About the Charlotte Harbor Estuaries
Volunteer Water Quality Monitoring Program

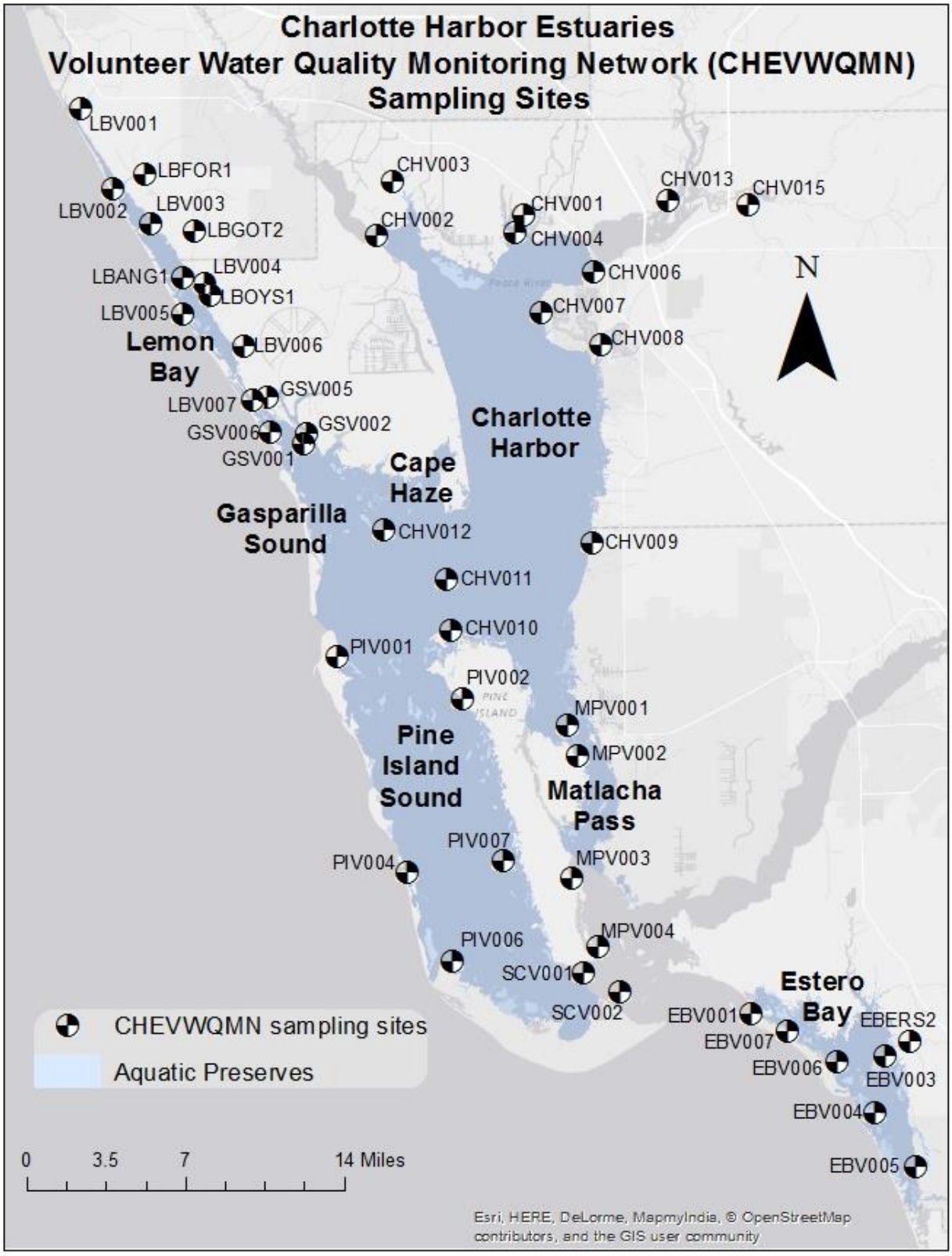
The Charlotte Harbor estuarine complex extends from Venice south to Bonita Springs, encompassing over 200,000 acres of diverse coastal and estuarine habitats. It is located within Sarasota, Charlotte and Lee Counties. North to south, there are six legislatively designated Florida Aquatic Preserves contained within the estuarine complex: Lemon Bay, Gasparilla Sound-Charlotte Harbor, Cape Haze, Pine Island Sound, Matlacha Pass and Estero Bay.

