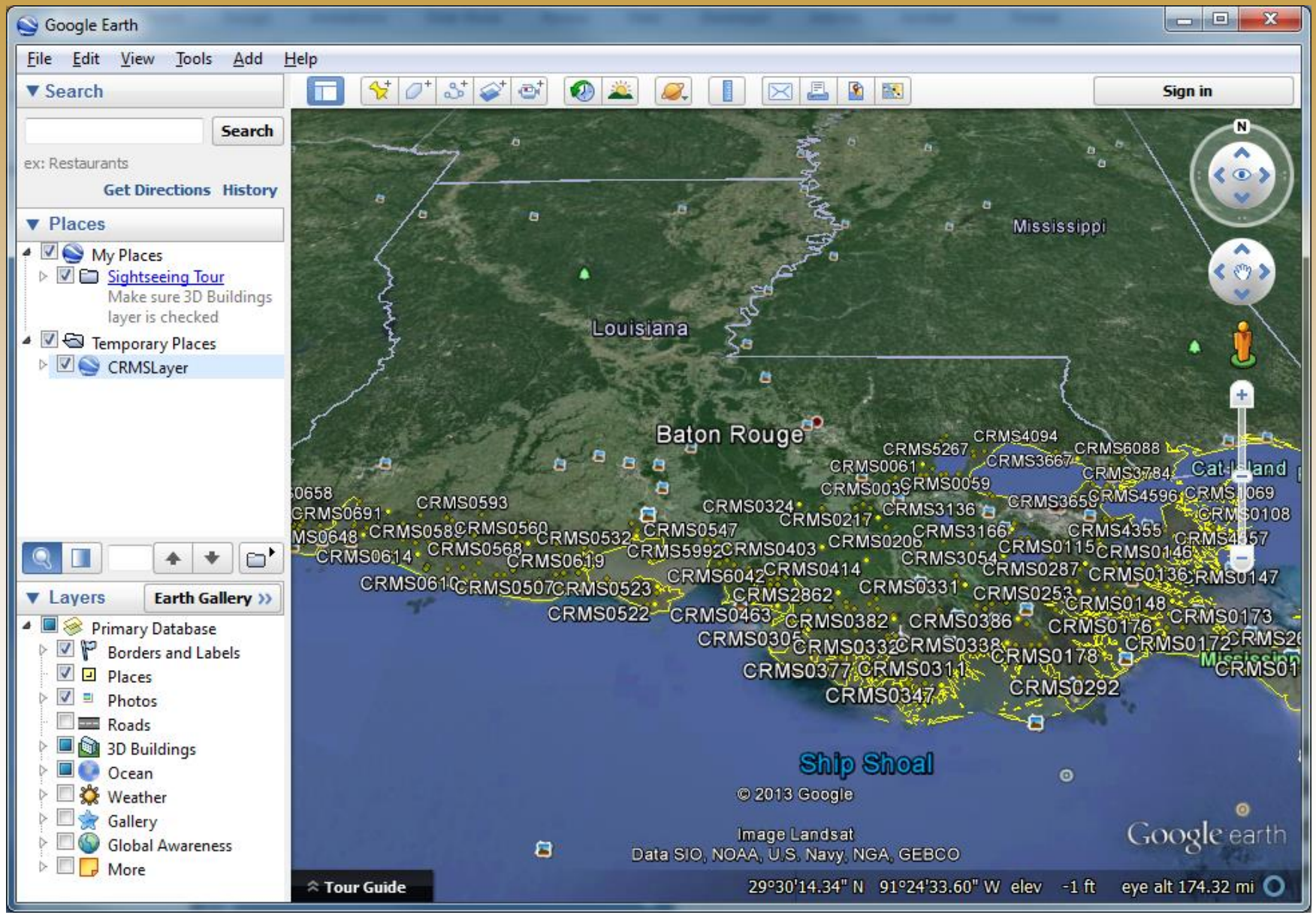
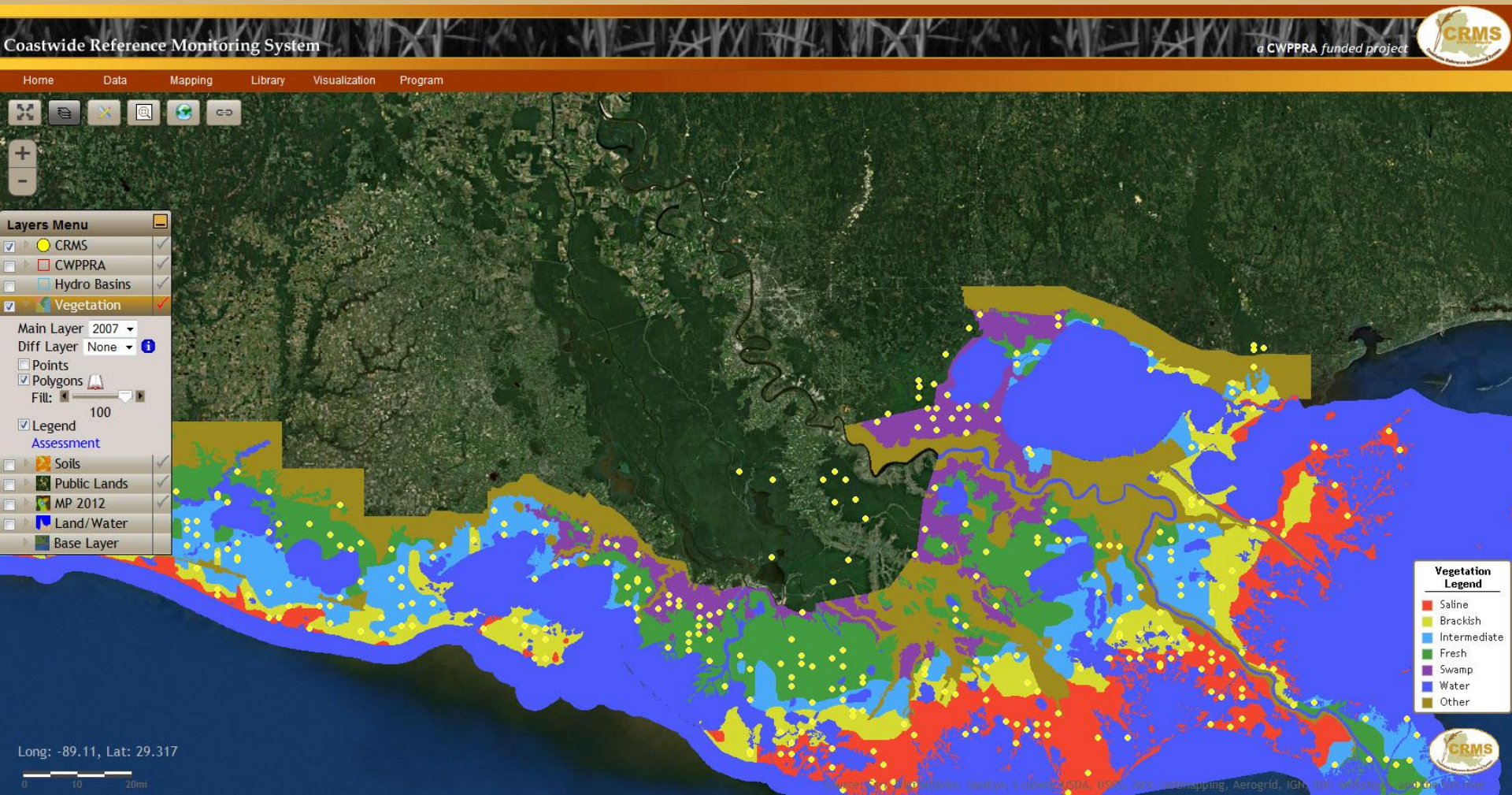


Staged for Release
Coming SOON!!!

2013 Coastwide Vegetation Data for Heli Survey

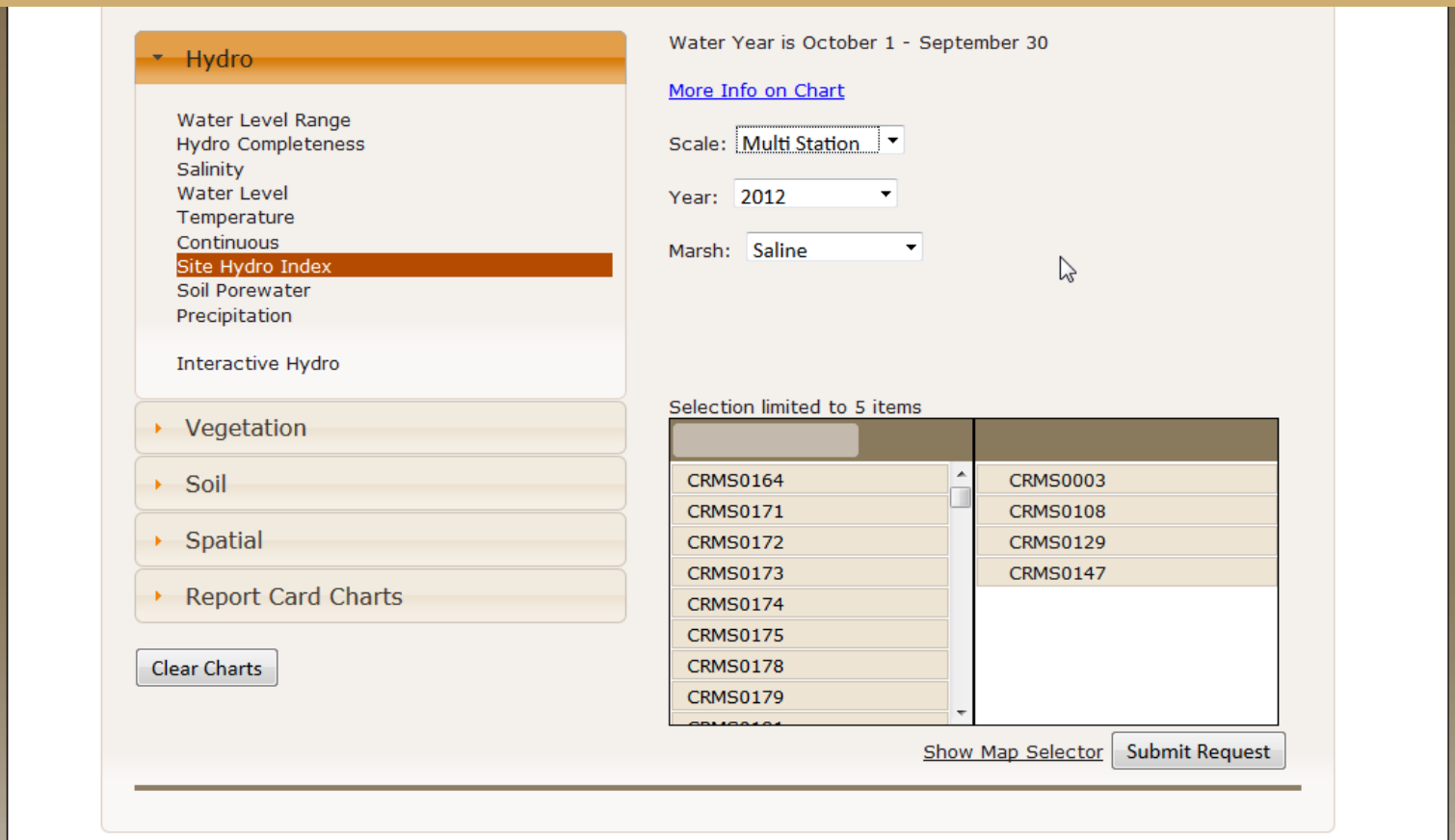


Charting

- **Released to Production**
  - Chart improvements made to:
    - Hydro index chart
    - Hydro station charts
    - Project FQI chart
    - Data availability chart
  - Chart Tool: Interactive Hydro chart can plot inundation
  - Charting Tool: Charting Interface Spatial Station/Site Selection
  - Data Download: SVI and CEC added to Data download tool

- **In Progress**
  - Forested FQI
  - Vegetation Community Salinity
  - Vegetative Volume
  - Landscape Index
  - Hypertemporal for Percent Land Chart

