What is the Water Atlas?

• A data warehouse
• A set of interactive maps
• A collection of tools for viewing/analyzing data
• An information resource that helps citizens to understand water issues
• An online venue for recruiting/organizing volunteers
Mission

“...to provide a comprehensive information resource that helps citizens, scientists and resource managers make informed decisions concerning our vital water resources.”

Our diverse group of users includes water managers, researchers, educators, citizen-scientist volunteers, and the general public.
Water Atlas History

• Began as a Hillsborough Atlas of Lakes in 1997
• Has expanded to include...
  • 8 County Atlases
  • 2 Regional Atlases
  • 1 Statewide Atlas

Hillsborough County & City of Tampa Water Atlas
Lake County Water Atlas
Manatee County Water Atlas
Orange County Water Atlas
Pinellas County Water Atlas
Polk County Water Atlas
Sarasota County Water Atlas
Seminole County Water Atlas
Charlotte Harbor NEP Water Atlas
Tampa Bay Estuary Atlas
Florida Atlas of Lakes
“One Atlas”

- All Water Atlas sites have the same “One Atlas” structure and the same basic tools and features.
- Individual sites may have optional water resource types (ocean, bays, springs), volunteer page groups, special-interest pages.
- All sites use a common dataset and code base, with site-specific customization.
- All sites are reachable from all other sites, and from the gateway site WaterAtlas.org.
Site Customization

Sarasota
• Bays, Ocean
• Volunteer Pages (NEST, SEA Team)
• Bay Conditions
• “Sarasota Captured” Photo Gallery
• Oral Histories
• Coastal Watershed Wiki

Tampa Bay
• Bays, Ocean
• Restoration Sites

Hillsborough
• Bays, Ponds, Ocean
• Volunteer Pages (Adopt-A-Pond, Lake Management, Stream Water Watch)
• Hillsborough River Watershed Alliance
• Frog Listening Network
• Curriculum for Teachers

Seminole
• Volunteer Pages (Macroinvertebrate Monitoring, Lake Management)
• Watershed Excursion
• Curriculum for Teachers

Charlotte Harbor
• Bays, Ocean
• Volunteer Pages (CanalWatch, CHEVWQM)
• Aquatic Preserves Page
• CCMP Management

Pinellas
• Bays, Ponds, Ocean
• Watershed Excursion
• Curriculum for Teachers
• Data is displayed by geography and by topic
• Each watershed and each water resource (lake, stream, bay, ocean, spring) has a page group with data about a group of related topics
• Water resources are grouped within watersheds
• Related data types are grouped on single pages
Geography

• Data is organized within watersheds
  • Within each watershed are water resources (lakes, rivers, ponds, bays, springs, oceans)

Upper Myakka Lake
Located within Myakka River Watershed

Currently 87°F and Partly Cloudy view forecast »

Go to a Specific Topic
• Water Resource Characteristics
• Watershed and Drainage Basins
• Report Pollution and Other Environmental Issues
• Regulation
• Get Involved
• Historic Information
• Related Links

Associated Names
• There are no associated names for this body of water.

News and Events
No news or events have been posted yet. Be the first to submit news and events to the Water Atlas.

Water Resource Characteristics

<table>
<thead>
<tr>
<th>Size and Volume</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Surface Area</td>
<td>955 acres</td>
</tr>
<tr>
<td>Mean Depth</td>
<td>Not Available</td>
</tr>
<tr>
<td>Maximum Depth</td>
<td>Not Available</td>
</tr>
<tr>
<td>Approximate Volume</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

Data Summary
This water resource is monitored by 14 sampling locations, which have collected a total of 2,761 samples ranging from 9/23/1975 to 1/25/2012. The sites sampling this water resource are:
**Topics**

Each watershed/waterbody has a data-driven page group that gives information specific to its type:

- **Watersheds** – Overview/current conditions, water quality/quantity, habitats/ecology, geography/land use, recreation, photos
- **Lakes/Ponds, Rivers/Streams** – Overview/current conditions, water quality, water levels & flows, habitats/ecology, recreation, photos
- **Bays, Gulf/Ocean** – Overview/current conditions, water quality, habitats/ecology, fish & wildlife, recreation, photos

---

### Nutrient Chemistry

Although present in all surface waters, nutrients are among the leading causes of degradation of Florida water resources. Learn more about nutrient chemistry.  