The mission of the Aquatic Preserve Program is to protect and maintain the natural conditions of aquatic preserves for future generations. The primary activities are resource monitoring and management, and education and outreach. The Aquatic Preserve Program is overseen by the Florida Department of Environmental Protection (FDEP), Florida Coastal Office. The local Aquatic Preserve offices include the Charlotte Harbor Aquatic Preserves (CHAP), located in Punta Gorda, and the Estero Bay Aquatic Preserve (EBAP), located in Fort Myers Beach.

The Charlotte Harbor Estuaries Volunteer Water Quality Monitoring Program (CHEVWQMN) is a region-wide, fixed station, monthly water quality monitoring program, and has been providing reliable water quality data for over 20 years. It was initiated to address the need of aquatic preserve resource managers to obtain baseline resource information and citizens' concerns about the health of local estuaries. Originally begun in 1994 in the Lemon Bay Aquatic Preserve as Three Creek Watch under the Lemon Bay Conservancy, the program later expanded to the Gasparilla Sound-Charlotte Harbor Aquatic Preserve in 1996 as the CHEVWQMN. Initially, the CHEVWQMN was overseen by the Charlotte Harbor Environmental Center (CHEC) to sample ten sites in northern Charlotte Harbor. In 1998 CHAP began managing the program, and expanded to include fifty sites, of which forty-six are still active, in the six aquatic preserves, as well as San Carlos Bay. The program involves close coordination with many local citizens who volunteer their time to perform the sampling each month. In addition, CHEC and the Charlotte Harbor National Estuary Program (CHNEP) offer support by providing local volunteer coordinators for the Lemon Bay and Pine Island Sound/Matlacha Pass areas, respectively. The program continues to be administered through the CHAP office.

The primary purpose of the CHEVWQMN is to collect consistent, technically sound water quality data throughout the region; and provide a framework for consistent training and sampling within the area. The original design was developed by the CHAP, with assistance from CHEC, the Lemon Bay Conservancy and the USEPA, and was intended to characterize baseline water quality conditions region-wide. On the first Monday of each month within two hours of sunrise, volunteers collect water samples at fixed sites throughout the Charlotte Harbor estuarine com-

plex. The sites were chosen to represent general water quality conditions throughout the region, and to be accessible in a safe and timely manner:



The program follows the Standard Field Procedures for Water Quality Monitoring (a.k.a. the CHEVWQMN Monitoring Manual). Each step of these procedures is important for collecting accurate, precise and reliable water quality data, as well as assuring consistency between water monitors. Volunteers receive classroom and field training on equipment usage and collection methods, and are provided with standard sampling equipment. In addition, water monitors are required to attend region-wide quality assurance sampling and training sessions twice a year, in order to receive updated supplies and equipment, validate sampling techniques, and correct any problems that are identified.

Data from this project have determined base level conditions throughout the estuary where little data previously existed. These data are used to guide resource management efforts by identifying the most critical water quality parameters; locations of concern; and trends within the region. The data are also provided to help identify waterbody impairments through the statewide FDEP TMDL (Total Maximum Daily Loads) program as well as other educational and scientific purposes. Results have been published in *Florida Scientist* as a status and trends report, and as a citizen's report in summary form.

Through the help of volunteers, a snapshot of water quality across the six aquatic preserves is able to occur while saving the State thousands of dollars a month in gas, wages, and time. All the while, volunteers develop a sense of stewardship while monitoring the health of their local estuaries.

Volunteers are THE critical component to the success of the monitoring program. If you would like to learn more about your local estuaries; have questions or comments; or for information on how to become a volunteer, please contact Melynda (Mindy) Brown at (941)575-5861 or Melynda.a.brown@dep.state.fl.us.