Hydro Index charts can plot multiple sites within same marsh



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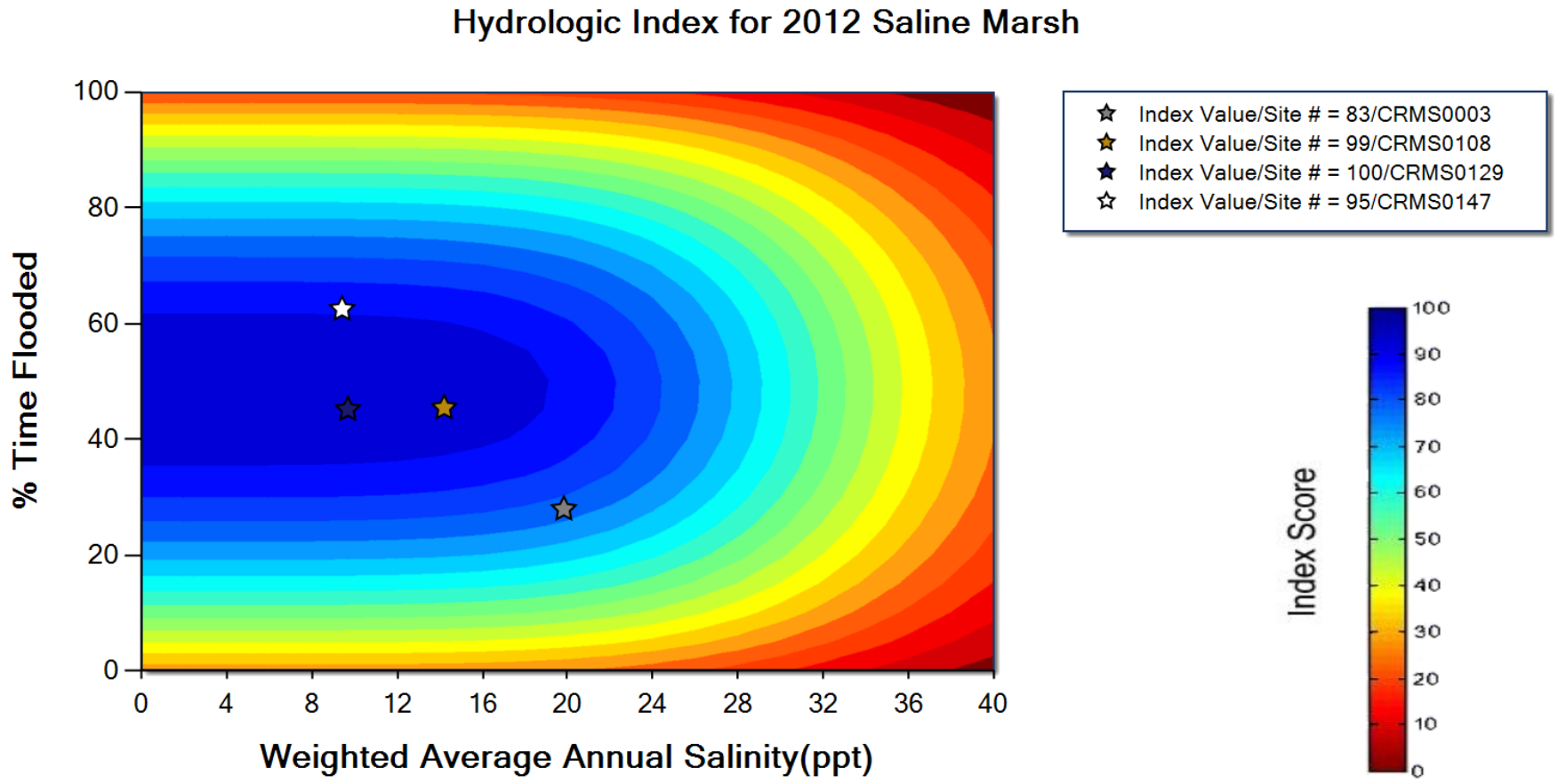
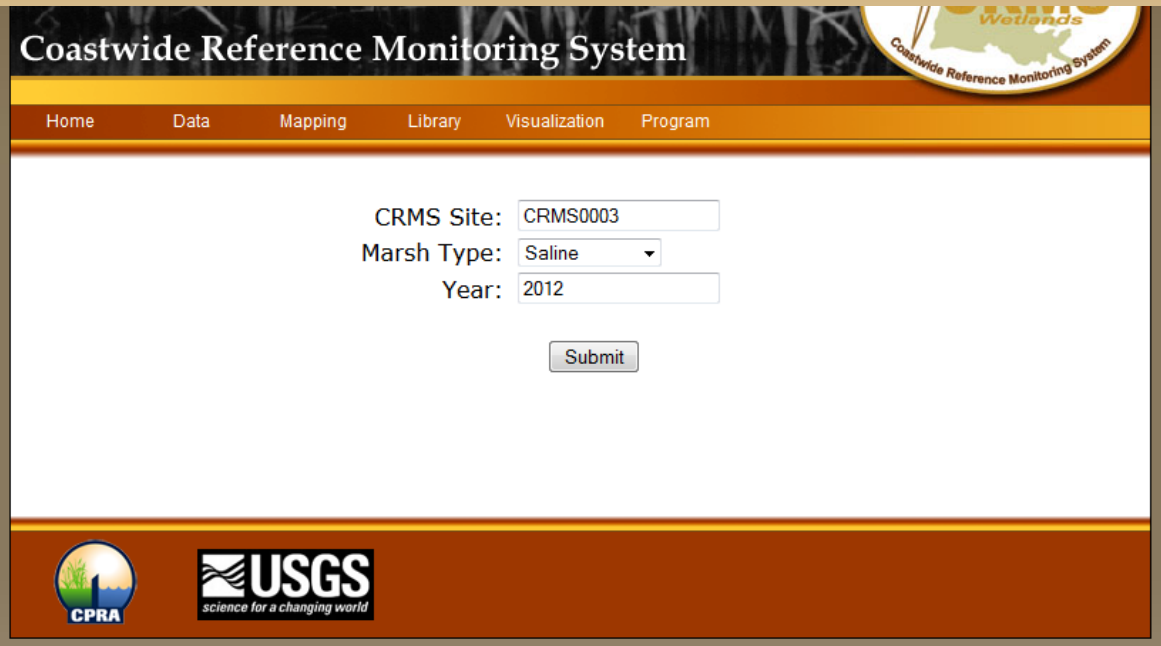
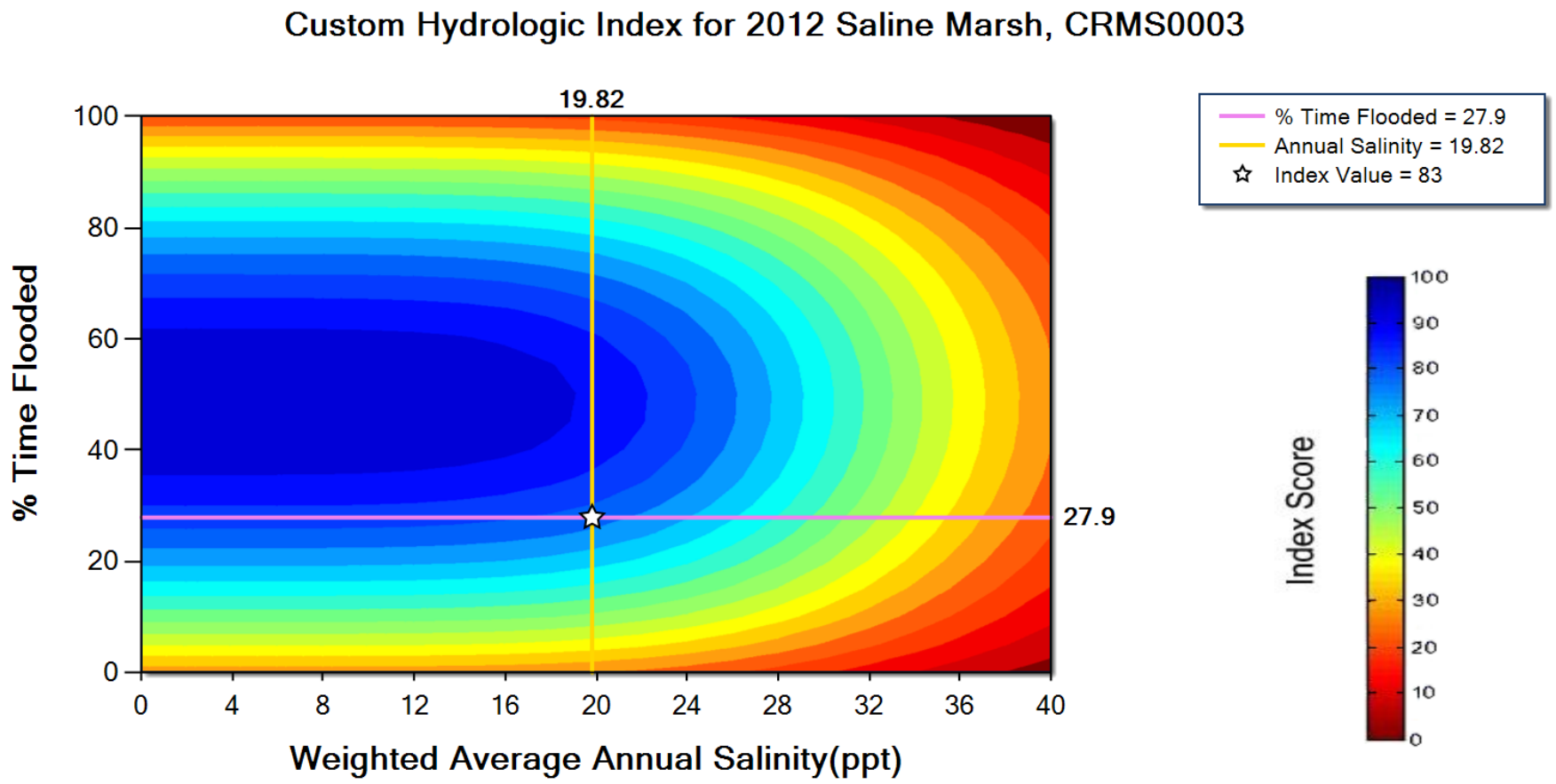


Request Access:
E-mail: comeauxm@usgs.gov



Custom Hydro Index



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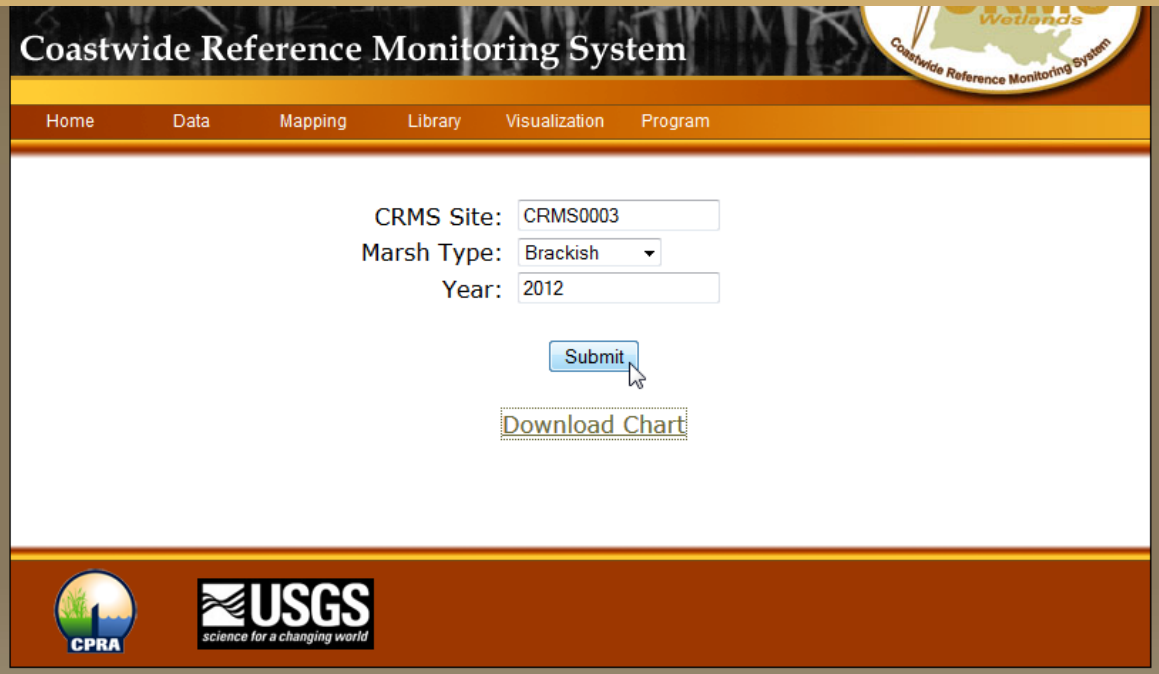

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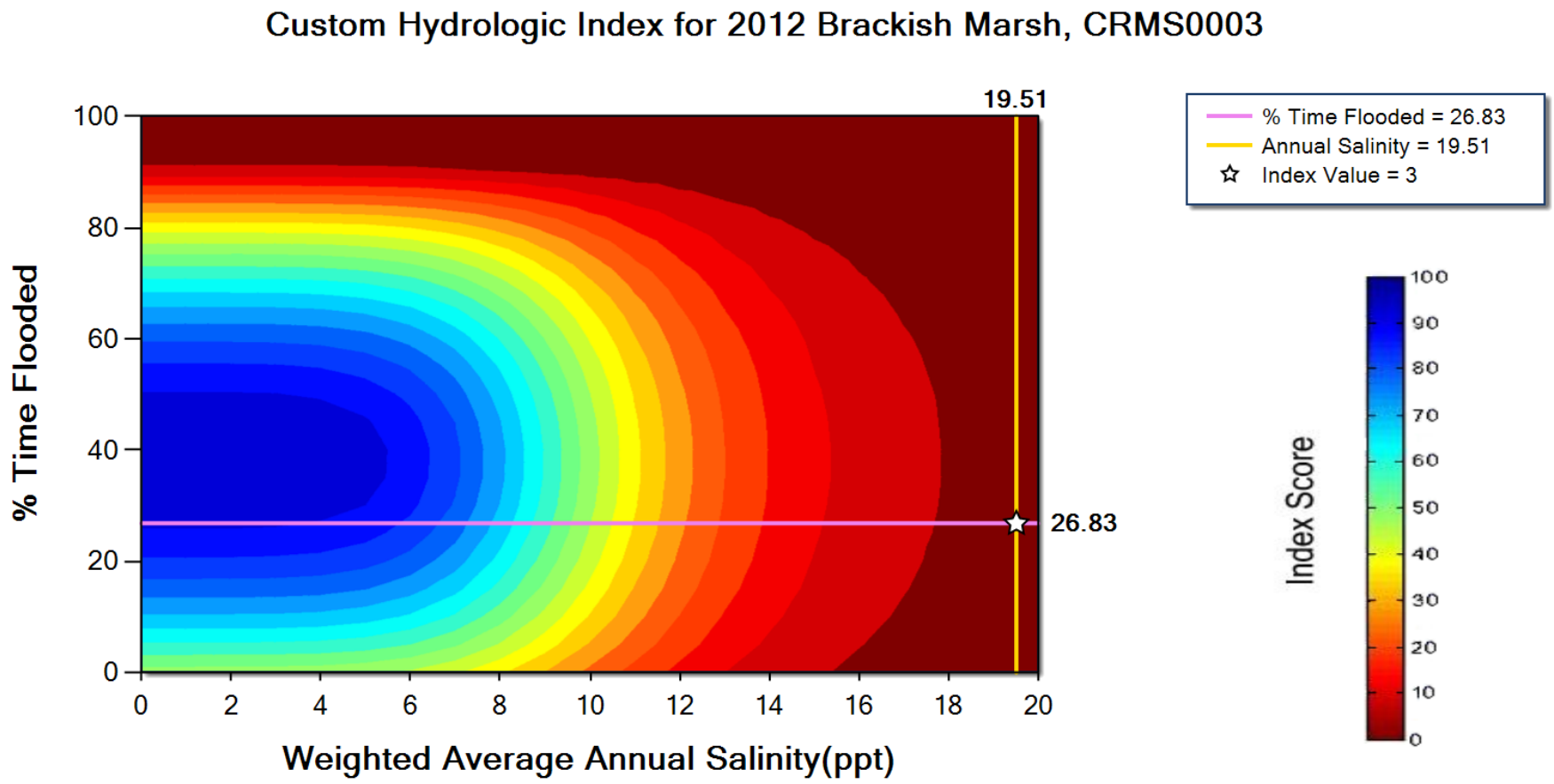
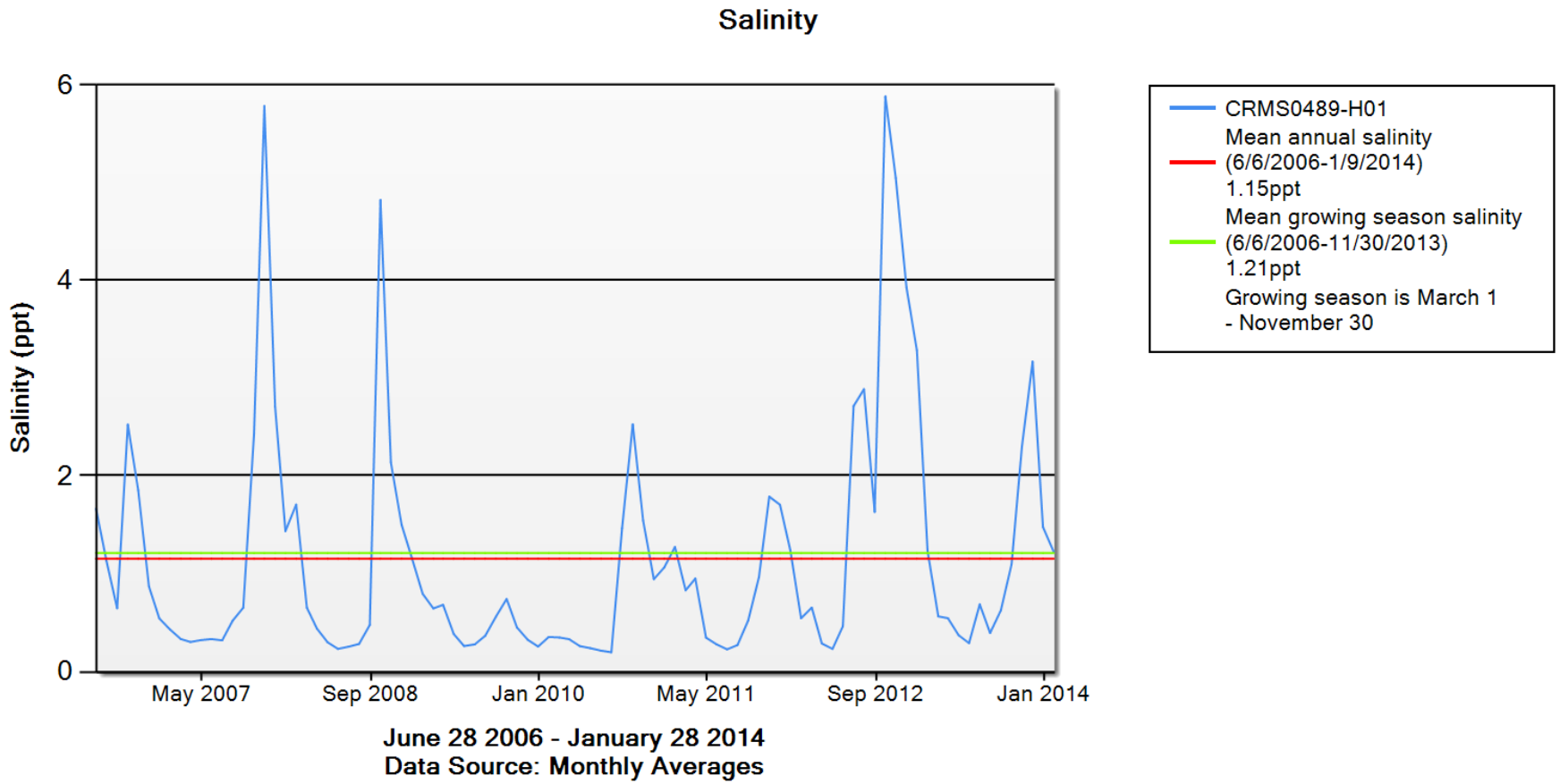
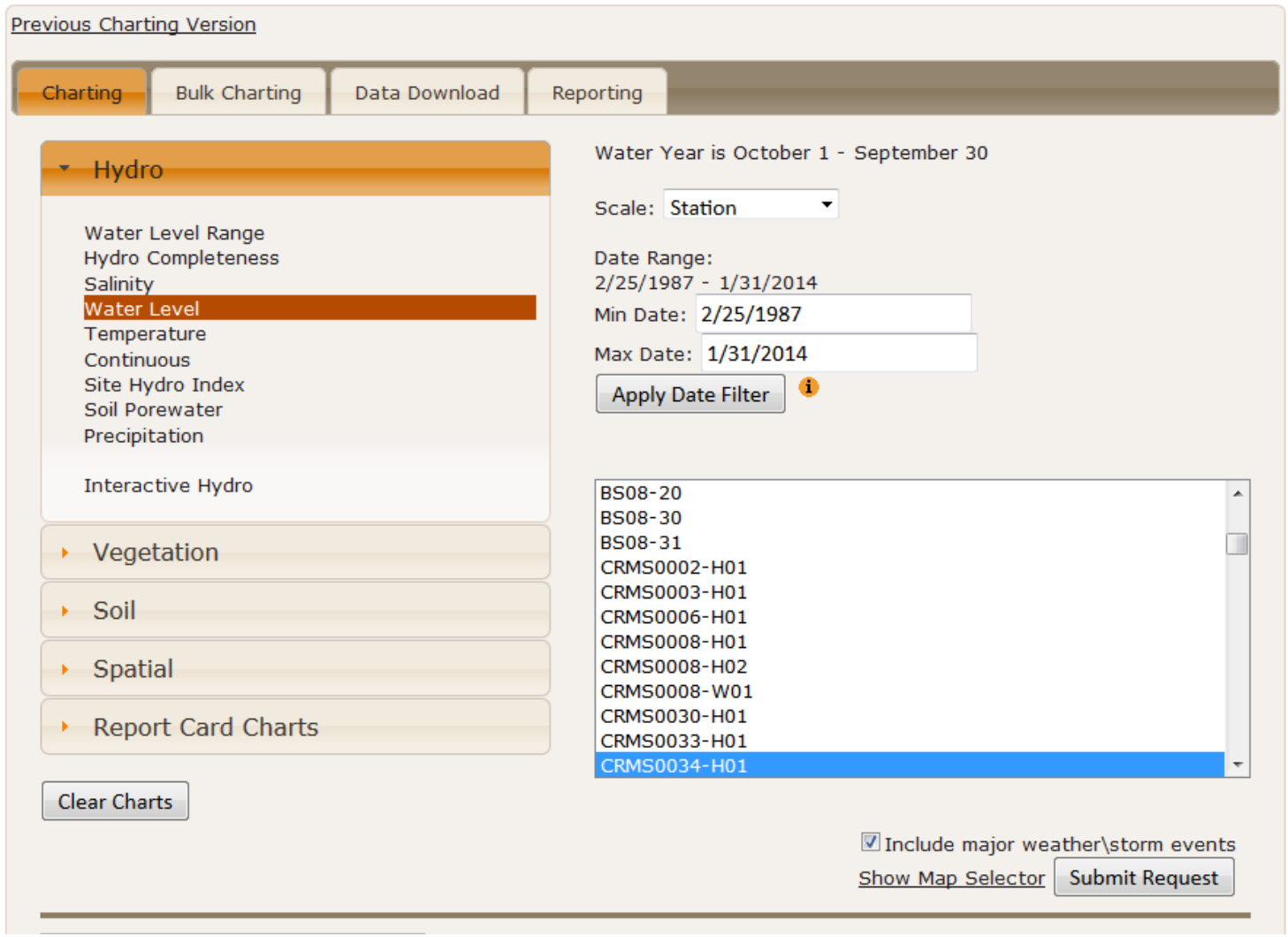


