

FWRMC Monitoring Catalog Workgroup: Update



Monitoring Catalog Workgroup: Update

- Reviewed & evaluated the following Catalogs & Atlases:
- **GOMA Catalog of Monitoring Programs** (catalog - in development)
- **NOAA GOM Digital Atlas** - <http://gulfatlas.noaa.gov/>
- **EPA My Environment** - <http://www.epa.gov/myenvironment/>
- **USGS Water Data Discovery** - <http://water.usgs.gov/data/>
- **USGS SOFIA (South Florida Information Access)** - <http://sofia.usgs.gov/>
- **Gulf of Mexico Ecosystem Portal** –
<http://ecowatch.ncddc.noaa.gov/catalog/gom>
- **SECOORA Biological and Habitat GIS** -
http://ocean.floridamarine.org/biohab_gis/
- **FWC GAME (Geospatial Assessment of Marine Resources)** -
<http://ocean.floridamarine.org/GAME/Viewer.htm>

Monitoring Catalog Workgroup: Update

Evaluations (cont'd):

- **FWC Marine Resource Geographic Information System** -
<http://ocean.floridamarine.org/mrgis/>
- **DEP MapDirect (STORET focus)** -
<http://ca.dep.state.fl.us/mapdirect/?focus=storet>
- **SRWMD Water Data Portal** -
<http://www.mysuwanneeriver.com/index.aspx?NID=345>
- **SWFWMD Water Management information System** -
<http://www.swfwmd.state.fl.us/data/wmdbweb/disclaimer.htm>
- **Water Atlas (FL Center for Community Design & USF)** -
<http://www.wateratlas.usf.edu/>
- **Comprehensive Everglades Restoration Plan (CERP)** -
http://www.evergladesplan.org/pm/projects/cerp_gis.aspx

Monitoring Catalog Workgroup: Update

review focused on:

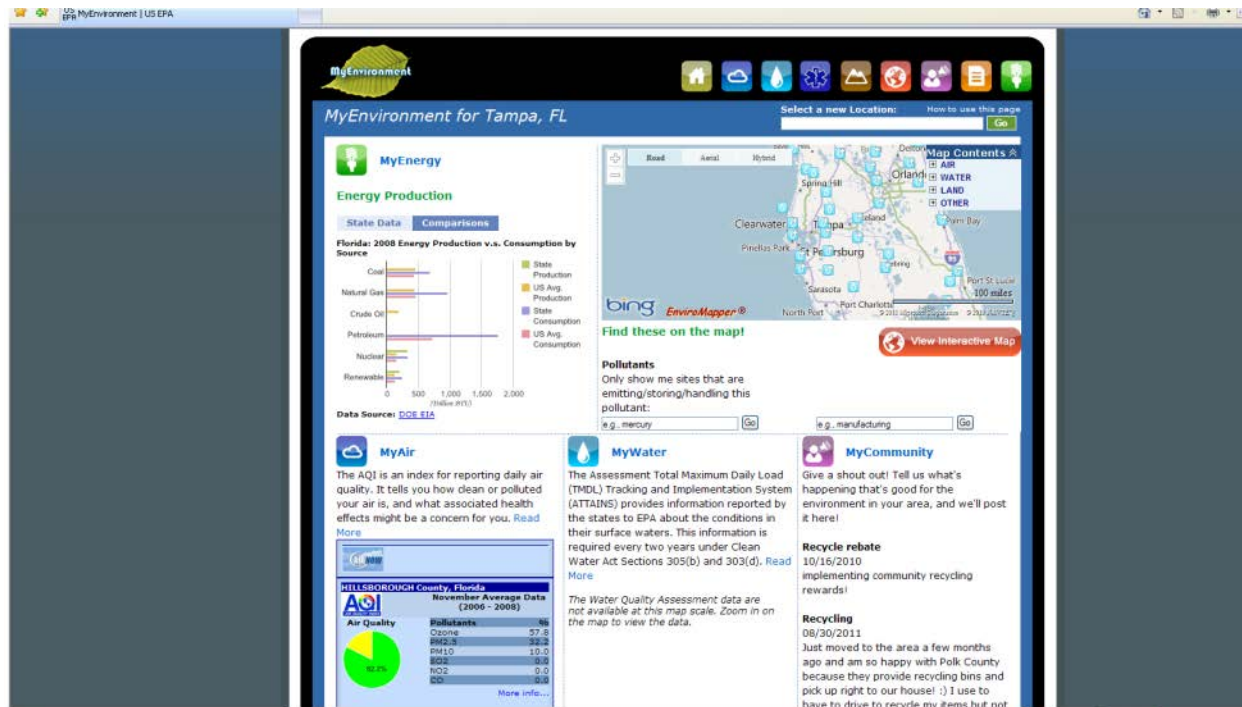
- user interface
- ability to search metadata for program/project information
- ability for individual entities to upload stations/metadata.