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Latest Value</th>
<th>Historic Range</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Nitrogen (TN)</strong></td>
<td>1,361.0 ug/L 9/1/2011</td>
<td>100.0 - 2,508,100.0 ug/L 6/11/1970 - 8/1/2011 2,420 samples</td>
<td>![Graph](2 Year Graph) ![Graph](10 Year Graph) ![Graph](Seasonal Variation Graph) ![Download](Download this data)</td>
</tr>
<tr>
<td><strong>Total Phosphorus (TP)</strong></td>
<td>290.0 ug/L 8/1/2011</td>
<td>20.0 - 2,440.0 ug/L 10/2/1962 - 8/1/2011 2,449 samples</td>
<td>![Graph](2 Year Graph) ![Graph](10 Year Graph) ![Graph](Seasonal Variation Graph) ![Download](Download this data)</td>
</tr>
<tr>
<td><strong>Chlorophyll a, uncorrected for pheophytin</strong></td>
<td>11.0 ug/L 8/1/2011</td>
<td>0.0 - 87.4 ug/L 1/13/1975 - 8/1/2011 802 samples</td>
<td>![Graph](2 Year Graph) ![Graph](10 Year Graph) ![Graph](Seasonal Variation Graph) ![Download](Download this data)</td>
</tr>
<tr>
<td><strong>Chlorophyll a, corrected for pheophytin</strong></td>
<td>8.5 ug/L 8/1/2011</td>
<td>0.0 - 81.0 ug/L 10/26/1981 - 8/1/2011 965 samples</td>
<td>![Graph](2 Year Graph) ![Graph](10 Year Graph) ![Graph](Seasonal Variation Graph) ![Download](Download this data)</td>
</tr>
</tbody>
</table>
• SOPs established for each data provider
• Most data is retrieved automatically, some manually
• Total of 327+ data providers, 7,729 water resources, 37,707 sample locations, 250-million+ data samples (as of 6/10/12)
• Optional, adjunct services include specialized data processing/mapping and water resource field assessments
Example Information

- Aerial photographs
- Boat ramps & parks
- Bottom contour maps
- Conservation advice
- Water news & events
- Dynamic maps
- Ecological reports
- Educational curricula/links
- Fishing reports

- Historic & current photos
- Land Use Maps
- Management plans
- Near real-time data
- Research Reports
- Vegetation Data
- Volunteer Group Project Info
- Water levels, flows & rainfall
- Water quality data
Volunteer Pages

Customized for activity:

- Adopt-A-Pond (Hillsborough)
- Lake Management (Hillsborough, Seminole)
- Water Quality Monitoring (Charloje Harbor Canal Watch & Water Quality Monitoring Network, Hillsborough Stream Water Watch)
- Restoration Activities (Sarasota NEST)
- Seagrass Surveying (Sarasota)

SEAGRASS SURVEY PROGRAM

managed by the Sarasota Environmental Aquatics Team

The Sarasota Environmental Aquatics (SEA) Team is a group of Sarasota County volunteers whose work has made positive impacts on our bays. Whether they are seeding scallops or surveying seagrass, this team of energetic volunteers provides scientists with valuable information. Seagrass survey volunteers boat or kayak Sarasota’s bays and document the types of seagrass they see. Seagrass is vital to maintaining healthy aquatic ecosystems, stabilizing shorelines and providing food and shelter for a variety of wildlife, including scallops, manatees and sea turtles. The information gathered by seagrass survey volunteers allows scientists to better understand and manage these important ecosystems. Many volunteers find surveying seagrass fun, easy and rewarding.

Requirements: Attend a two-hour training session and be available a few days during the months of February or August. Note: Volunteers should have their own GPS, boat or kayak, but when possible, those who do not will be paired with those who do.

FAQs

What is SEA Team about?
The Sarasota Environmental Aquatics (SEA) Team is a group of volunteers whose work has made positive impacts on our bays. SEA Team seagrass surveyors are volunteers from all walks of life who regularly monitor the seagrasses in Sarasota’s bays, gathering data that will help scientists better understand and manage our seagrass meadows. Seagrass is vital to maintaining healthy aquatic ecosystems, stabilizing shorelines and providing food and shelter for a variety of wildlife, including scallops, manatees and sea turtles. SEA Team is comprised of dedicated and energetic volunteers who provide scientists with valuable information.

What SEA Team Seagrass Volunteers do:
Seagrass survey volunteers boat or kayak Sarasota’s bays and document the types of seagrass they see. In addition to this, surveyors also take note of things like blade length, percent bottom cover and algae abundance. It is strongly preferred that volunteers swim at every location they survey, however a visual observation from a boat or kayak will also be accepted. The information gathered by volunteers allows scientists to better understand and manage these important ecosystems. Many volunteers find surveying seagrass fun, easy and rewarding.

Requirements: Attend a two-hour training session and be available a few days during the months of February or August. Note: Volunteers should have their own GPS, boat or kayak, but when possible, those who do not will be paired with those who do.

Who can join the SEA Team?
Any local or area residents and visitors are encouraged to participate in the program or to join the effort. You will not only be helping scientists better understand our bays, but you will also be out enjoying the water and making a positive impact on our environment. If you’ve ever wanted to get involved in a local environmental group, this is a perfect opportunity for you! Contact: info@wateratlas.org
Interactive Tools

All Water Atlas sites have a core set of tools for analyzing and displaying data:

• Advanced Mapper
• Real-time Data Mapper
• Data Download
• Water Quality Contour Mapping (coastal atlases only)
• Digital Library
Advanced Mapper

For best use of mapping, pop-up blocking should be disabled.