Hydro charts can show Mean Annual and Growing Salinity



Ability to plot Major events on Hydro Charts



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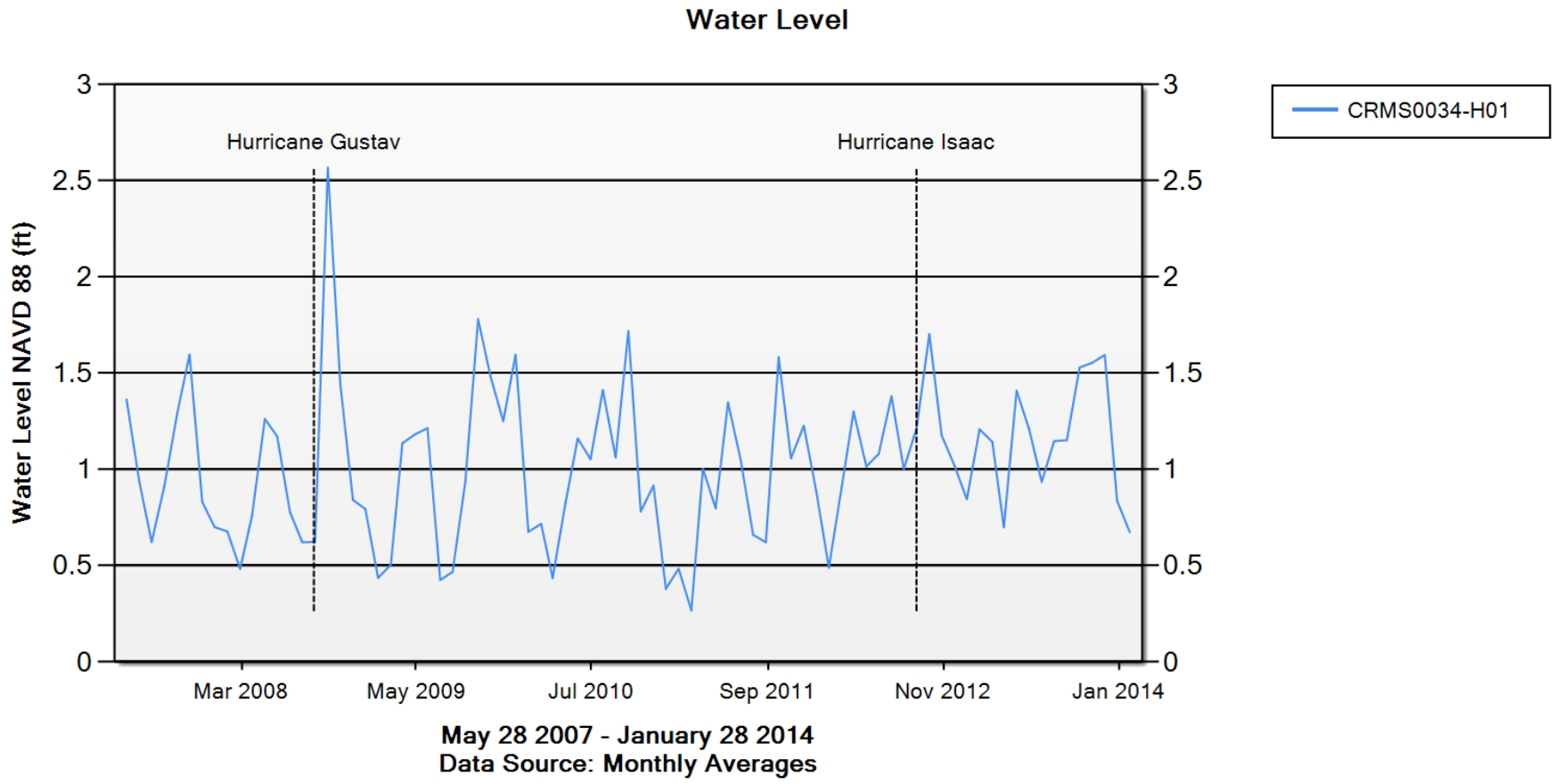
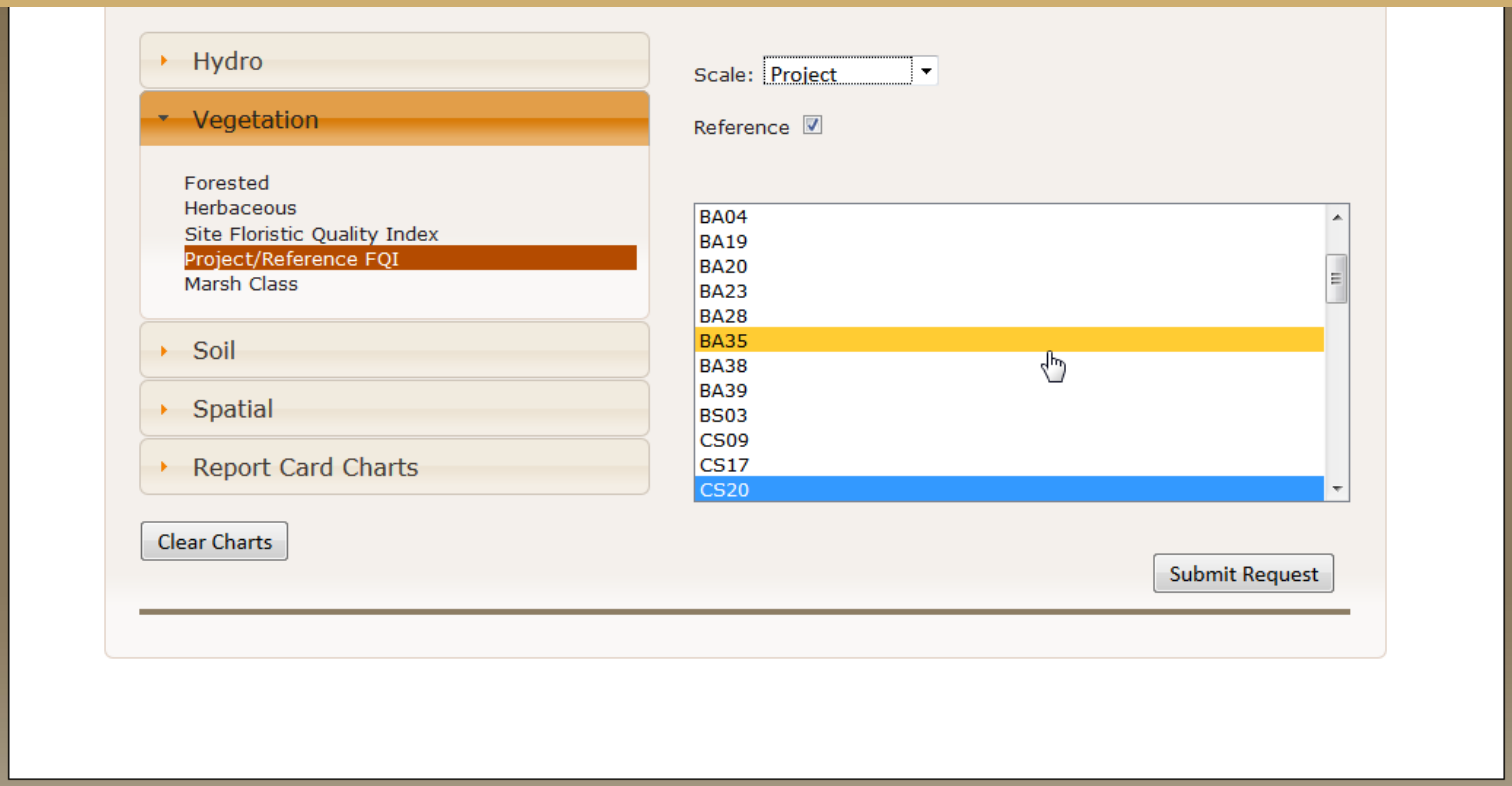


Users can choose to plot Reference on Project FQI



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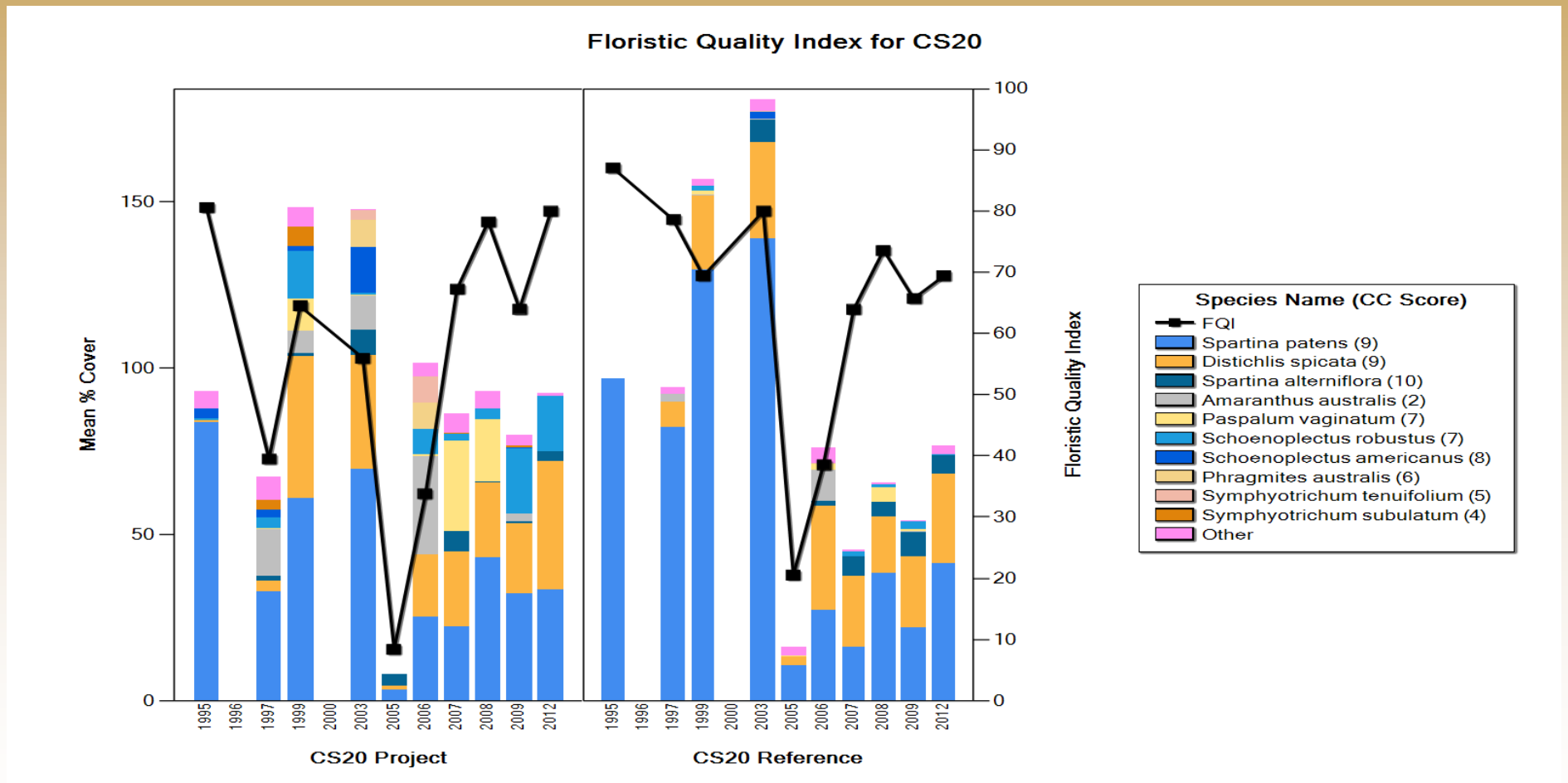