- NOAA Gulf of Mexico Digital Atlas—map view with tabs; static - ideal for linking to other organizations' interactive stand-alone websites; no searchable metadata, or individual entity upload



Monitoring Catalog/Atlas Evaluation Highlights

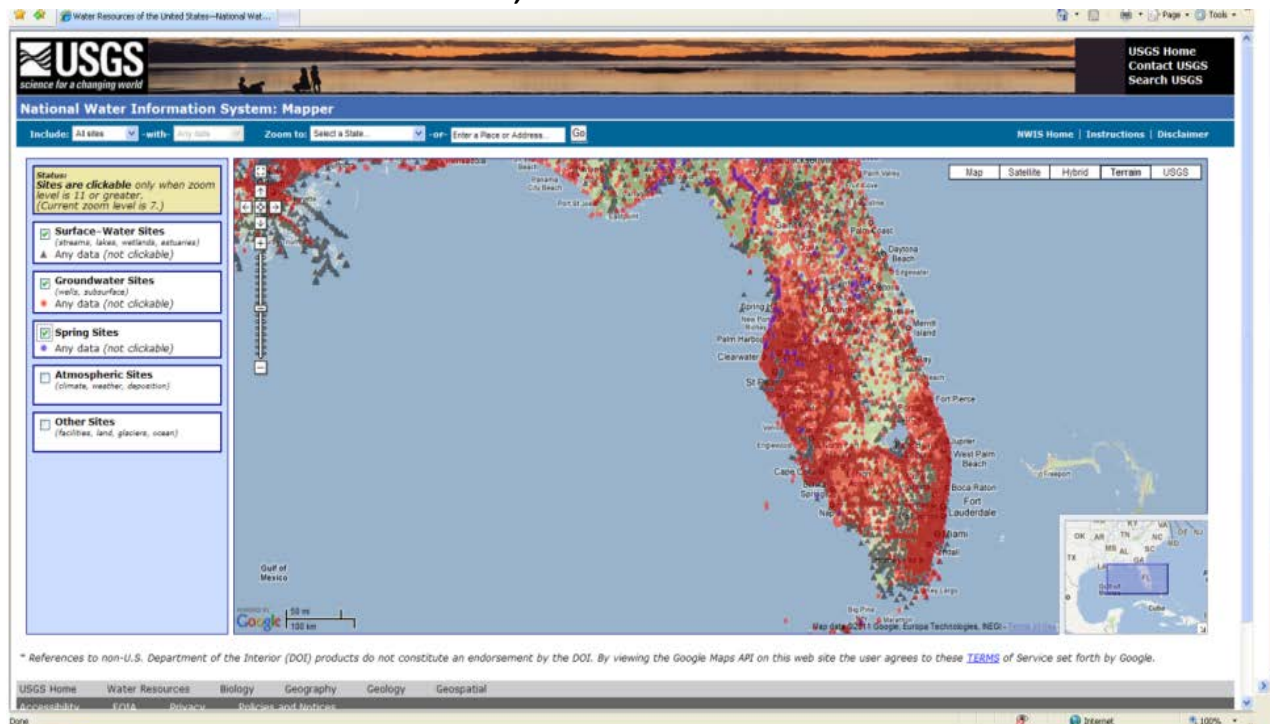
- EPA My Environment – “report card” appearance; limited ability to search metadata; data is uploaded via STORET upload



<http://www.epa.gov/myenvironment/>

Monitoring Catalog/Atlas Evaluation Highlights

- USGS Water Data Discovery - good overall map view that includes stations; limited searchable metadata; unknown if other entities can add data



- <http://water.usgs.gov/data/>

Monitoring Catalog/Atlas Evaluation Highlights

- USGS SOFIA (South Florida Information Access): difficult geographic navigation with maps present only for individual projects; easy to navigate, searchable metadata; unknown how data from different entities is uploaded

