

Surface Water Improvement and Management (SWIM) Program



Since 1987, the Southwest Florida Water Management District's (District) Surface Water Improvement and Management (SWIM) Program has implemented projects for the improvement of priority water bodies throughout its 16-county region.

The District's SWIM Program manages projects that focus on restoring degraded habitats and reducing pollution entering SWIM priority water bodies, including some of the state's most iconic springs.

To date, the SWIM Program has completed nearly 375 habitat restoration and water quality improvement projects. This translates to the restoration of more than 13,000 acres of habitat and the water quality treatment of more than 219,000 acres of watershed. The SWIM Program and its partners have received more than 60 environmental excellence awards for these projects.

In Tampa Bay, the SWIM Program has completed about 130 coastal restoration projects, totaling more than 5,600 acres (8.75 square miles) of restored habitat, including saltwater and freshwater wetlands and uplands. Additionally, more than 100 water quality improvement projects are helping Tampa Bay recover from poor water quality and contributing to the return of seagrasses and sea life.



On the cover: The series of photos shows the before, during and after phases of the Cockroach Bay restoration project. District staff designed and constructed this braided tidal creek to create habitat for Tampa Bay's fish and wading bird species.

Florida's surface waters include bays, estuaries, springs, rivers, lakes, streams, creeks, ponds, sloughs and wetlands — all of which play an important role in sustaining Florida's ecosystems, economy and quality of life. Over time, many of our state's water bodies have suffered from pollution and habitat loss caused by wastewater and industrial discharges, agricultural runoff and increases in population and development.

For that reason, the state Legislature recognized the importance of restoring and protecting damaged and at-risk surface water bodies by establishing the SWIM Act.

Surface Water Improvement and Management Act

In 1987, the Florida Legislature created the SWIM Act to protect, restore and maintain Florida's highly threatened surface water bodies. Under this act, the state's five water management districts identify a list of priority water bodies within their authority and implement plans to improve them.



Currently, the District's 12 priority water bodies include Tampa Bay, Rainbow River, Crystal River/Kings Bay, Lake Panasoffkee, Charlotte Harbor, Lake Tarpon, Lake Thonotosassa, Winter Haven Chain of Lakes, Sarasota Bay, Weeki Wachee River, Chassahowitzka River and Homosassa River. The list of priority water bodies is updated periodically to reflect changes in the health of individual water bodies.

Since 1987, the SWIM Program has funded numerous restoration projects and diagnostic studies to improve habitat for bay life.

District SWIM Program

The SWIM Program is responsible for many water quality and habitat restoration initiatives. With the help of state agencies, local governments and other organizations, the SWIM Program focuses on water quality and habitat restoration projects to carry out these initiatives.

Water Quality Protection and Restoration

In order to sustain good water quality throughout west-central Florida, the SWIM Program evaluates priority water bodies, identifies potential problems, and carries out projects to improve their water quality.

A main issue affecting water quality is pollution. Water bodies are polluted both directly and indirectly. Some direct pollution sources are easy to identify and manage, such as trash entering lakes, rivers and springs. When water bodies are polluted indirectly by sources such as chemicals in stormwater runoff, the sources are more difficult to identify.



The District conducts water quality monitoring and vegetative studies in the Rainbow River to maintain the quality of the water body.

Stormwater runoff is possibly the biggest threat to the health of our water bodies. It occurs when rainwater flows across land and picks up pollutants, which eventually wash into water bodies. These pollutants may include litter, motor oil, gasoline, fertilizers, pesticides, pet wastes, sediments and anything else that can float, dissolve or be swept away by moving water.

SWIM projects focus on reducing the pollution in stormwater runoff. These projects may include creating ponds or swales, filtration devices and chemical treatment systems to remove sediments, trash and other pollutants entering a water body.

An increase in seagrass acreage is one indicator that water quality is improving in coastal systems, since seagrass requires relatively clean water to flourish. Not only do seagrass beds serve as nurseries for sea life, they also provide protection from predators and a food source for animals such as manatees and sea turtles. The improvement and protection of valuable seagrass habitats are an important aspect of the SWIM Program.



The Three Sisters Springs Bank Stabilization Project repaired the shoreline around Three Sisters Springs to prevent future erosion. These improvements benefit the Crystal River/Kings Bay spring system by restoring habitat including critical manatee habitat, and increasing safety for visitors.

Habitat Restoration

Over the years, Florida's expansive growth and increase in urbanization have altered or eliminated many natural plant and animal habitats. These habitats play a significant role in the state's economy, influencing the commercial fishing, recreation and tourism industries. The SWIM Program focuses on improving and protecting these natural ecosystems for fish and wildlife, including threatened and endangered species, while enhancing water quality and providing flood protection.