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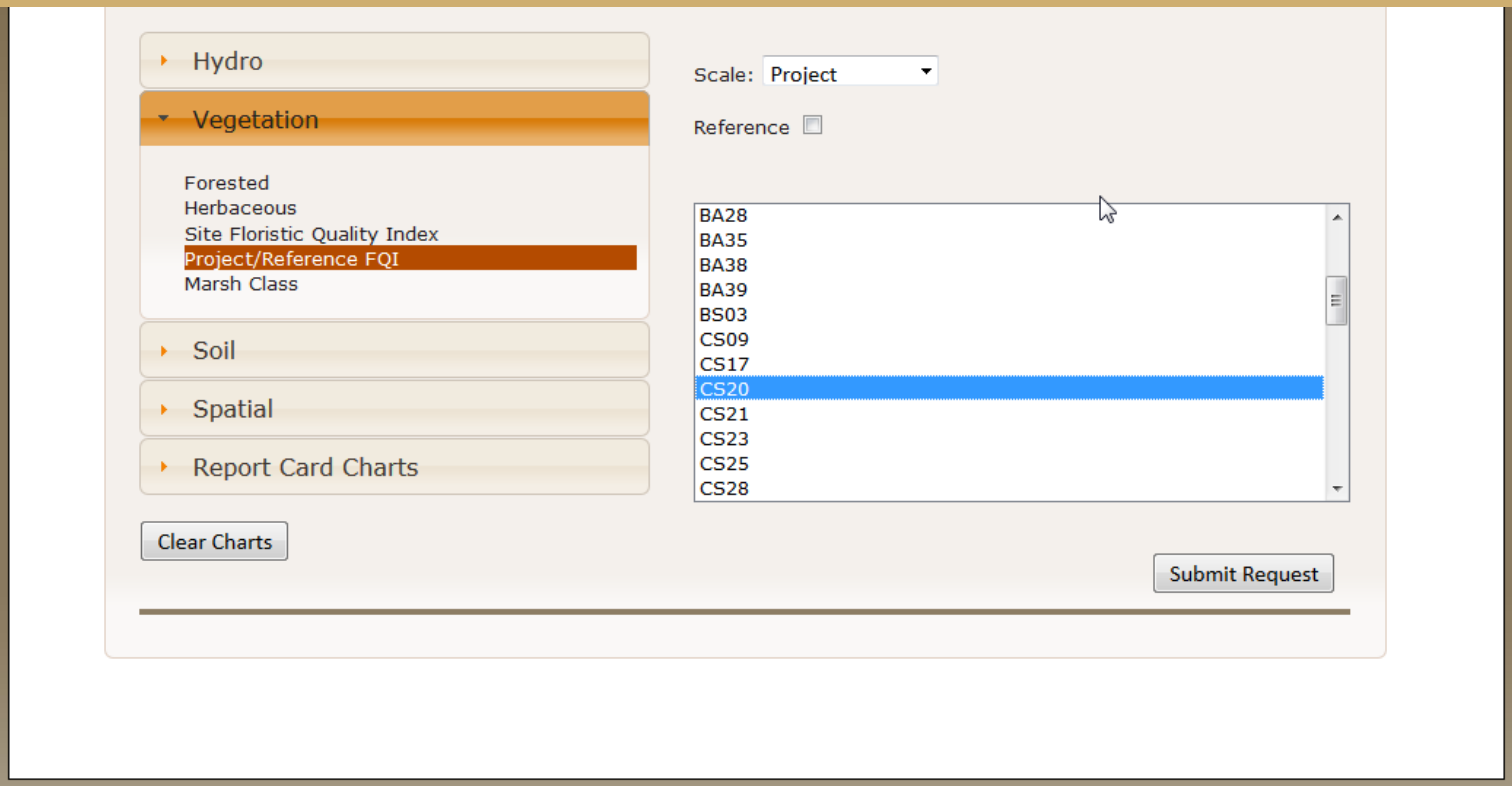

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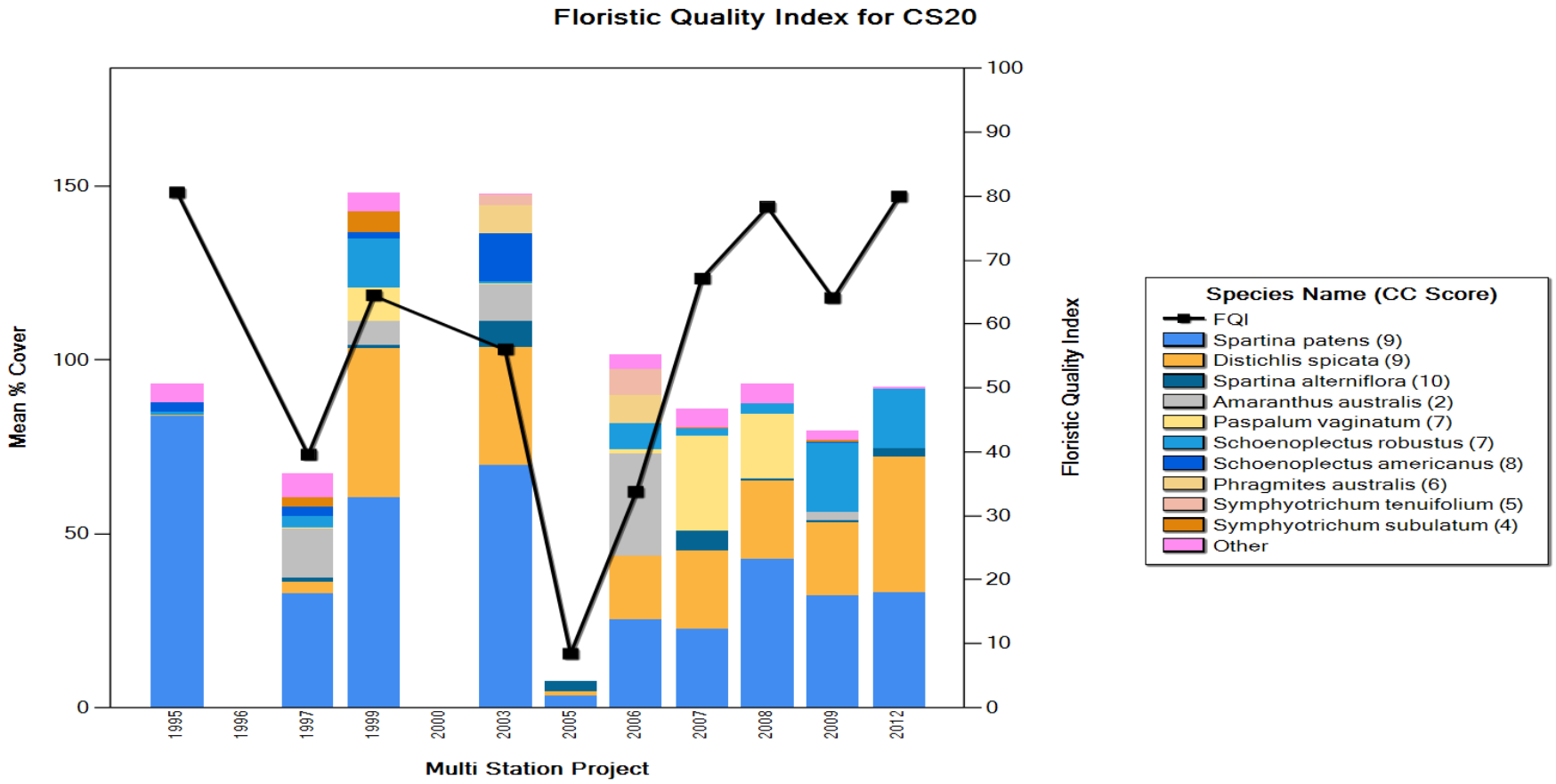
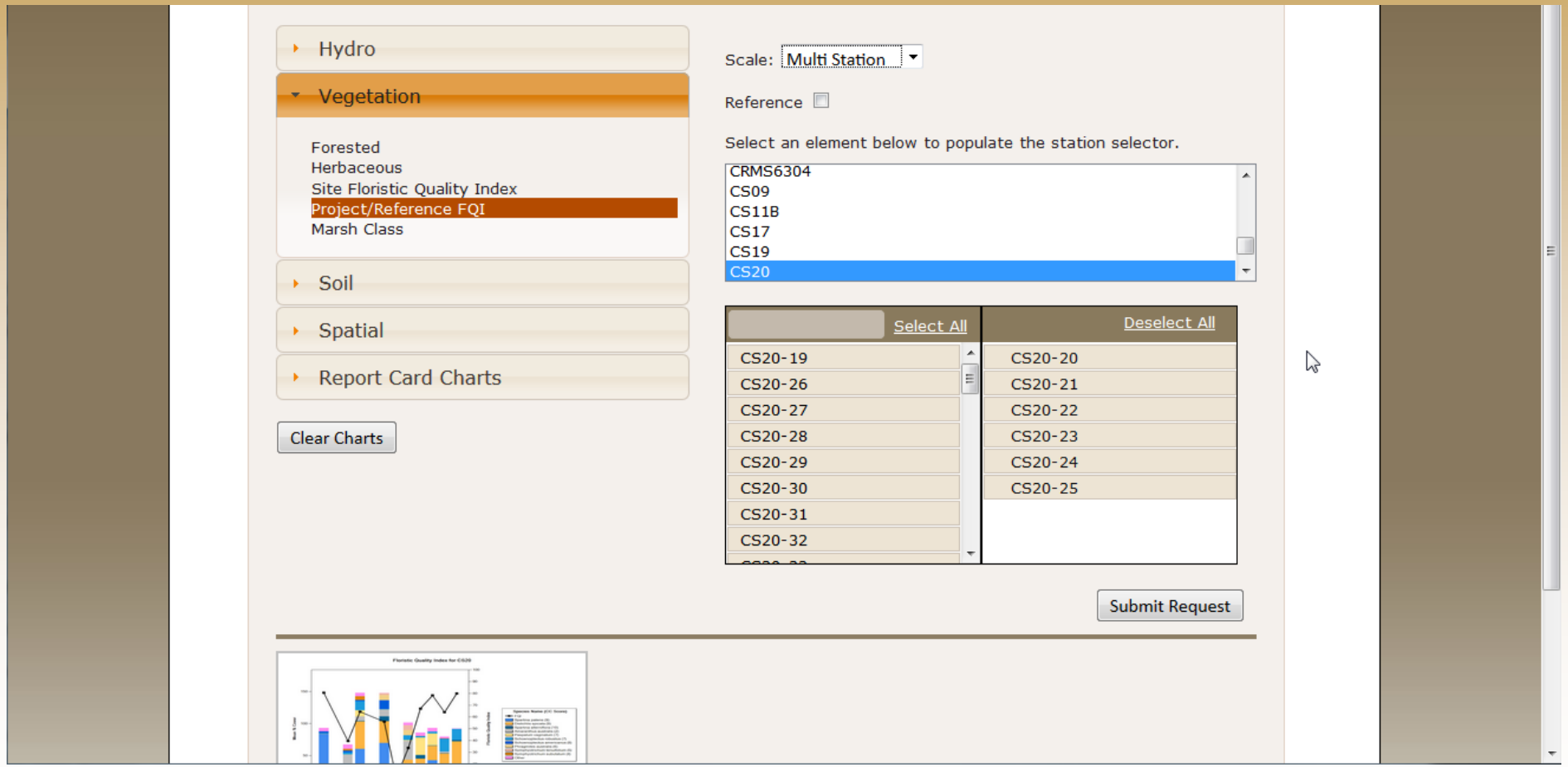


Users now have control over what stations go into Reference



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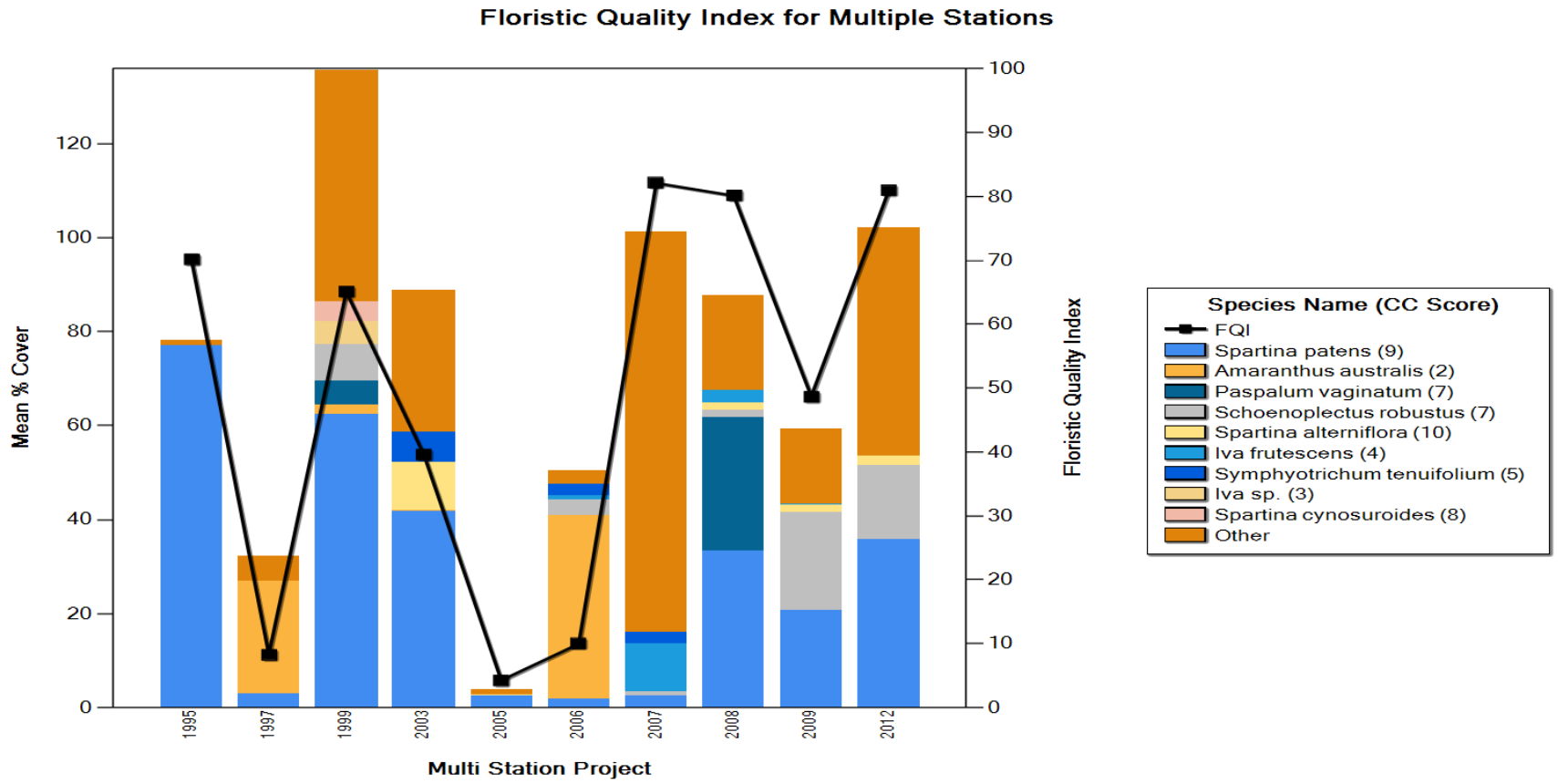

