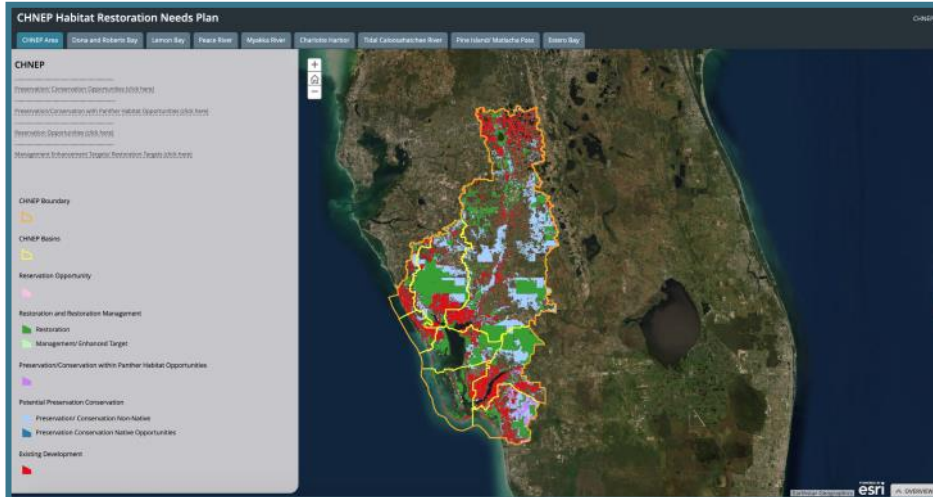
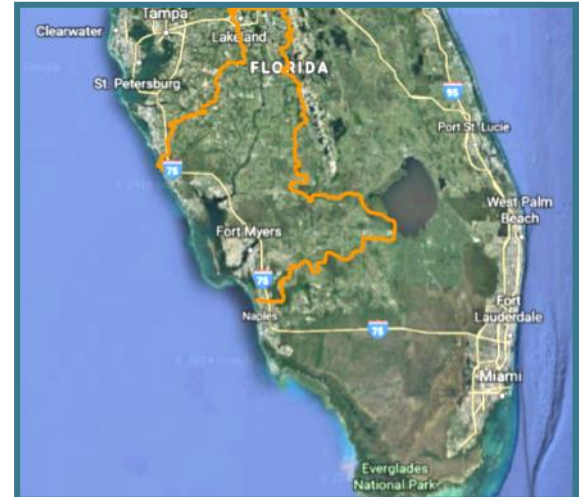


# CHNEP Water Atlas Maintenance and Enhancements



## WATER QUALITY IMPROVEMENT



### Summary

The CHNEP Water Atlas is a web-based resource center providing both technical users and interested community members and policy makers with a one-stop shop to find local data on water quality, flow, and habitat to information about educational events and volunteer resources in Central and Southwest Florida. The site includes: up to date and historical data, trend analysis, historical maps and studies, water resource maps, and much more. It is a readily accessible way to find more information about local waterways.

The page is a resource that the Coastal & Heartland National Estuary Partnership (CHNEP) continues to provide for scientists, resource managers, elected officials, and the public to view and access local data through various user-friendly maps and charts. CHNEP provides the funding necessary to maintain and annually update the CHNEP Water Atlas and ensure continued access to water quality data, analysis, and other information. Outlined below are the newest additions and improvements featured on the CHNEP Water Atlas.

### New Features and Future Additions

**Habitat Restoration Needs (HRN) Interactive Mapping Tool:** CHNEP Water Atlas users can view maps of strategic conservation opportunities and management/restoration targets from the Habitat Restoration Needs plan for the CHNEP area. These maps are presented interactively through a web-based application and divided by watershed basin for easy viewing (as depicted in the map above). Future work will include adding the freshwater Caloosahatchee basin to the interactive mapping tool and updating the map to load faster.

