Manasota Basin Board

FY2007 Accomplishments

On October 11, 2006, the Manasota Basin Board held its annual planning workshop for the purpose of reviewing recent accomplishments, identifying emerging issues and setting strategic budget priorities for fiscal year 2008. These priorities provide guidance to District staff and the Basin Board's cooperators in identifying projects for potential Basin Board funding. At the workshop, the Board agreed on the following set of strategic budget priorities.

Strategic Budget Priorities for Fiscal Year 2008

- Myakka River Watershed
- Implementation of SWUCA Recovery Strategy
- Alternative Water Supply and Development
- Public, Youth and Stakeholder Education
- Watershed Management
- Maintain Projections for Major Basin Funding Commitments

While the above priorities were developed to help ensure that the most critical needs of the Manasota basin are addressed, the Basin Board funds a wide variety of projects to assist in the achievement of the mission of the Southwest Florida Water Management District. These include projects that fall within each of the District’s four areas of responsibility: water supply, flood protection, water quality and natural systems.
**Water Supply**

The PR/MRWSA Regional Loop System Feasibility Project: The completed Loop System Feasibility analysis included coordination with local governments, public information, geographic information system mapping, water quality compatibility evaluation, project administration and a phased plan for project implementation. This study investigated pipeline routing, environmental impacts, connection points, pipe sizing, costs, loop segment prioritization, construction scheduling and preferred alternative(s) for the projects identified in the H023 planning effort. The PR/MRWSA Regional Loop System Project Phases will go forward based on the recommendations of this study.

Evaluation of Low-Cost Irrigation Management Devices to Reduce Water Use: Currently there are about 725 permits (142,000 acres, 2.6 mgd) for irrigation water use in the Manasota basin’s watersheds. Growers have used various methods to try to manage their irrigation systems. This completed study evaluated the use of low-cost irrigation management devices to reduce water use and recommends the most accurate and economical device. The amount of water saved will be a function of the number of acres planted and their water use, which will change annually based on market and climatic conditions. If we assume that 10 percent of the permitted water use would be saved because of this project, an estimated 95 million gallons per year would be conserved.

Manatee Agricultural Reuse Supply (MARS) Project: The completed MARS project will supply reclaimed water for irrigation of agricultural, residential and recreational customers, thereby decreasing dependence on potable ground water. There are current major agricultural customers identified, as well as many smaller agricultural users along the route that can become customers. New residential developments, some with golf courses, are planned and under construction along the transmission route and will be potential customers of the MARS System. The project will provide 20 mgd of reclaimed water to offset 12 mgd of groundwater and surface water withdrawals within 20 years of project completion.

**Flood Protection**

Dona Bay Watershed Management Plan (L493): This initiative developed a comprehensive watershed plan for the Dona Bay watershed that provides the basis for developing and implementing projects that will address the water resources issues within the watershed, which includes (1) providing a more natural freshwater/saltwater regime in the tidal portions of Dona Bay, (2) providing a more natural freshwater flow regime pattern for the Dona Bay watershed, (3) protecting existing and future property owners from flood damage, (4) protecting existing water quality, and (5) developing potential alternative surface water supply options. This regional initiative promotes and furthers the implementation of the Charlotte Harbor Comprehensive Conservation and Management Plan, SWFWMD’s Southern Coastal Comprehensive Watershed Management Plan and Sarasota County’s Comprehensive Plan. The completed plan will be used to determine the BMPs that will be implemented.

**Water Quality**

Gladiolus/N. Shore Basin Drainage Improvements: Flood protection and water quality improvements included in this completed project consist of shallow (1-foot deep) dry retention swales, various diameter high-density polyethylene/reinforced concrete pipe, inlet/control structures and baffle structures at each basin outfall location within the Gladiolus/N. Shore drainage basin (approx. 27 acres) located at the north end of the City of Anna Maria. The anticipated increase in flood protection level of service provided by the City’s existing drainage system will be through an increase in storage and conveyance capacity. These improvements will allow for the retrofitting of a stormwater management system that will provide increased flood protection and water quality benefits. Swales will provide treatment for approximately 12,800 cf (3.5 acre-inches) of stormwater runoff through percolation and evaporation; the proposed baffle structures will provide treatment through sedimentation and skimming.