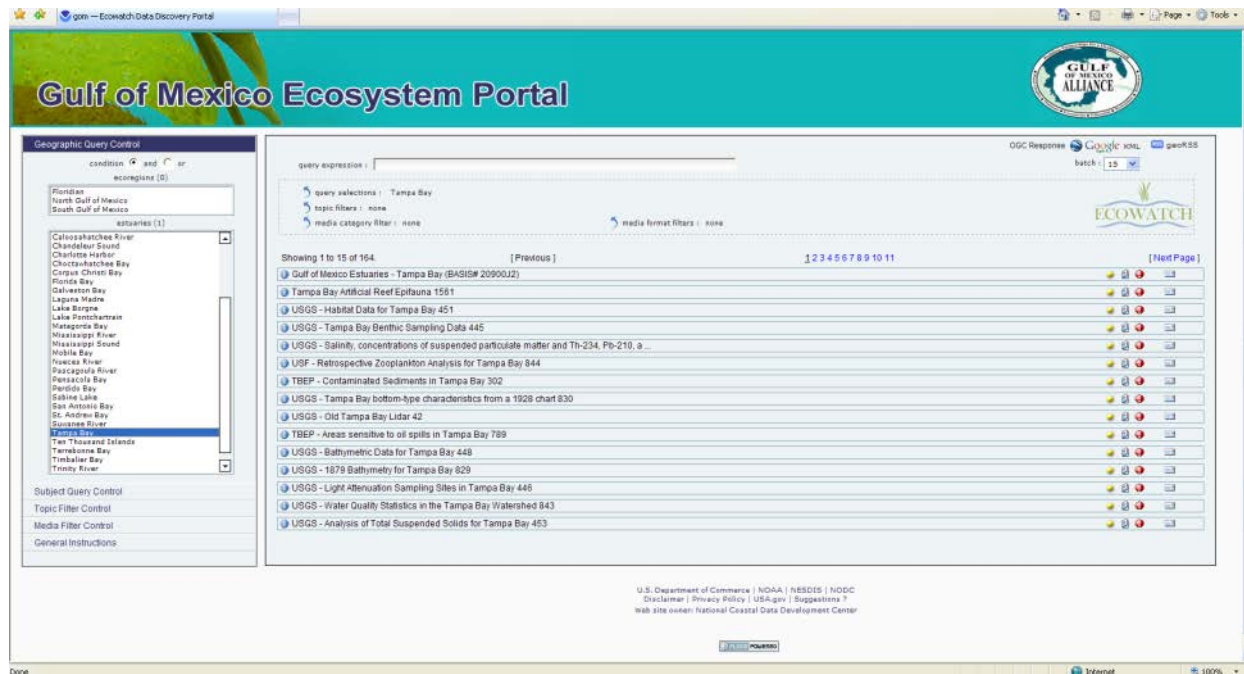
The screenshot shows the USGS South Florida Hydrology Data Download web application. The page has a header with the USGS logo and the text "science for a changing world" and "South Florida Information Access - Data Exchange". Below the header is a navigation menu with links for "Hydrology Data", "Data", "Help", "Additional Data", "Metadata", "Format", "Methodology", "Location Map", and "Sites Listing". There are also links for "Related Projects" such as "Coastal Gradients of Flow, Salinity and Nutrients", "Freshwater Flows to Northeastern FL Bay", "Hydrologic Monitoring in Joe Bay", "SW FL Coastal & Wetland Systems Monitoring", "Flow Monitoring Along the Tidal Caloosahatchee River & Tributaries", "Hydrodynamic & Salinity Char. of Rivers and Estuaries of the Ten Thousand Islands", and "Empirical Studies in Support of a Disk".

The main content area is titled "South Florida Hydrology Data Download". It contains a "Time Frame" section with a text input for "Enter a date range in the format 'YYYYMMDD' (data at 15 minute intervals from 1995-10-01 to 2009-09-30; not all stations have full range of data--coverage for each station is detailed in the Stations table)." and a "Data Variables" section with a list of variables to select for download. The "Stations" section at the bottom allows users to select stations for which they would like to download data.

A map of South Florida is displayed on the right side of the page, showing the locations of various monitoring stations. A callout box for the "Card Sound Canal 251816080232200" provides details about the station, including its location (Latitude: 25°18'18" Longitude: -80°23'23"), parameters (Stage, Surface Temperature, Bottom Temperature, Surface Salinity, Bottom Salinity, Discharge, Filtered Discharge), and links to "MVIS Real-time Data" and "MVIS Daily Data".

