The University of South Florida Water Institute leverages the talents of students and faculty from throughout the University to address complex water-related issues. The Water Institute facilitates innovative multidisciplinary research, education and public outreach efforts that assist public and private sector agencies and organizations within the State of Florida, the nation, and the world. The Water Institute develops inclusive cross-disciplinary partnerships with researchers, educators and external stakeholders that lead to a broader understanding of water issues and a resolution of water problems.

As an extension of our ongoing research programs, we offer technical research services to public or private organizations looking for opportunities to augment the technical abilities of their existing staff as well as provide valuable training opportunities for undergraduate and graduate students. Current services include:

- Contour Data Processing & Mapping Services
- STORET Data Processing Assistance
- Data Mapping/Download Web Tool
- Field Data Collection – Water Resources
- Field Data Collection – Urban Infrastructure

**Technical Services**

**Data Mapping**

The Data Mapping/Download Web Tool is a system for collecting, storing, analyzing and disseminating raw or processed sensor data. It is an easy-to-use graphic portal that allows viewing and downloading any information that has a spatial component, helping website visitors to quickly identify data sets of interest.

**Contour Data Processing**

We process customer-collected data using specialized software to generate bathymetric maps of waterbodies. These accurate, geospatial models reveal the complex bathymetry and morphological characteristics of the waterbody and allow it to be graphically represented.

**STORET Data Processing**

The STORET Data Warehouse is the Florida Department of Environmental Protection's repository of water quality monitoring data collected by water resource management groups statewide. We assist organizations in meeting the stringent requirements of DEP EAS-0101, the data field definition imposed by the Impaired Waters Rule (IWR).

**Field Data Collection**

Our field scientists have the training, experience, and state-of-the-art equipment to perform a number of different types of on-site resource assessments for both fresh and saltwater environments.

**Water Atlas** [http://www.wateratlas.usf.edu/](http://www.wateratlas.usf.edu/)

The Water Atlas Program was designed to help meet the needs of local governments by providing the means through technology to connect multiple stakeholders in water resource management. The Atlas serves as a one-stop data warehouse, which provides unprecedented access to a wealth of water resource information.

Data available on the Water Atlas dates back to 1907. New real-time data is added every day.
Plant Atlas  http://www.plantatlas.usf.edu/

Project partners are united by a common need to manage and disseminate vascular and non-vascular plant information with colleagues and the Public.

Water-CAT  http://water-cat.usf.edu/

The goal of the Catalog is to help water resource managers better protect, preserve, manage and restore water resources in the state of Florida, by making it easier for them to coordinate water resource monitoring efforts and share information.

The Browse, Search and Map functions will allow you to answer these questions:

- **Who?** Using the Catalog’s Browse, Search and Map tools, you can find all stations associated with a particular organization or organizations.

- **What?** Use the Search and Map tools to find all stations that are collecting a certain kind of data.

- **Where?** While the interactive Map tool allows you easily to visualize where monitoring stations are located, the Search and Browse tools also allow you to identify stations by their location.

- **When?** Search for stations based on the timing of data collection.

- **Why?** Each station is associated with one or more projects. By reviewing the description(s) of the project(s) you can discover what those who established it hoped to learn from the data collected.

To submit information for the Water-CAT, email watercat@usf.edu

Tampa Tree Map  http://www.tampatreemap.usf.edu/

TampaTreeMap is a web-based map and database that enables everyone to collaboratively create an accurate and informative inventory of the trees in the City of Tampa and on the campus of the University of South Florida.

**How can you help?**

1. Search for nearby trees that interest you. Find native trees, fruit trees, or those with beautiful flowers. Search for the biggest trees in your neighborhood – then go visit them!

2. The Tampa Tree Map grows as urban foresters like yourself add trees. Show a tree’s location by placing it on the map, and then provide as much additional information as you can.

3. Start by searching for trees near you. Update what data you can and add photos and alerts. With your help we’ll track changes in Tampa Bay’s urban forest and watch it grow!

For more examples of Water Institute projects visit waterinstitute.maps.arcgis.com