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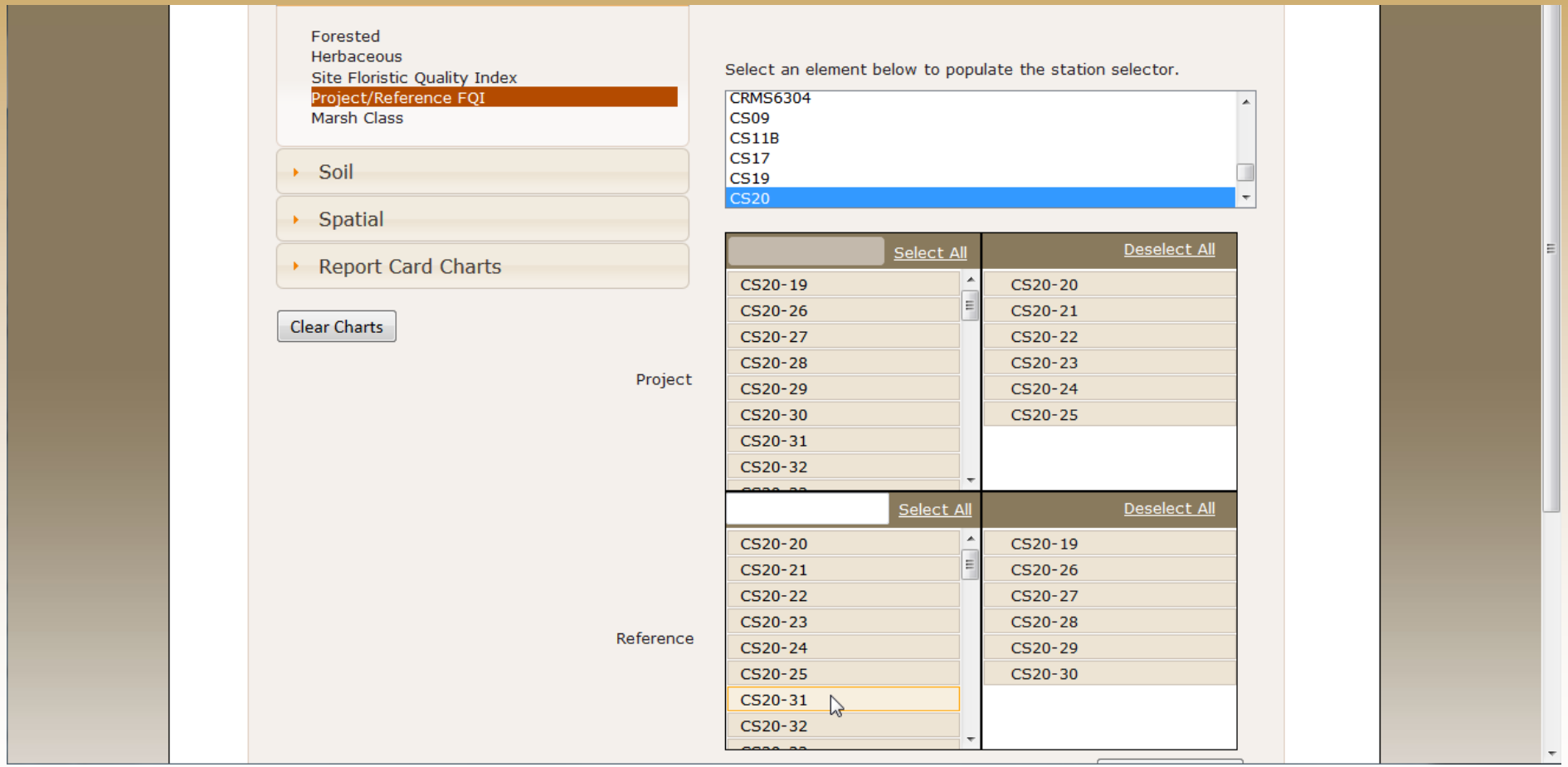

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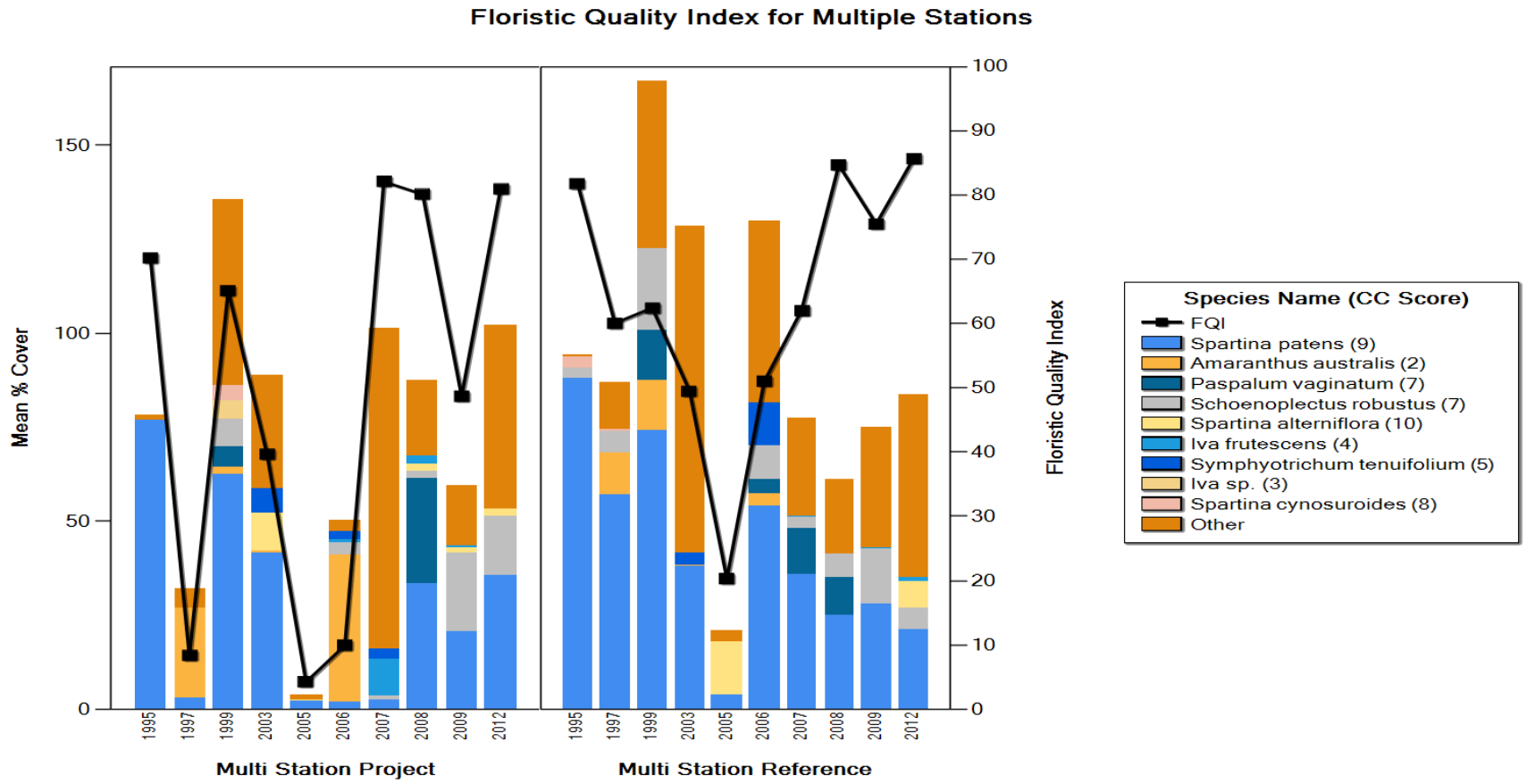
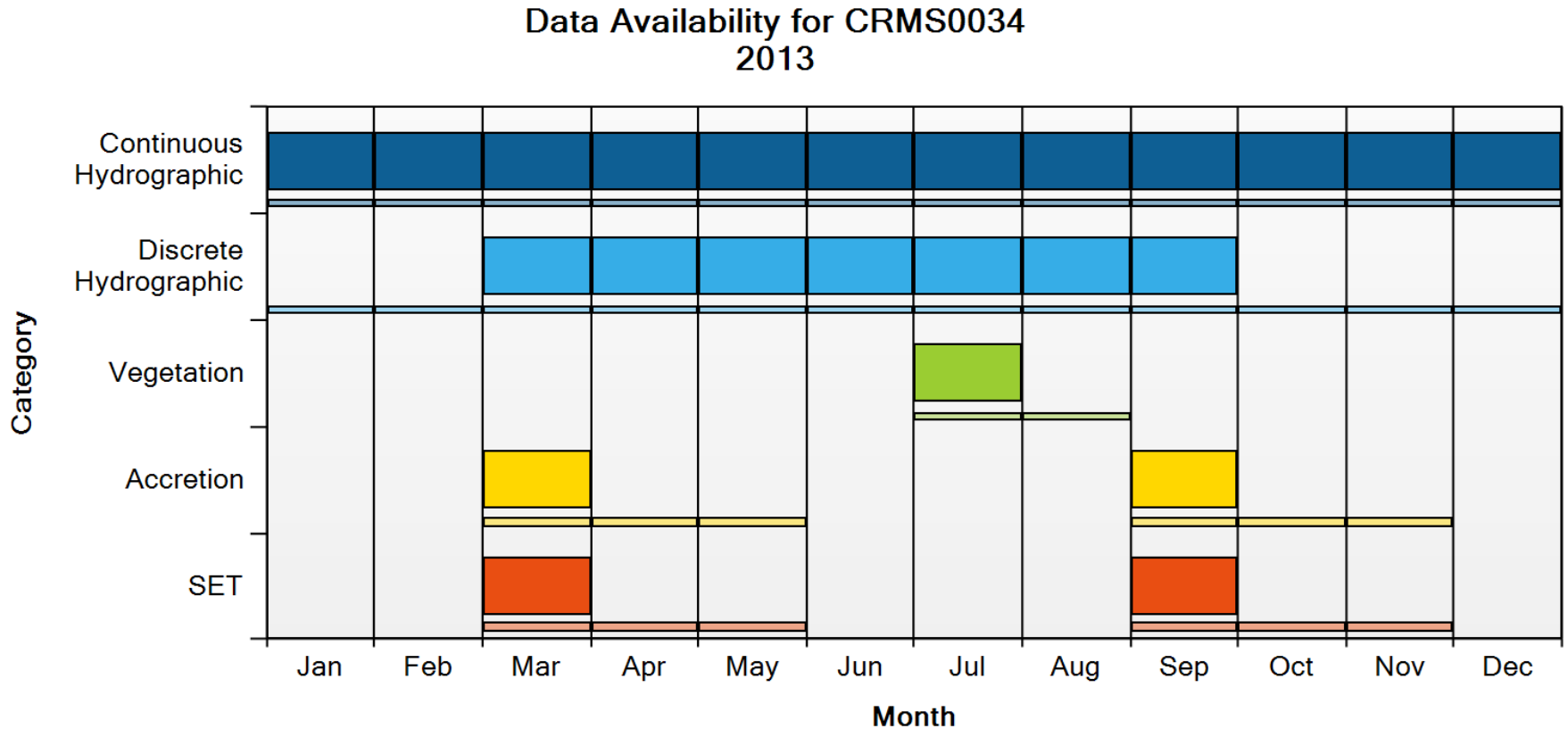
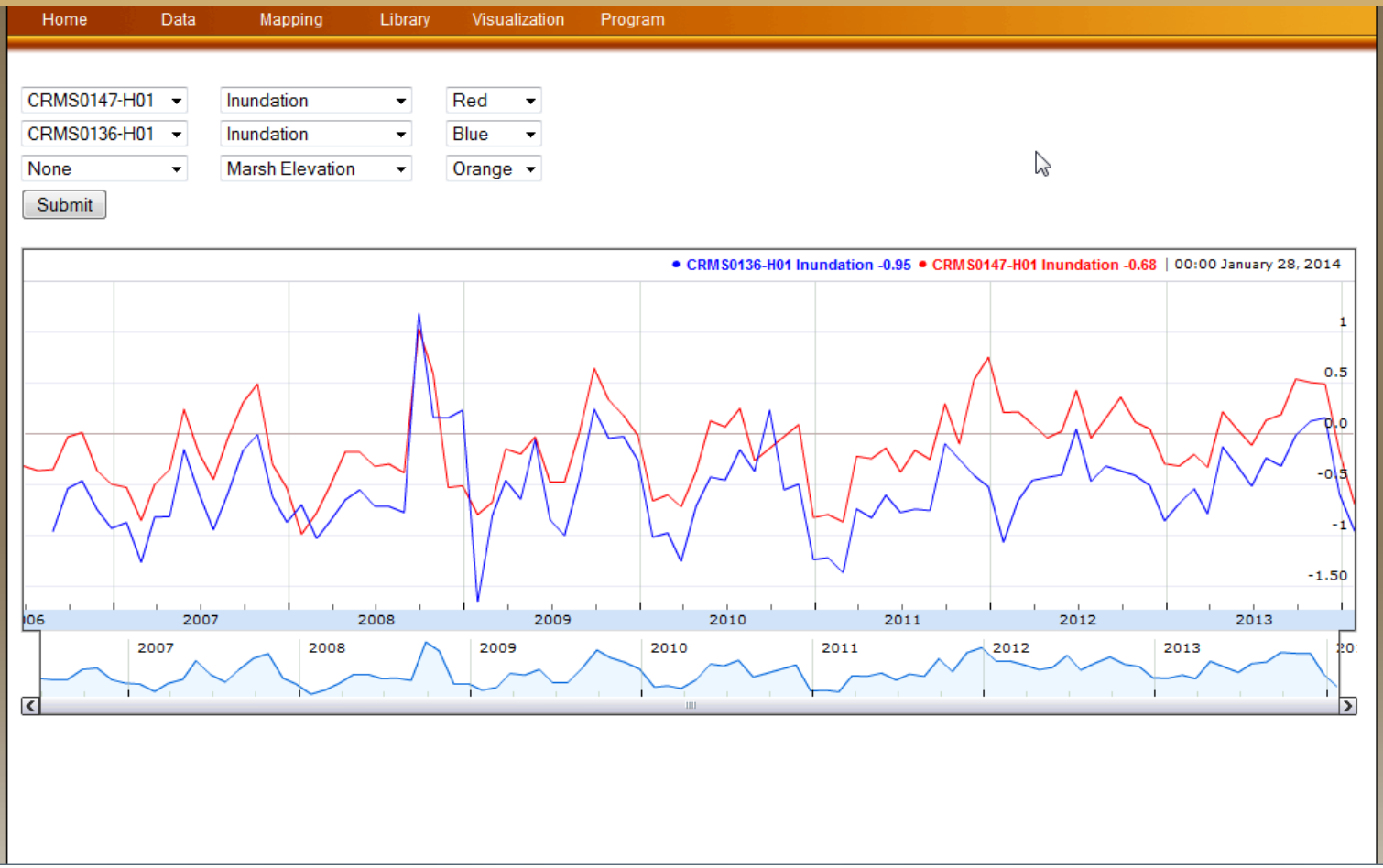


Data Availability chart now shows when data are expected



* Thin bar indicates typical data collection time range.