Monitoring Catalog/Atlas Evaluation Highlights

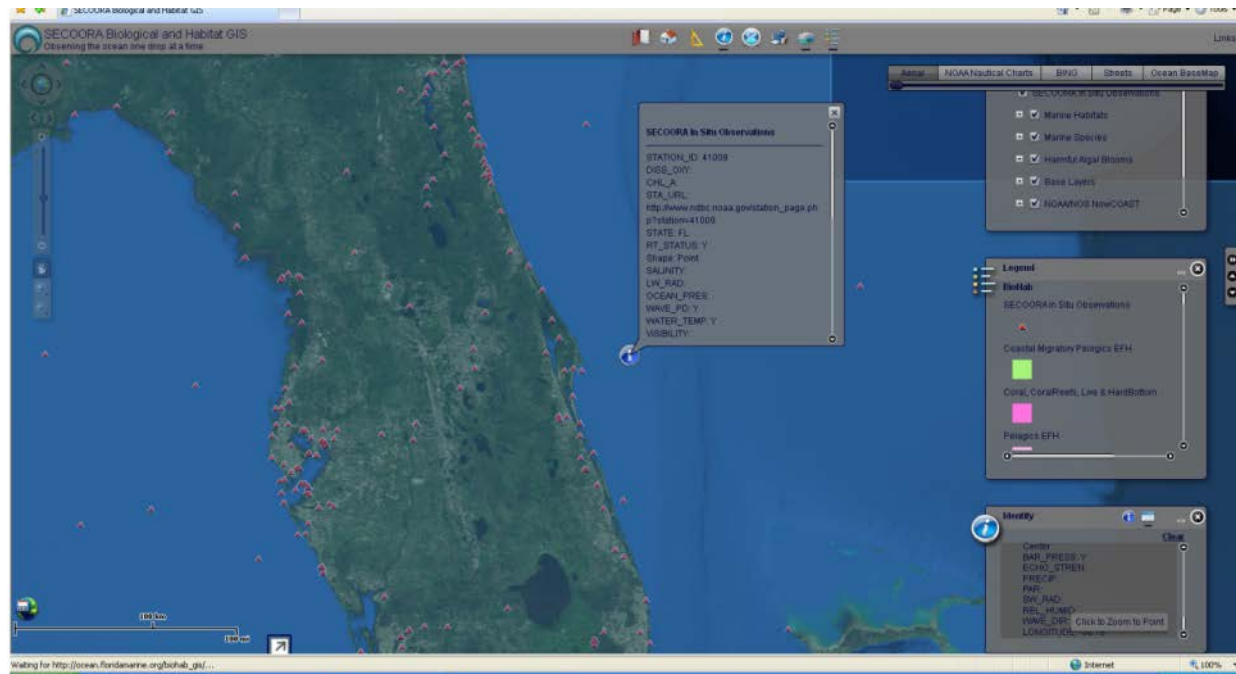
- **Gulf of Mexico Ecosystem Portal**: difficult to navigate; limited metadata searchability; unknown how data from different entities is uploaded



- <http://ecowatch.ncddc.noaa.gov/catalog/gom>

Monitoring Catalog/Atlas Evaluation Highlights

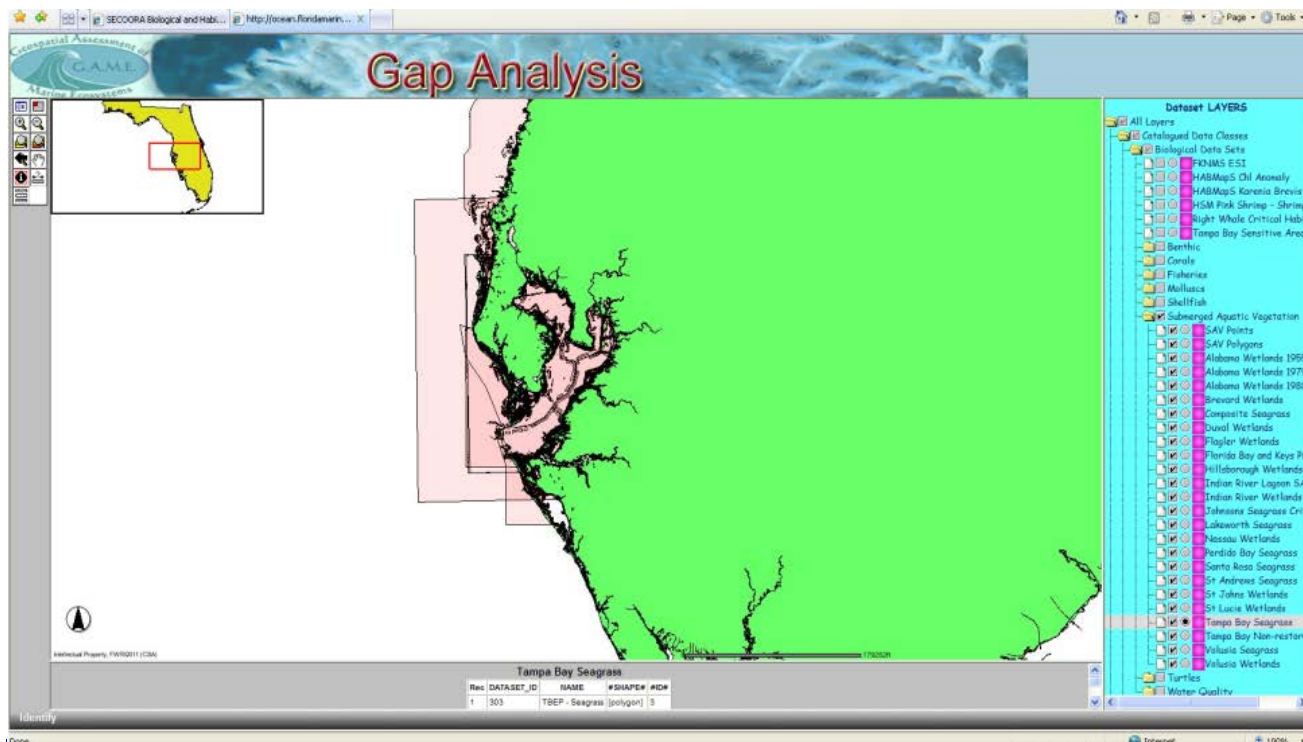
- **SECOORA Biological and Habitat GIS**: excellent overview map, easy navigation, selection tool not ideal; limited metadata available; unknown if data entry available to different entities