Search For:
- an address
- a water resource

myakka river

MAP LAYERS

+ WATER
+ ENVIRONMENTAL
+ RECREATION
+ PLANNING & INFRASTRUCTURE
+ HABITATS
+ WATER LEVELS
+ WATER QUALITY
+ SAMPLING LOCATIONS
+ AERIAL PHOTOGRAPHY

Enter a Scale
1: 291388

Map Navigation Tools
- ZOOM IN
- ZOOM OUT
- SELECT A WATERSHED
- SELECT A WATERBODY
- PREVIOUS EXTENT

Map Display Options
- MAP LAYERS
- LOCATOR MAP

Advanced Map Tools
- GET INFO/IDENTIFY
- DOWNLOAD GIS DATA
- VIEW PRINTABLE MAP
Real-time Data Mapper

Tool for viewing real-time & ambient sample sites/data

- Google map-based – can choose map or satellite view, zoom/pan
- User can filter stations by atlas, data source, status (active/inactive/decommissioned), data currency, water body, data monitored
- Filtering to a single water body reveals ambient data collection sites
- Clicking on site icon opens popup with metadata
- Clicking on link in popup allows user to view graphs of most recent data or to download data

MYAKKA RIVER AT NORTH PORT CHARLOTTE FL – 02299230 Active

7 Day Graphs

7-Day Graph of Elevation, water surface (653 measurements)

- Latest Data
- Last 24 Hours of Data
- 24 Hour Graphs
- 7 Day Graphs
- 31 Day Graphs

Latest Data

<table>
<thead>
<tr>
<th>Sample Date</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/14/2012 10:00:00</td>
<td>0.44 ft</td>
</tr>
</tbody>
</table>

View last 24 hours of data

Download data for this location using the Water Atlas Data Download tool
Data Download

Data Download allows the user to download and graph water quality, hydrology, and meteorological data from one or more sample sites.

- User selects candidate sites by filtering on location, site info, and sample info.
- User may choose one or more stations to view.
- User may download tabular data in row or column format, or view the data as graphs.
Allows spatial visualization of water quality parameter values.

- Available on coastal atlases for bays
- Set of pre-selected WQ parameters may be mapped
- Three options:
  - View stored PDFs created monthly for a single parameter
  - Compare different parameters and/or months onscreen
  - Create a custom map by choosing time period, WQ data samples; job is queued, PDF is emailed to user

WQ Contour Mapping
Digital Library

Electronic repository for documents, videos, websites, contact info:

• Search by keyword, water resource, map, type, author, publisher
• Documents include management plans, water resource assessments, research reports, fact sheets, brochures...
• Recently added spaDal component to display map with icons for documents linked to particular water resource

Spatial Library

Search through our library of water resource related documents by using the form below. To search by map locations, leave the keyword search box empty and zoom/pan the map.

Keyword Search: quality

Search Library Cancel

Results

Displaying 1 - 15 of 15

Sort by: Title Publisher Publish Date Distance from Center Zoom Out to All

Cow Pen Slough Basin Master Plan Final Report by USDA
1997 Sarasota County Stormwater Environmental Utility
24.3 MB
The Cow Pen Slough drainage basin is described in detail, the floodplain boundaries are defined, and Level of Service deficiencies are identified. Water quality is modeled. Wetland enhancement was considered.

This record is matched to multiple locations. View alternate location on map.

Curry Creek Basin Master Plan Update, Book 1 of 3
2001 Sarasota County Stormwater Environmental Utility
816 KB
The Curry Creek Basin Master Plan was prepared to (1) characterize the hydraulic network, (2) identify LOS deficiencies, (3) delineate 100-year floodplain, and (4) comment on water quality.

Lake Myakka Water Quality Study
1983 Padale Sajjanick Inc. 11.6 MB
Study to (1) define the discharge limits to meet dissolved oxygen standards in Whitaker Bayou, (2) define existing water quality, flushing rates and existing/desired nutrient loadings in the lake system and (3) estimate impact to Sarasota Bay by City of Sarasota wastewater discharge and desirable nutrient limits at discharge locations.
An Evolving Project...

• New features and tools are constantly under development
• As GIS and database technologies improve, so does the Water Atlas
• Our sponsors and users constantly find new uses for the Water Atlas
• Future enhancements will include more mobile apps
• What would you like to use the Water Atlas for? Tell us!
Contact the Water Atlas

If you have questions, comments, suggestions...
Please contact:
Jan Allyn, Web Content Manager
janallyn@usf.edu
(813) 579-3381
Follow us on: @wateratlas, facebook.com/wateratlas

Cool, clear, spatially-mapped data served fresh daily... Drink up!
Questions?