Inundation has been added to the Interactive Hydro Interface



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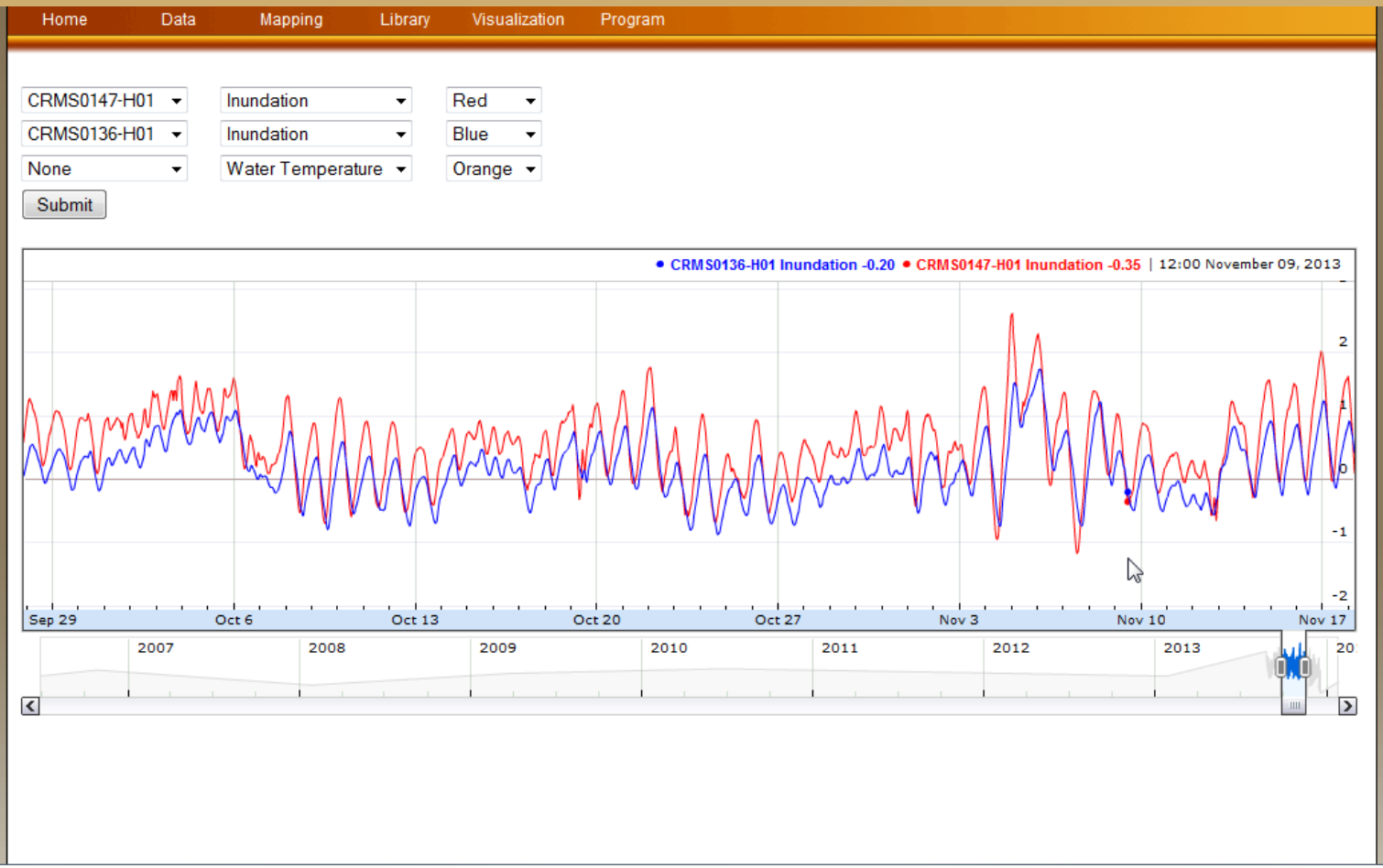
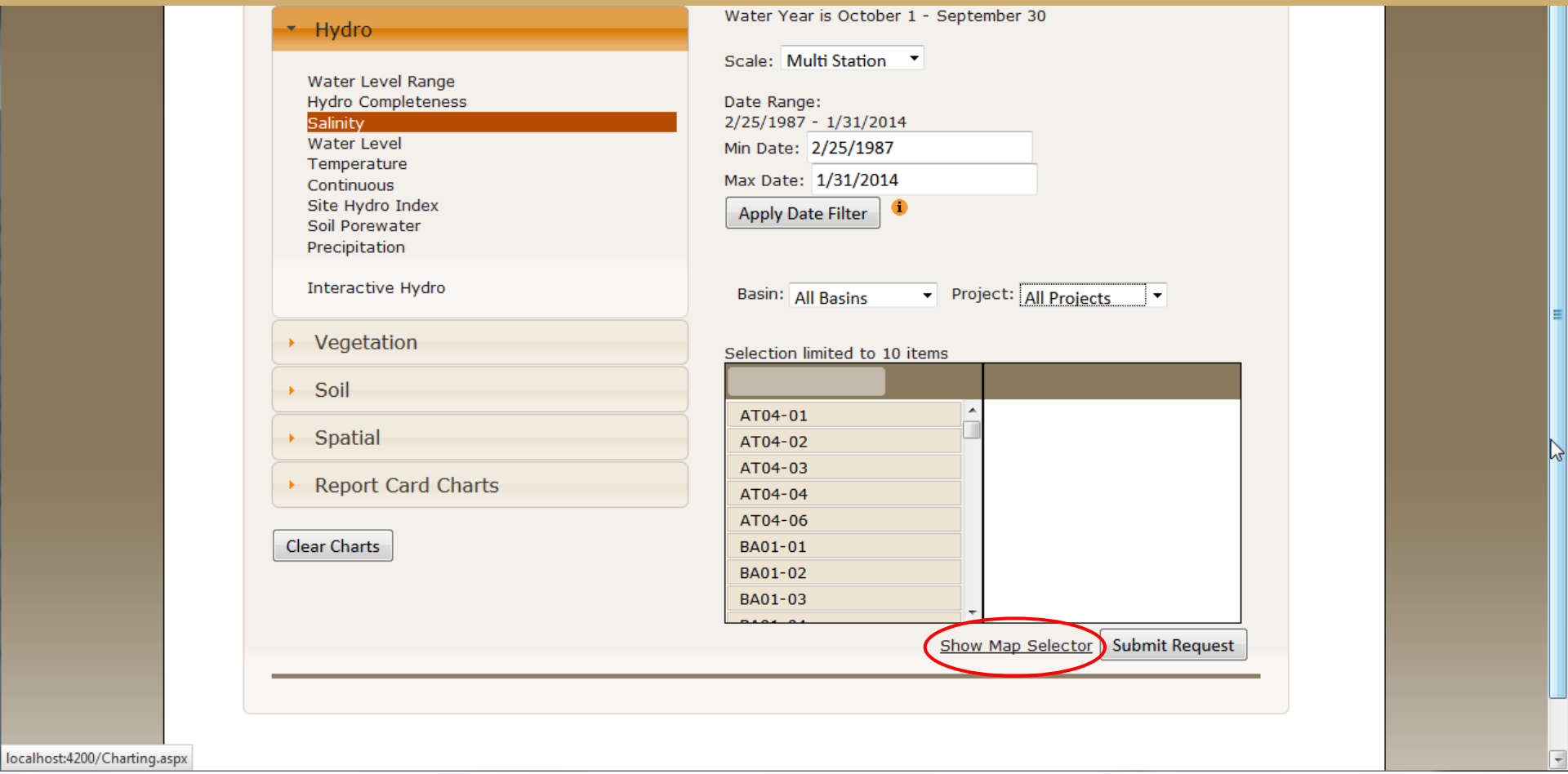


Spatial selection has been added to Charting



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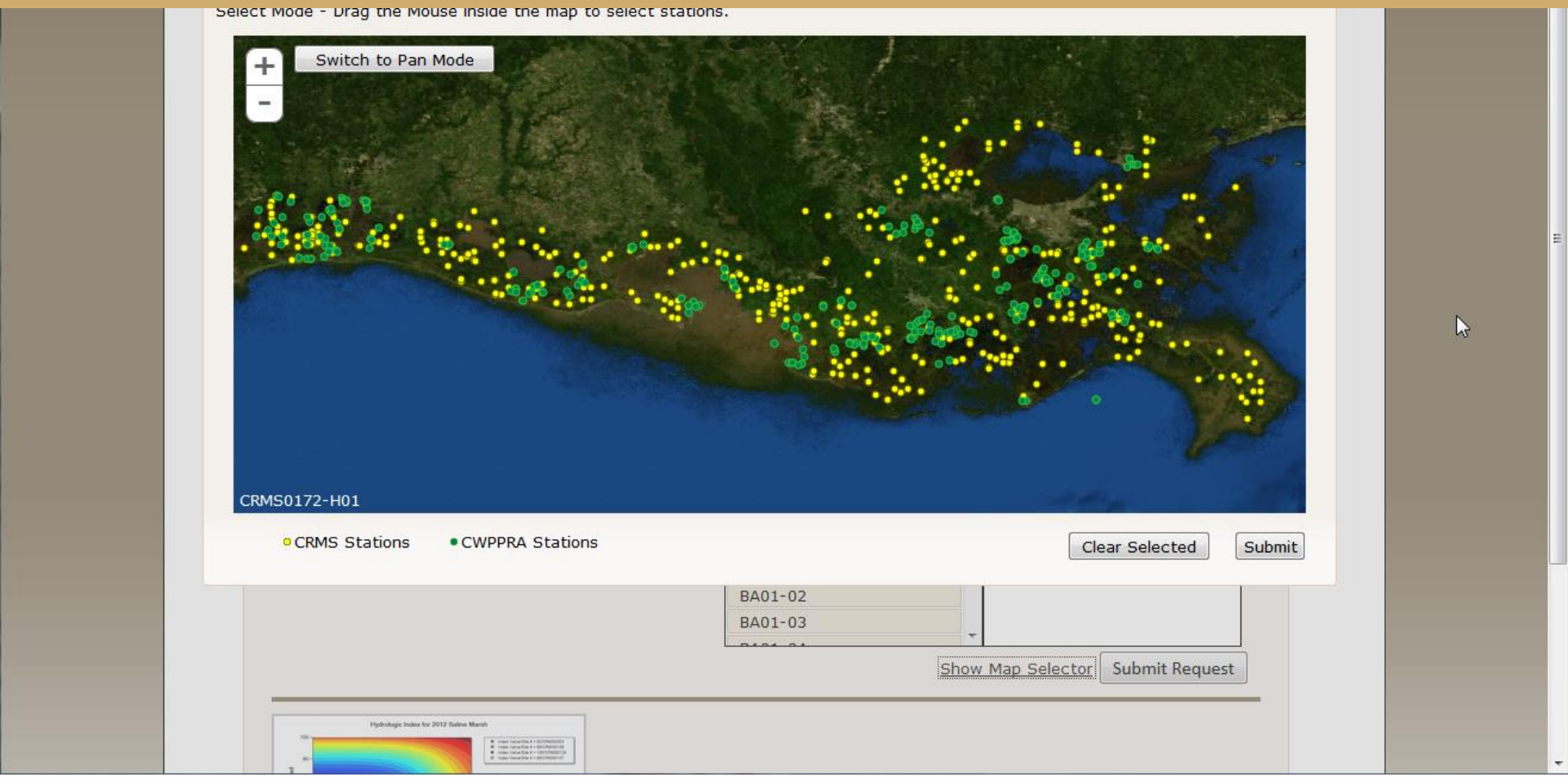

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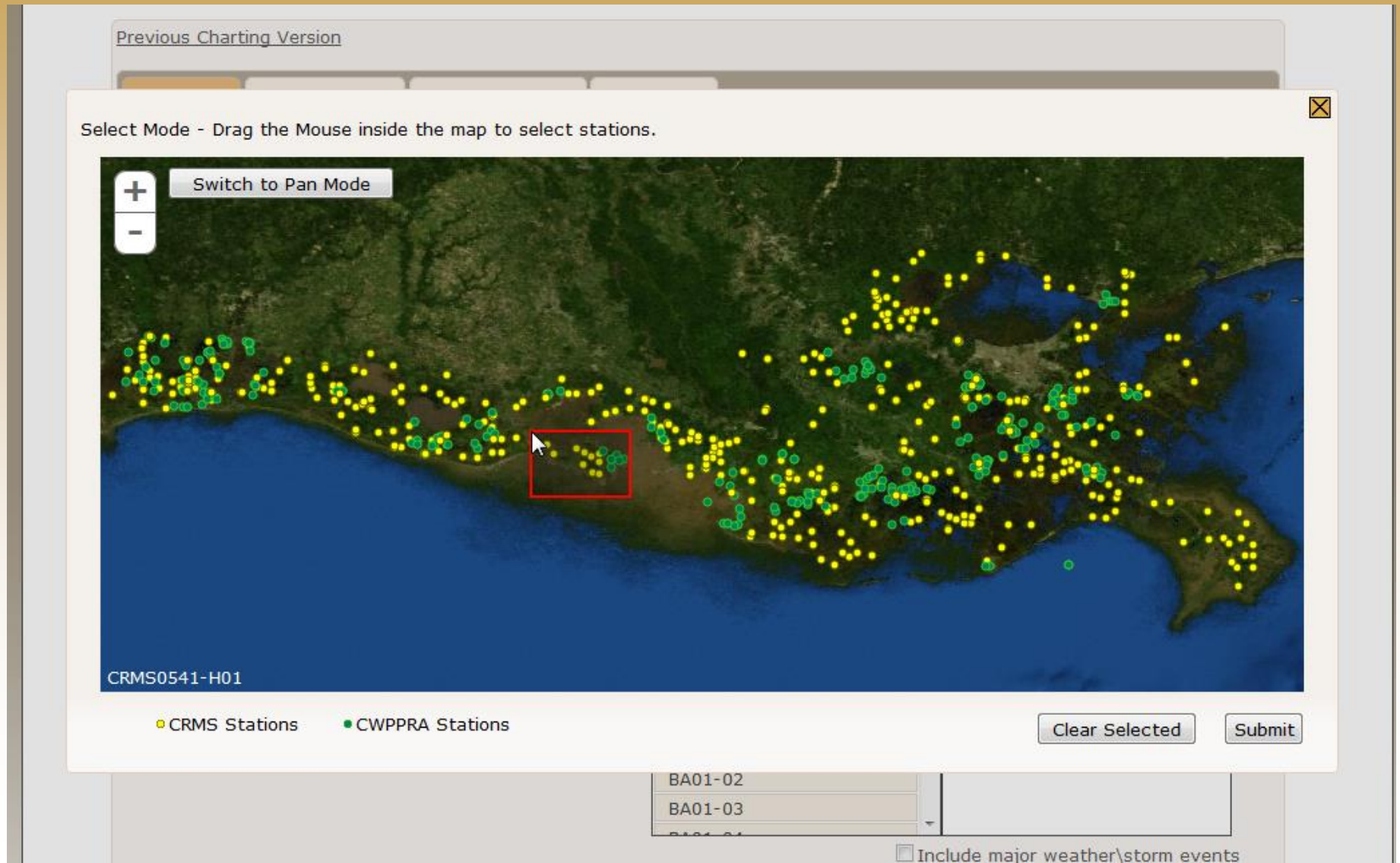

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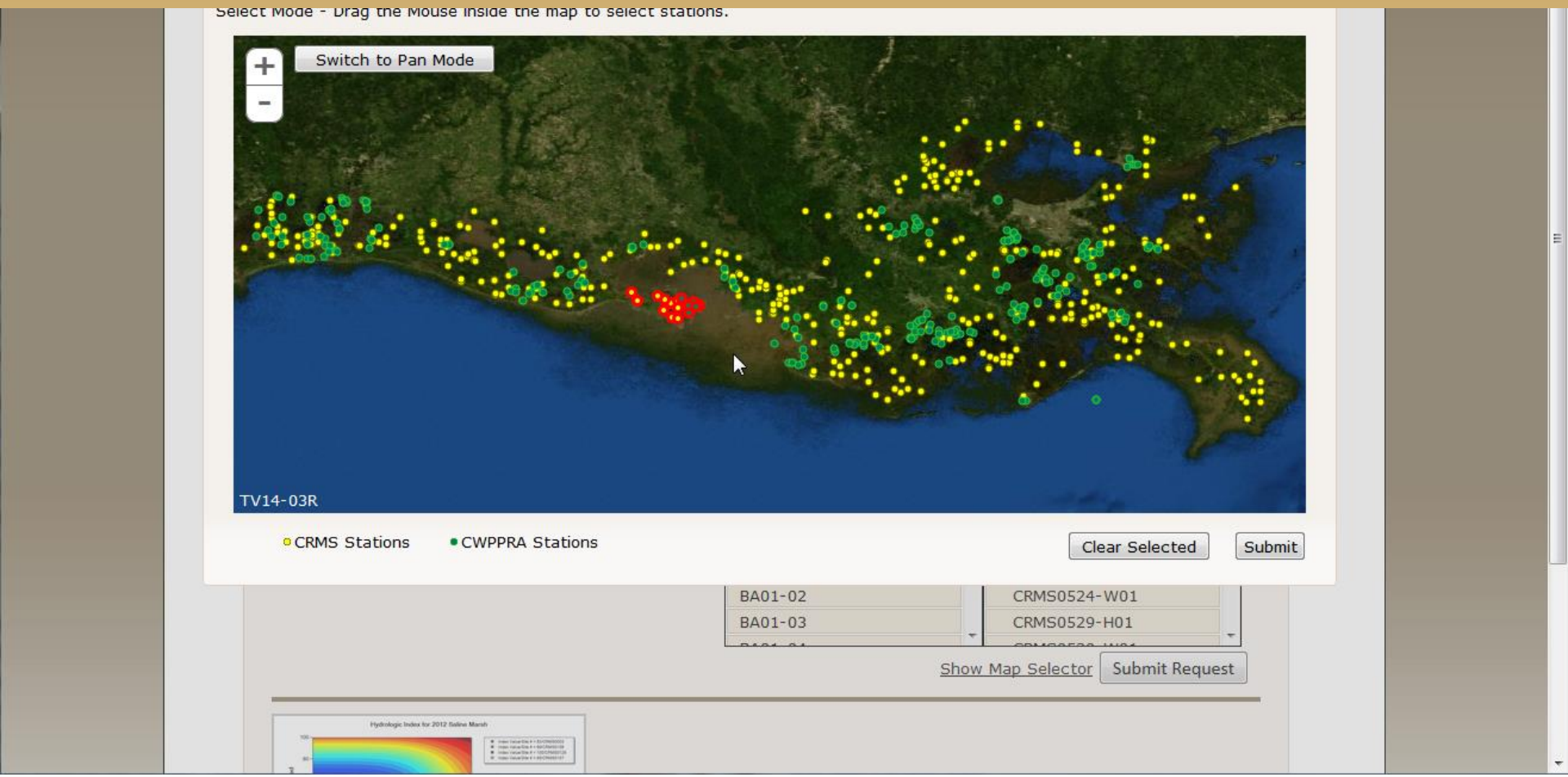