Habitat restoration projects rebuild the natural structures of ecosystems essential to productive plant and animal communities. Individual mangrove, marsh and seagrass habitats within an ecosystem provide shelter and food for fish and wildlife. Additionally, water quality in these habitats is maintained as aquatic vegetation filters excess nutrients and sediments from the water and holds sediments in place, preventing erosion. Human activities sometimes alter the historical way habitats function.



The Lake Hancock Outfall Treatment Wetland Project involved constructing a 1,000-acre treatment wetland to improve water quality leaving the lake before it enters the Peace River. In 2014, more than 100 species of birds were documented at this site.

The SWIM Program works to restore the natural characteristics and functions of water bodies and lands through habitat restoration projects. Several types of projects such as removing nonnative plants and replacing them with native species to provide food and shelter for wildlife are implemented. Other projects create intertidal lagoons and freshwater ponds to provide nursery areas for juvenile fish and aquatic life. Restoration projects also reestablish the natural flow of water within a system, improving water quality while replenishing the aquifer. These projects result in measurable resource benefits to streams, lakes, wetlands, springs and aquifers within the District's boundaries.

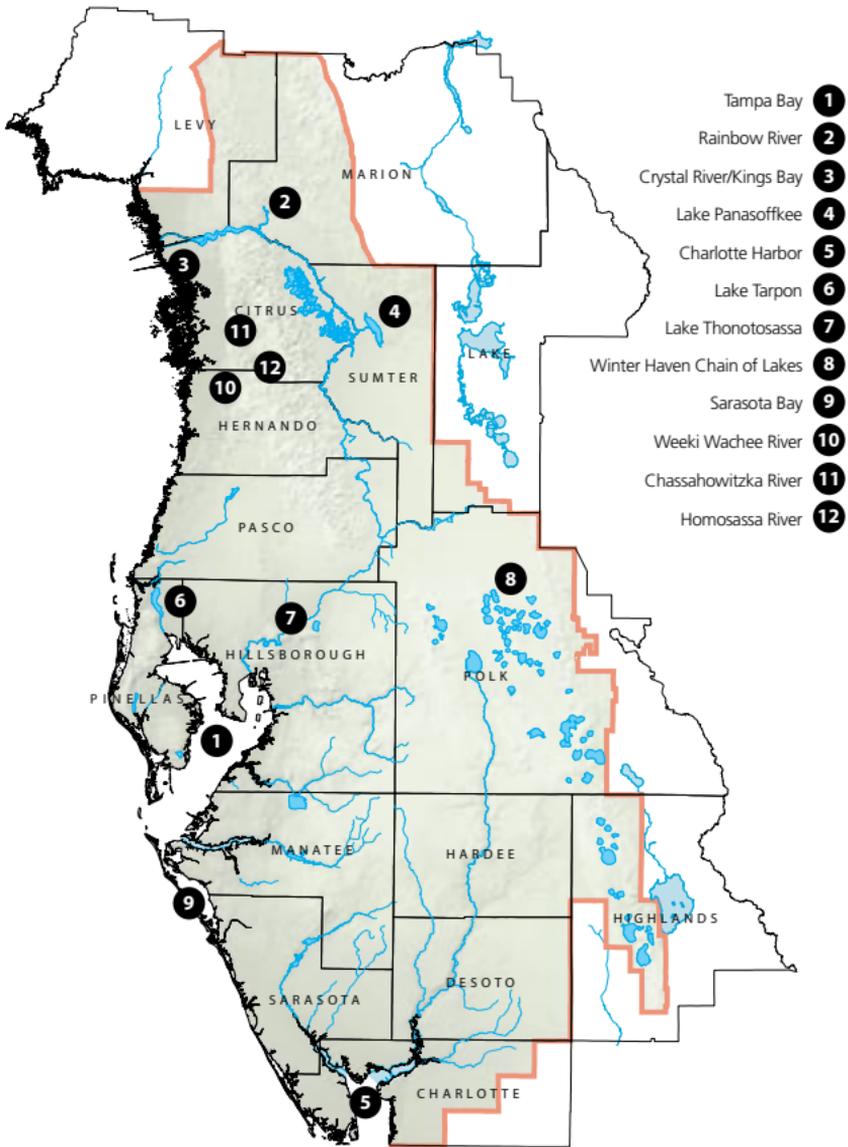


At Rock Ponds, volunteers plant marsh grass to provide habitat for juvenile fish and prevent erosion.

Funding

SWIM projects are funded primarily by District ad valorem taxes, in addition to local, state and federal funds. One of the keys to the success of the SWIM Program is the cooperation of partners that support SWIM projects through land acquisition, cooperative funding or in-kind services.

SWIM Priority Water Bodies



For more information about the District’s SWIM Program, please call 1-800-836-0797, ext. 2201.



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