Visit the CHNEP Water Atlas at [www.chnep.wateratlas.usf.edu](http://www.chnep.wateratlas.usf.edu)

**Location:** CHNEP Area

**Partners:** University of South Florida Water Institute, Coastal Charlotte Harbor Monitoring Network, CHNEP Management Conference Members

**Implemented:** 2011-Present

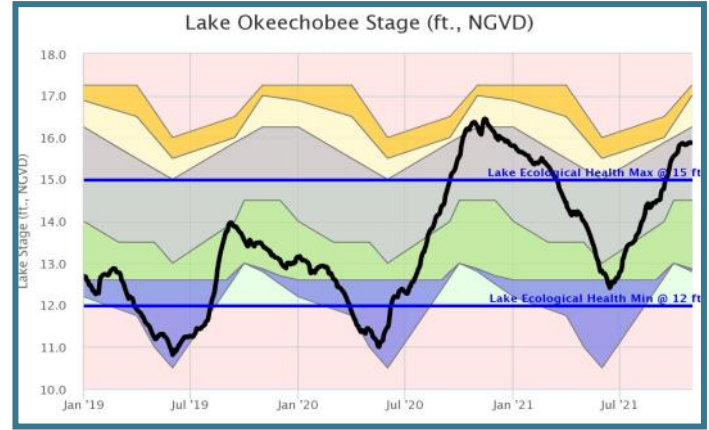
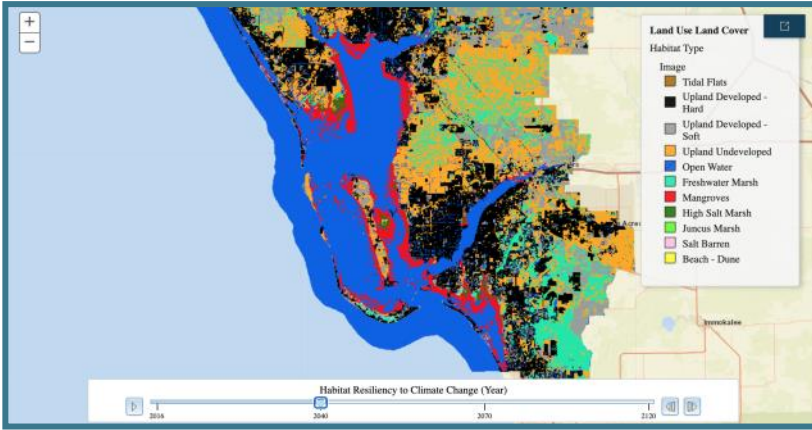
**Status:** Ongoing

**CHNEP Cost:** \$56,000 Maintenance  
\$27,670 Additions

**Funding Source:** Environmental Protection Agency

**2019 CHNEP Plan Activity:** 

Water Quality Improvement 1.2: Support uploading and archiving of data in standard, common public databases, including FDEP's database and the CHNEP Water Atlas.



**Habitat Resiliency to Climate Change (HRCC) Interactive Story Map:** A climate change interactive map story has been added for users to take a closer look at what kind of impacts our waterways may experience given the most recent climate change and sea level rise science (left image). These maps show habitat loss and conversion to open water over time, as well as estimating the migration of various habitat to higher elevations as well as inland.

**Lake Okeechobee Conditions:** A recent addition of the Lake Okeechobee pages focuses on current lake levels and water quality conditions and trends and documents changes in flow from Lake Okeechobee into the Caloosahatchee River. This page includes background information on how the Lake and River are managed, reports, plans, and spatial datasets (right image). This new page will allow residents and water managers to easily access the status and conditions of this lake and its impacts to the Caloosahatchee watershed which partially falls into CHNEP's expansion area.

**Seagrass Maps:** The CHNEP Water Atlas now features seagrass pages that include current and historical aerial maps and seagrass acreages as well as data collected in the field and analysis to help users understand the importance of seagrass monitoring as an indicator of water quality and recovery. Seagrass pages are broken down by watershed basin for easy viewing and also include an interactive mapper.

**Numeric Nutrient Criteria (NNC) Calculator:** The FDEP Numeric Nutrient Standards specify region-specific and sometimes site-specific criteria also called Numeric Nutrient Criteria (NNC) to determine if a waterbody passes the standard. The site will soon feature the Numeric Nutrient Criteria (NNC) Calculator, which compares preliminary data on chlorophyll a (used to measure phytoplankton levels) as well as phosphorous and nitrogen levels in CHNEP waterbodies, using data from water quality samples stored in the Water Atlas database, to thresholds defined in the Florida Administrative Code (FAC). The NNC Calculator tool can be used to informally evaluate recent nutrient levels in selected waterbodies by comparing them to applicable state standards.

**Water Quality Dashboard:** A map-based dashboard will present the most recent water quality data for waterways in the CHNEP area on red-yellow-green dials. The dashboard tool will compare the most recent data against existing water quality standards to demonstrate if the results from the sample are good, fair, or poor. The dashboard will include nutrient levels along with water clarity and bacteria data.

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*Uniting Central and Southwest Florida to protect water and wildlife*