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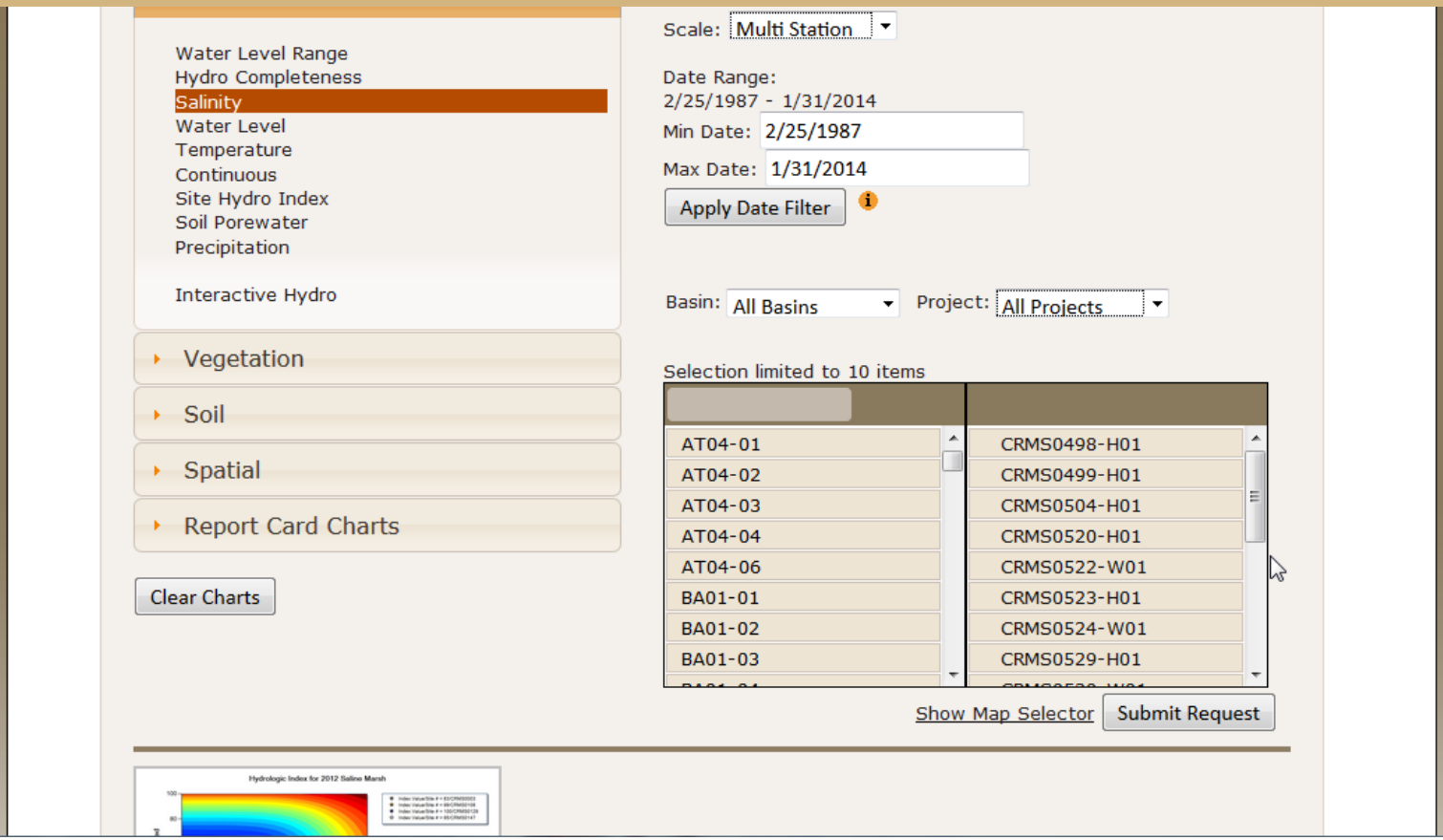

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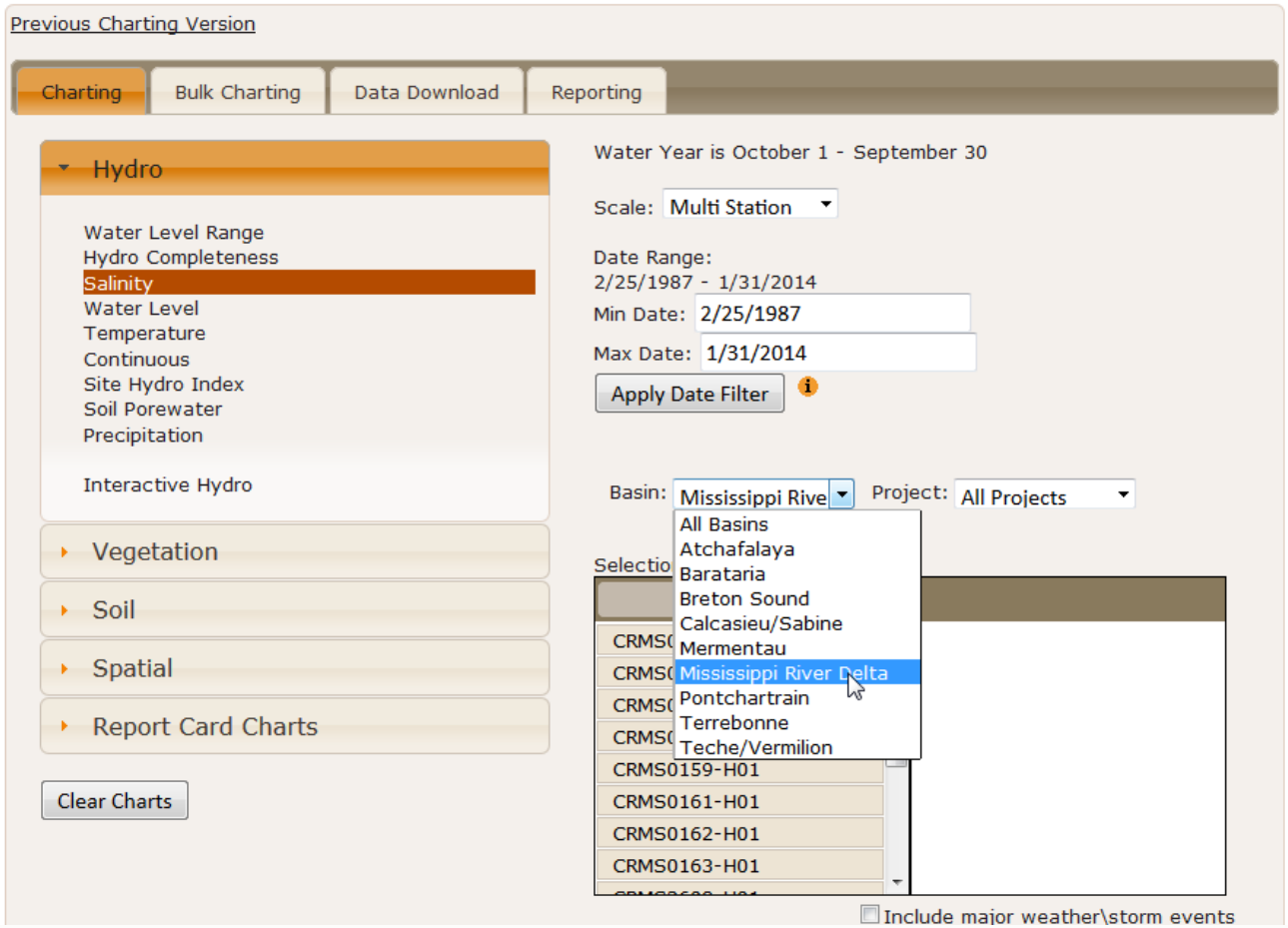

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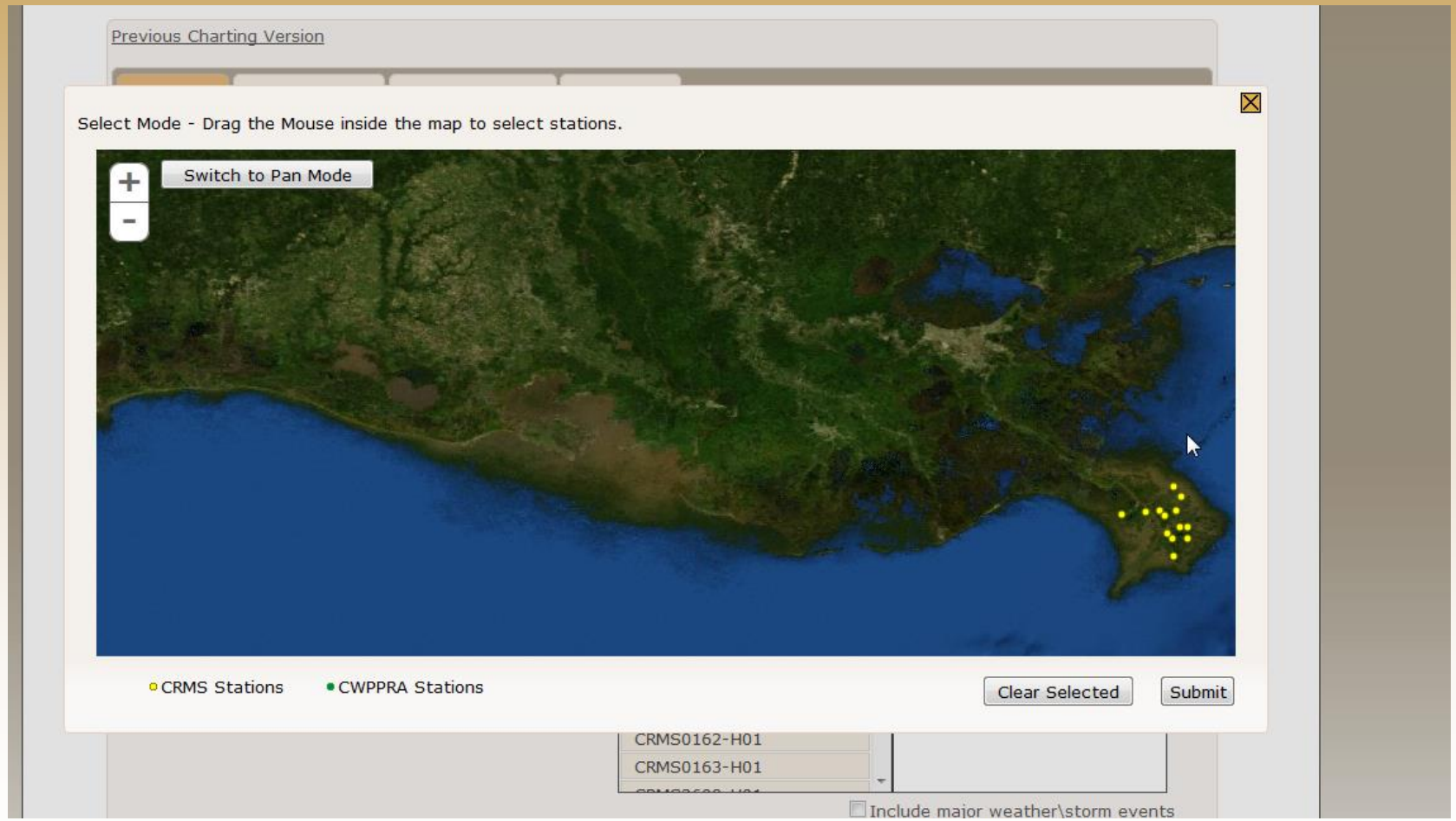
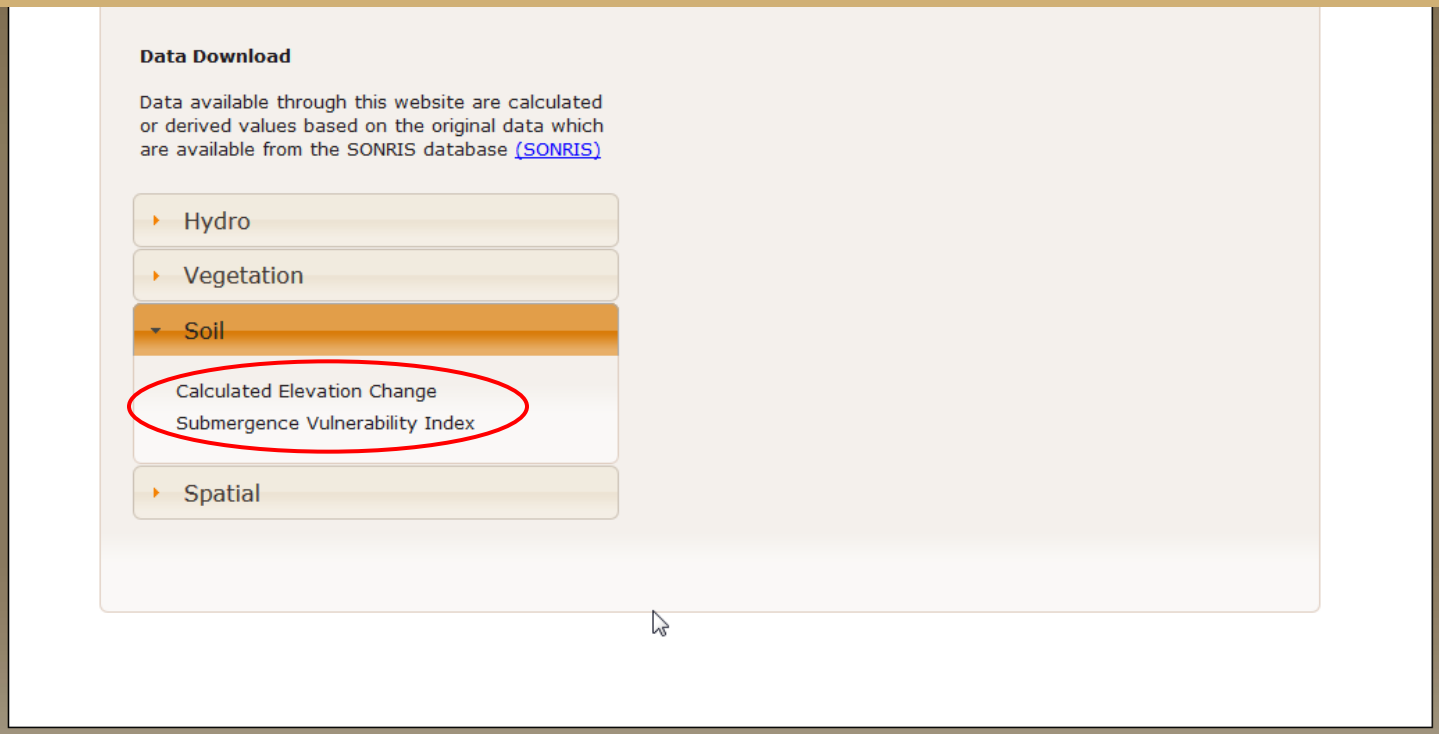
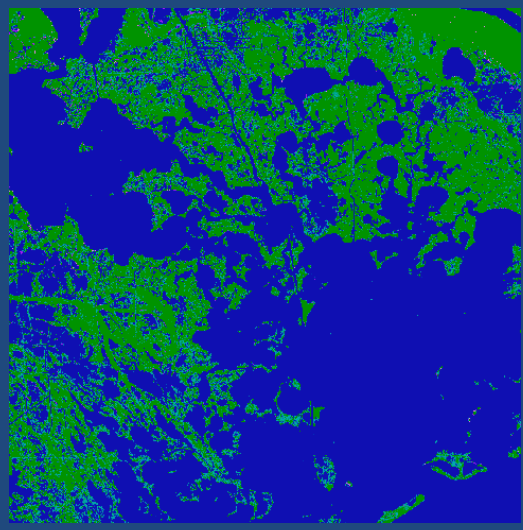


