



Commitment to Water Conservation 2016

One of Tampa's Lowry Park Zoo's core values is to be a leader in conservation. In addition to the Zoo's work in endangered species conservation, the Zoo is also interested in developing and implementing a holistic and progressive approach to the conservation of water. Realizing the value of water resources to



the Tampa Bay Area and the State of Florida, the Zoo decided to pursue funding to support the development of a Water Resource Master Plan (WRMP). The Cooperative Funding Initiative (CFI) brought the Zoo, the Southwest Florida Water Management District (SWFWMD), and the City of Tampa together to hire Greenman-Pederson, Inc. (GPI) to develop a Water Resource Master Plan. The EPA Gulf of Mexico Program, SWFWMD, and the City of

Tampa funded the project. The goal of the WRMP is to improve water-use efficiency within the Zoo and improve the water quality discharged by the Zoo to Hamilton Creek. Hamilton Creek is a tributary to the Hillsborough River that runs through the Zoo, and ultimately discharges to Tampa Bay.

The WRMP identified and recommend projects and procedures to maximize the efficiency of the Zoo's storm and wastewater operations. It also assessed the potential for water conservation and reuse, and identified strategies to minimize pollutant loading in Hamilton Creek. In the consultant's report, rain gardens were recommended as a high priority strategy to better manage stormwater and reduce the amount of water the Zoo treats and discharges to Hamilton Creek. As many as 20 rain gardens of varying size and complexity were proposed for sites throughout the Zoo and parking areas.

Currently, the Zoo has received funding through the Tampa Bay Estuary to install and monitor a conventional rain garden. The Education Department's after-school program, Teens4TampaBay, located at Van Buren Middle School, will be designing and installing this rain garden. With Tampa's Lowry Park Zoo's staff guidance, they will also develop accompanying interactive signage. During programming, students will explore issues such as water quality, urban runoff, and nutrient management.



In the classroom, they will design and fabricate working filtration models to understand how water systems work. They will then compare their models to natural systems, such as wetlands. They will visit a wastewater treatment facility, modified and conventional rain gardens, the Florida Aquarium, and the Zoo to learn about varying approaches to protecting water resources. They will meet with University of South Florida scientists who are currently developing solutions to wastewater management and with the Zoo's animal care staff to learn about efforts to advance water protection technologies. Knowledge gained from this experience will allow club members to become advocates for their waterways and provide them with the tools to become change agents. By inviting club members to create and deliver conservation messaging, the Zoo will provide them with the opportunity and tools to continue that conversation in their community. Not only will the installed rain garden help protect water resources at the Zoo, but club members will act as a community voice to interpret to visitors the importance of protecting this natural resource, and inspire them to take action.



Come celebrate World Water Day at Tampa's Lowry Zoo and visit our Water Conservation Station on the Key West Deck. We will be celebrating water and featuring fun activities for all ages. This interactive experience will allow visitors to discover what pollution really is and why it is so important to stop it in the first place. Education staff will encourage visitors to experiment with different tools to clean pollutants from water and invite guests to interact with models that demonstrate how water, and pollutants, move through our world.