http://ocean.floridamarine.org/biohab_gis/

Monitoring Catalog/Atlas Evaluation Highlights

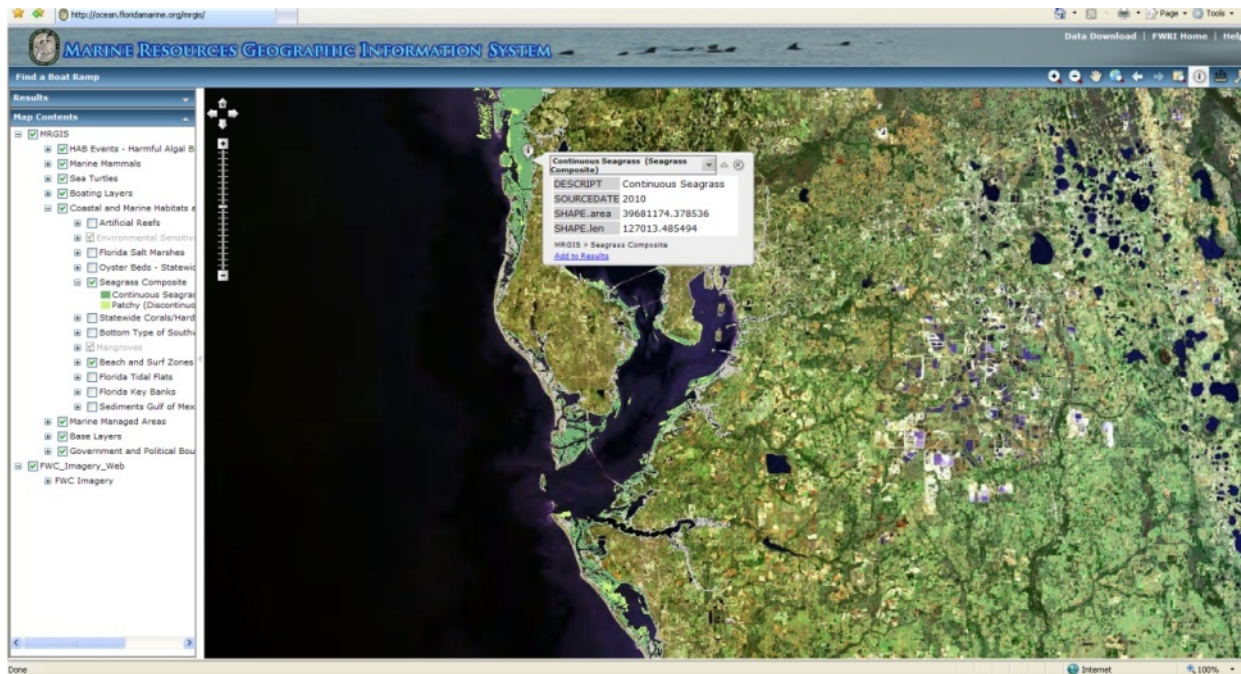
- **GAME:** not easy to navigate; limited metadata; unknown if different entities can upload data; may no longer be maintained?