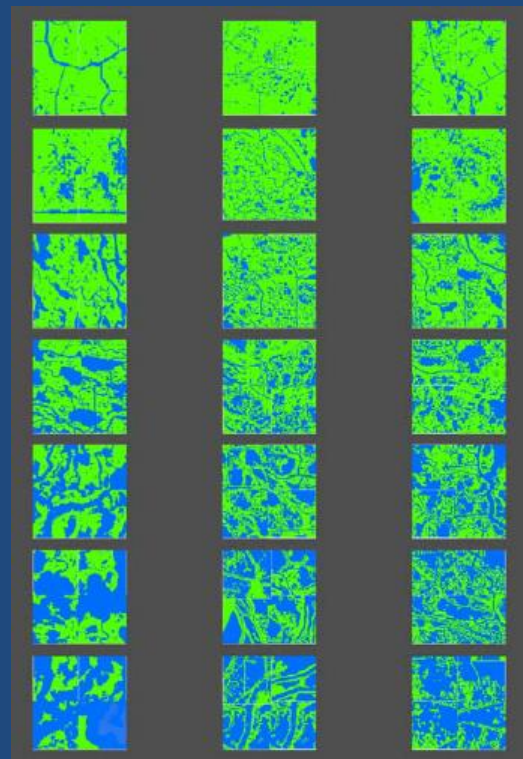
Added SVI and CEC to Data Download



Landscape Configuration Index

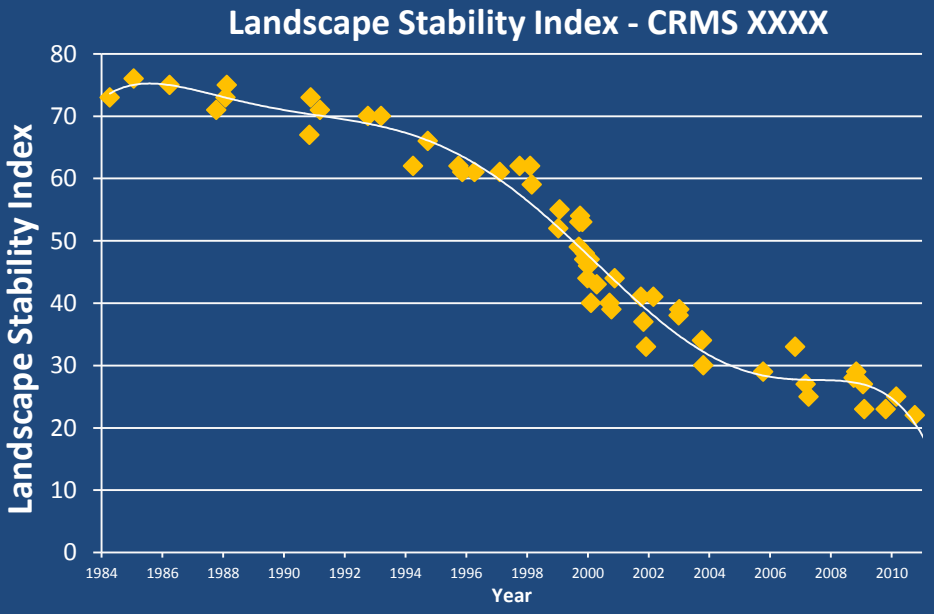
- CRMS monitors landscape composition (land/water change), but landscape configuration hasn't been investigated.
  - Extent to which a landscape is aggregated or fragmented.
- The disaggregation of a landscape plays a crucial role in the process of wetland loss and fragmentation.
  - Wetland loss generally involves the disaggregation of contiguous wetlands into more dispersed wetland and isolated patches.
  - As wetland loss and fragmentation proceed, wetlands become disaggregated and eventually ecological function is impaired (Saunders et al. 1991).
- Building on previous USACE funded work

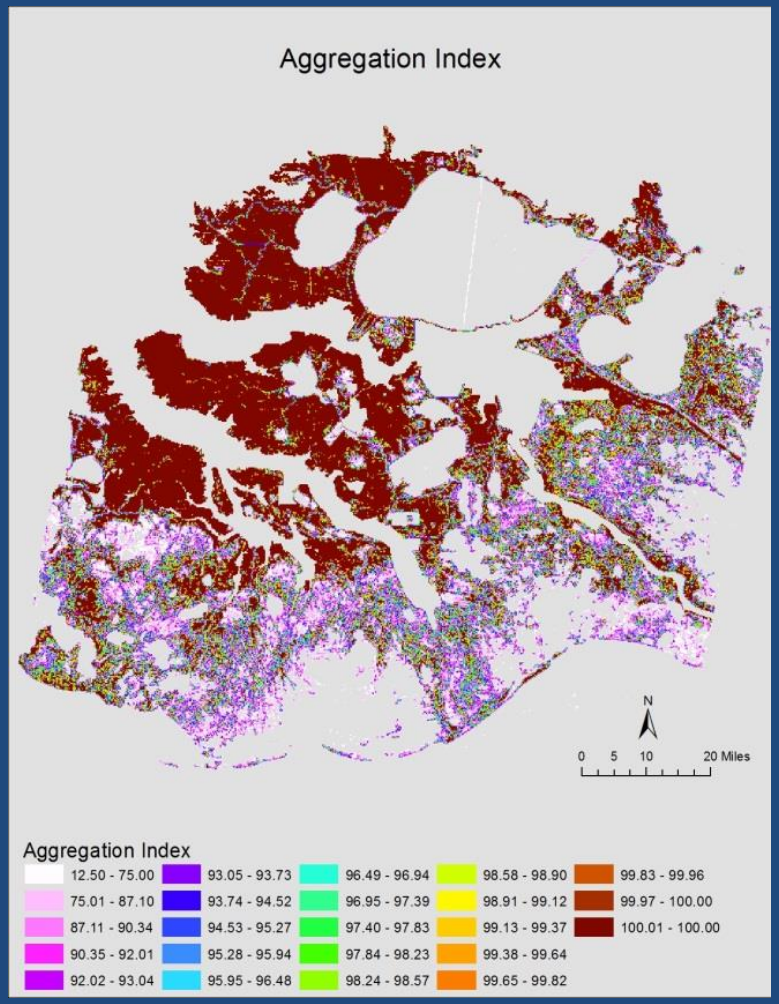




Landscape Configuration Index

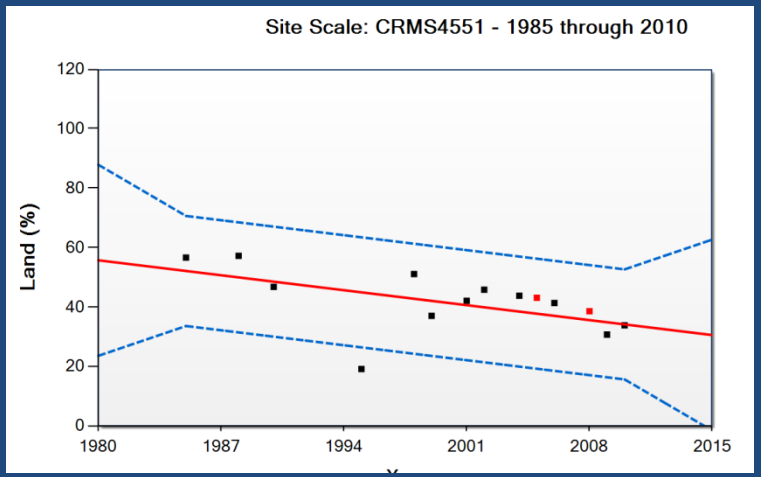
- **Uses Hypertemporal data, already acquiring**
- **Currently investigating an aggregation index as a metric to measure landscape stability at CRMS sites and the coastwide landscape.**
- **This will serve as an improvement over the WVA qualitative assessment of interspersion and will move toward a quantitative assessment.**



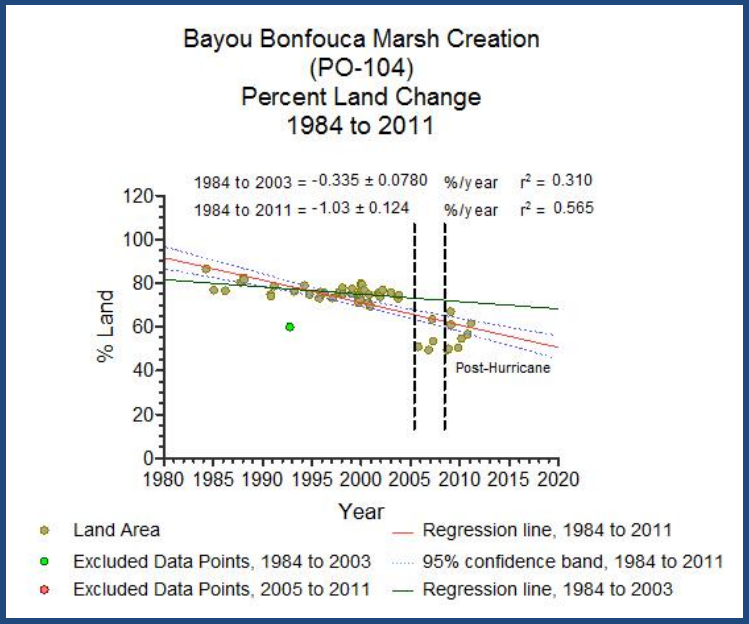


Hyper vs. Multi-temporal Wetland Change Analyses

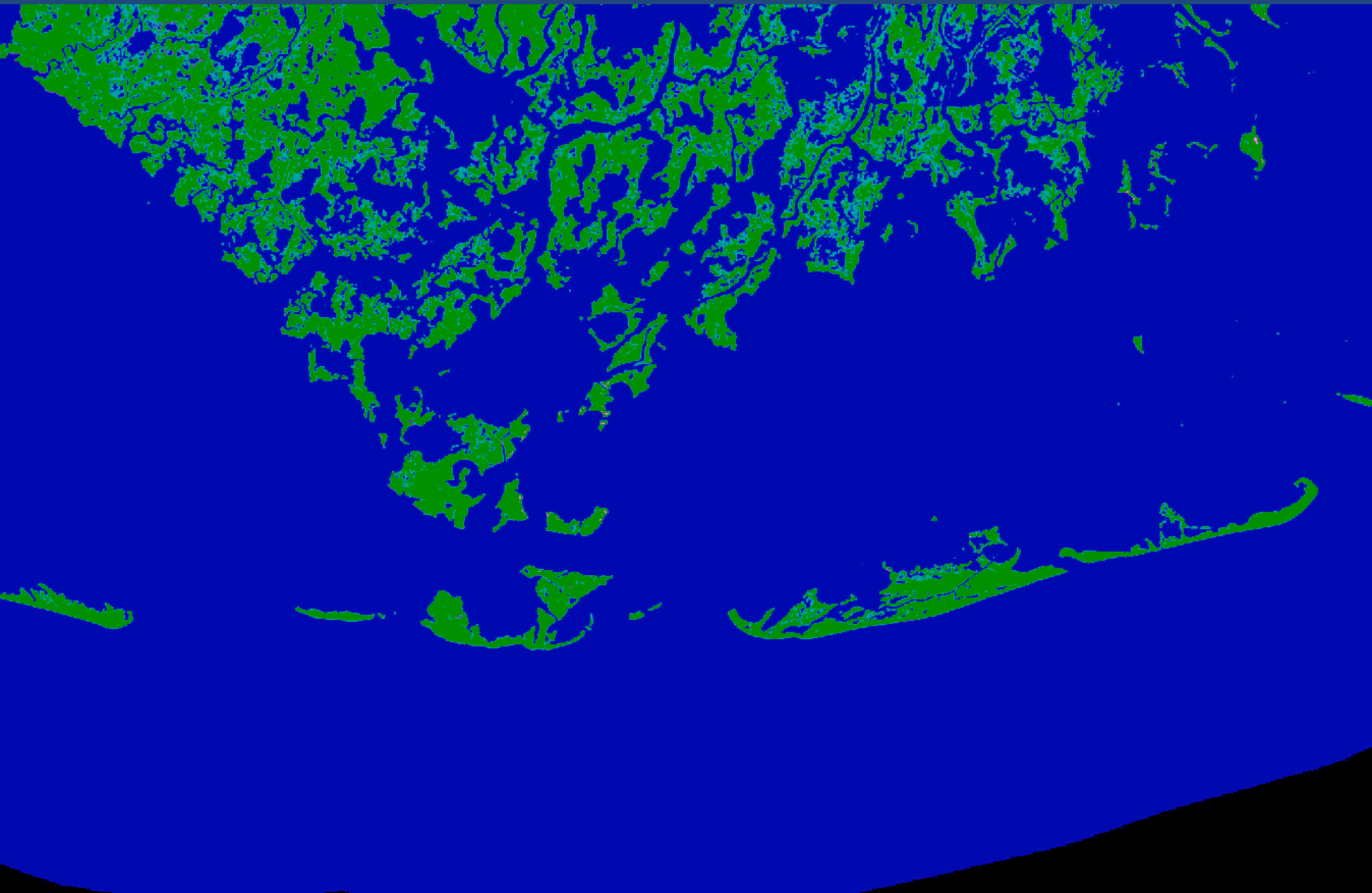
- Previous wetland change rates were calculated on 8 to 14 dates
- Variability in remotely-sensed land area estimates can often be attributed to normal environmental variability present during imagery acquisition.



- A hyper-temporal analysis will enable the removal of transient phenomena and enable isolation of "true" change
  - Ex: Temporary flooding or isolation of a disturbance
  - Could focus on project construction features
- Number of dates varies depending upon location of the coast (due to cloud conditions)
  - ranges from 56 to 124 dates
- 30m resolution
- 1984 thru 2011 – Landsat 5 and Landsat 7
- 2013 and beyond – Landsat 8



Hyper-temporal Wetland Change Analyses



Works in Progress

- **Forested Floristic Quality Index**
- **Vegetation Volume Index**
- **Vegetation Community Salinity Tool**
- **Porewater vs. Surface Salinity Analysis**

- **IDEAS:**
  - **Station level visualization**
  - **Rework interface for 1km spatial data**
  - **Classify Tool –**
    - **Develop an outlier visualization**

  Examples:

  1) **2 STD of the mean for salinity based on previous annual site means**
  2) **Shallow subsidence exceptionally high**

  - **Suggestions???**

Questions, comments, complaints, or large data requests……..

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