- <http://ocean.floridamarine.org/GAME/Viewer.htm>

Monitoring Catalog/Atlas Evaluation Highlights

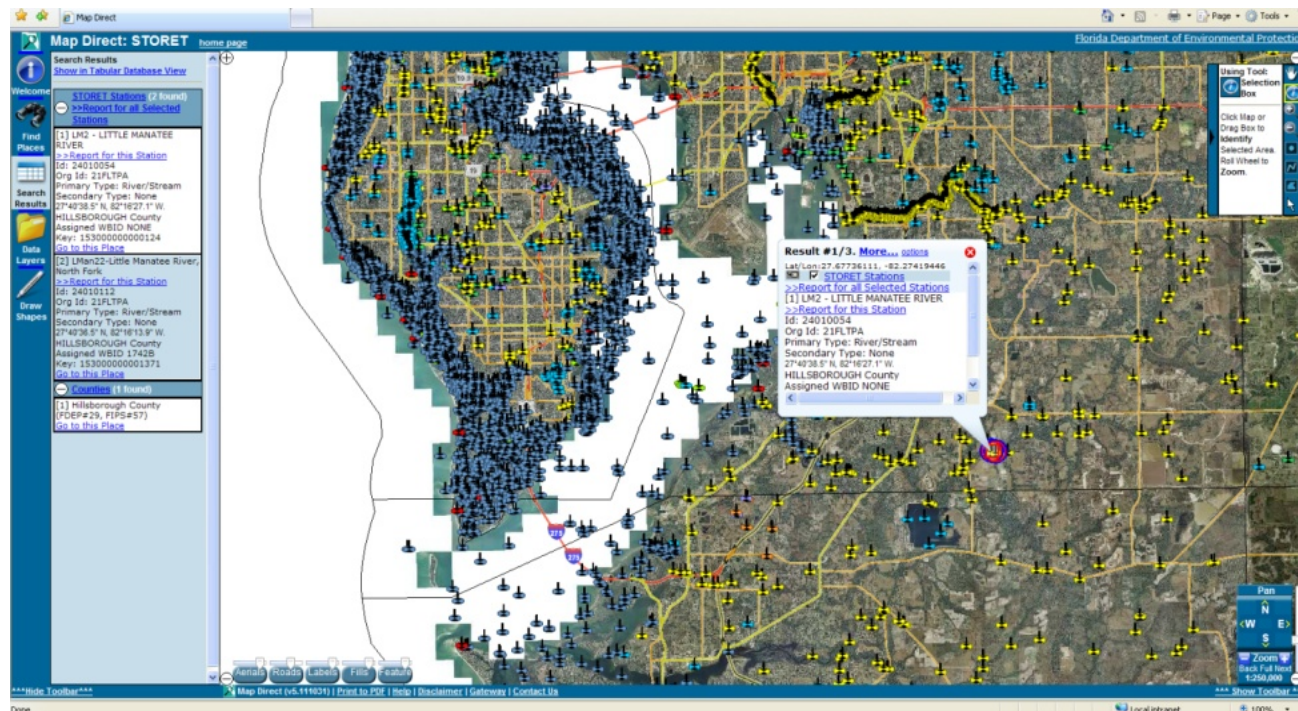
- **FWC Marine Resource Geographic Information System**: somewhat difficult to navigate ; unknown if metadata are available, or whether other entities can enter data



- <http://ocean.floridamarine.org/mrgis/>

Monitoring Catalog/Atlas Evaluation Highlights

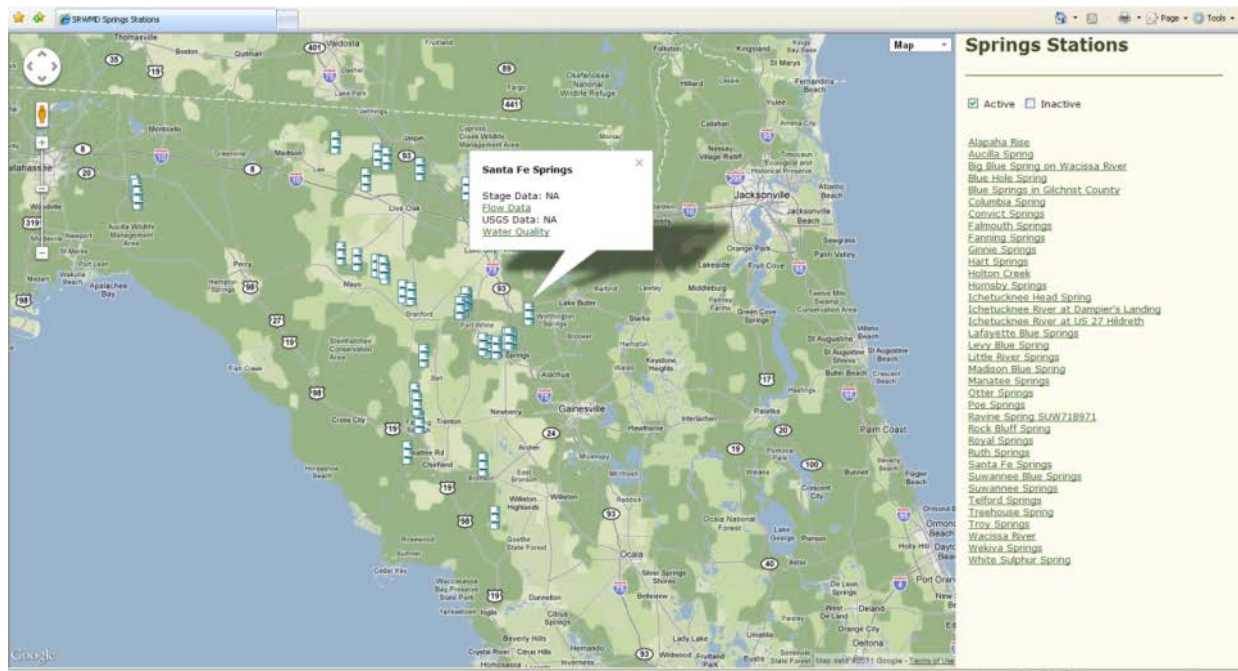
- **DEP MapDirect (STORET focus)**: easy to navigate (once you know the trick!); very limited metadata; upload access strictly maintained



- <http://ca.dep.state.fl.us/mapdirect/?focus=storet>

Monitoring Catalog/Atlas Evaluation Highlights

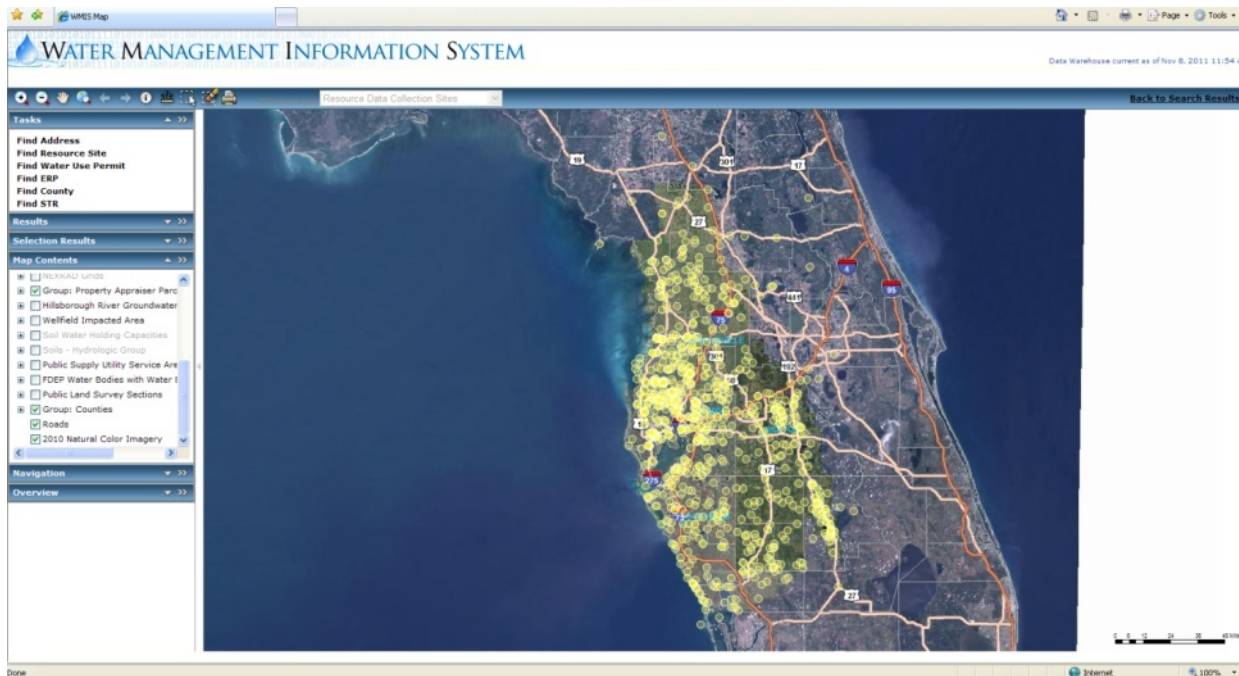
- **SRWMD Water Data Portal**: appealing map interface; limited metadata searchability; unknown if other entities can upload data



- <http://www.mysuwanneeriver.com/index.aspx?NID=345>

Monitoring Catalog/Atlas Evaluation Highlights

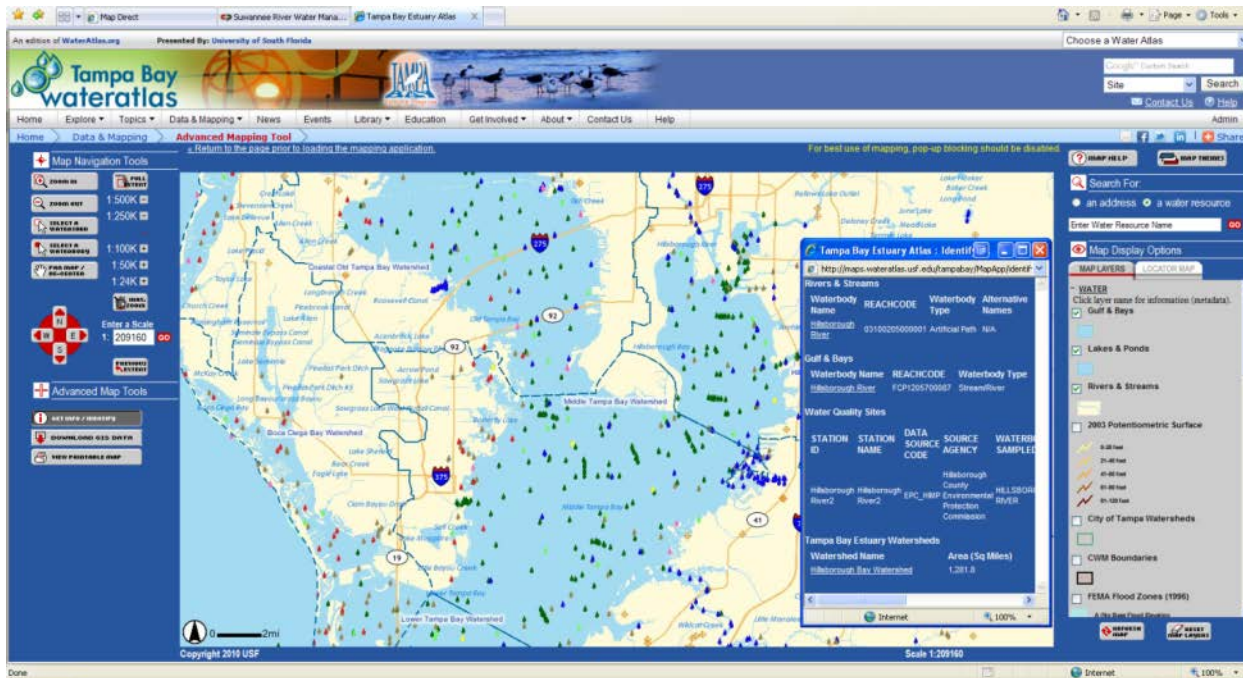
SWFWMD Water Management Information System : map not readily available at direct interface; some searchable metadata; upload limited to SWFWMD



<http://www.swfwmd.state.fl.us/data/wmdbweb/disclaimer.htm>

Monitoring Catalog/Atlas Evaluation Highlights

- **Water Atlas (FL Center for Community Design & USF)**: very comprehensive, easily navigable interface; limited metadata; participating entities can upload data.



- <http://www.wateratlas.usf.edu/>

Monitoring Catalog/Atlas Evaluation Highlights

	NOAA digital Atlas	EPA My Environment	USGS Water Data Discovery	USGS SOFIA	GOMA Ecosystem Portal	SECOO-RA Biological and Habitat GIS	FWC GAME	FWC Marine Resource Geographic Information System	DEP MapDirect	SRWMD Water Data	SWFWMD Water Management information System	Water Atlas	Comprehensive Everglades Restoration Plan
<u>Interface</u> (ease to nav., complete info, aesth.)	Y	Y	Y	Y	N	Y	N	N	Y	Y	Y (limited)	Y	? (Incorrect Website Listing)
<u>Ability to search metadata</u>	?	?	Y (limited)	Y (Not searchable)	Y (limited)	?	Y (limited)	?	Y (limited)	Y (limited)	Y (limited)	Y (limited)	? (Incorrect Website Listing)
<u>Ability to upload data</u> (by different entities)	?	N	?	?	?	?	?	?	N	?	N	Y	? (Incorrect Website Listing)

Monitoring Catalog/Atlas Evaluation Issues & Discussion

Interface

- spatial component should be a main focus (everything isn't strictly tied to projects/programs;) will be easier to document that sampling was maintained even though sampling organization may have changed.
- define the focus of the application – to display monitoring stations and their associated metadata.
- partitioning monitoring information historical vs. current (active vs. inactive stations.)
- May want to provide links to organization's websites where data can be downloaded instead of trying to incorporate it into Catalog.

Monitoring Catalog/Atlas Evaluation Issues & Discussion

Metadata Searchability

- address analytes/analyte groups; previous discussions have indicated that the following elements are desirable:
 - DQOs,
 - period of record,
 - frequency,
 - station locations,
 - organizations responsible for sampling & data management,
 - links to organizations' websites and data.
 - Other types of data such as flow data from USGS are also desirable to include.
- determine level of metadata necessary if Monitoring Catalog will be more than just links back to organizations' websites.

Monitoring Catalog/Atlas Evaluation Issues & Discussion

Individual Entity Metadata Uploads

- Strategy to maintain continuity in data collection when monitoring is transferred from one agency to another.
- develop a strategy for data/metadata management; agencies are responsible for uploading & updating their own
- Include as many organizations as possible
- data providers should frequently update their information to preclude full/messy. system

Monitoring Catalog/Atlas Evaluation Issues & Discussion

Funding:

- Maintenance/funding for maintenance may be a problem with using a structure like SOFIA with separate pages for each program.
- Is GOMA funding limited to western side of FL?
- Is it possible to make a request for basic funding for the FWRMC Monitoring Catalog?

FWRMC Monitoring Catalog: Next Steps . . .

Issues for NEXT meeting

- Research SJRWMD data retrieval tool.
- Should FWRMC effort collaborate/integrate with other existing/developing efforts (Which ones?)
- Present Catalog effort to upper management; funding?
- Develop priorities for how to proceed
- Visit NOAA GOM Atlas site (<http://gulfatlas.noaa.gov/>) and consider how FWRMC & GOMA Catalog effort could potentially collaborate by adding a plate that links back to the Monitoring Catalog.



Questions?