**Natural Systems**

Terra Ceia Isles Habitat Restoration: The Terra Ceia Aquatic and Park Preserves habitat enhancement and
restoration project is located in the southeastern reaches of Tampa Bay (Manatee County). This large, multiphased project is being cooperatively implemented with the Florida Department of Environmental Protection and is important in meeting management plan goals of SWIM and the Tampa Bay Estuary Program. The current project involves the enhancement, restoration and management of an estimated 700 acres of various habitats typical of coastal ecosystems: estuarine and freshwater wetlands, transitional habitats and uplands. The project will provide valuable habitats for Tampa Bay fisheries and other coastal species. Improved habitat values and the addition of habitat acreages will provide opportunities for many differing species of coastal wildlife, inclusive of commercial and sportfishing species, bird populations, a host of invertebrate species (crabs, shrimp, oysters, etc.) and small mammals. Upland restoration is complete. Wetlands restoration is ongoing.

Biennial Seagrass Mapping of Tampa Bay, Sarasota Bay and Charlotte Harbor: This SWIM initiative project involves mapping and monitoring seagrass within three SWIM priority water bodies: Tampa Bay, Sarasota Bay and Charlotte Harbor. The project is conducted every two years to monitor the long-term health of these vital resources. The 2005–2006 mapping effort is complete and the 2007–2008 effort is under way. A new task for the project in 2007–2008 will be to scan photography from 1994, 1996, 1999 and 2002 at high resolution and create digital GIS imagery layers that will then be uploaded to the District’s GIS system. The mapping of seagrasses within each estuary allows the District, the estuary programs and other entities to monitor the health and distribution of seagrasses. Seagrass health is used as an indicator of water quality conditions. Thus, this project can assist with water resource management decision-making, specifically in evaluating the effectiveness of water quality improvement projects.
Education
The District’s communications and education program uses various methods to inform and educate the public about the importance of managing and protecting water resources to ensure they remain healthy, productive and sustainable.

Youth Education
Some of the significant FY2007 projects and the numbers reached in the Manasota basin are listed below.

- 58,118 pieces of Youth Education materials distributed
- Teacher training provided to 14 participants
- 13 Splash! mini-grants reached 9,504 students and teachers
- G.WIZ Museum Water Workshops impacted 846 students and teachers
- Around the Bend Nature Tours field trip program reached 800 students and teachers

Public Education
Public Education efforts address many aspects of the lives of residents in our region. Several significant accomplishments are listed below.

Landscape Education
The landscapes of approximately 85 new homes were reviewed for compliance with the Florida-friendly landscaping criteria of the Florida Green Building Coalition certification by the Charlotte, Manatee and Sarasota counties’ Florida Yards & Neighborhoods program coordinator. More than two dozen area builders received consultations on Florida-friendly landscaping in FY2007.

Community Education Grants
Seven projects were funded with $20,000. Two projects were of particular note. The City of Venice Engineering Department marked 427 inlets and educated 700 residents that any trash dumped into inlets will flow directly into a larger body of water, potentially clogging stormwater drains, causing flooding and negatively affecting water quality. The second project of note provided opportunities for 71 volunteers from Sarasota Military Academy and staff members and children from the on-site childcare center to participate in the planting of shoreline and aquatic plants in the newly established stormwater management waterways in the Pines of Sarasota, a residential community for low-income seniors. This project reached 500 people. Visitors of the Pines will continue to learn about the project through signage placed near the pond.

Watershed Education
Science and Environment Council (SEC) (L238): More than 25 decision-makers, homeowner association and civic leaders, builders, developers and private-use planners attended a Watershed Leadership Workshop hosted by the SEC on September 6 at Marie Selby Botanical Gardens. Participants learned not only about local natural systems and watersheds, but also about future water use and actions they can take in their homes, neighborhoods and communities to protect water resources. Attendees saw the unveiling of the SEC’s portable indoor watershed education kiosks, which will be displayed at SEC member organizations in FY2008, impacting a potential 300,000 people.

Charlotte Harbor/Lemon Bay SWIM Program (W506): The Charlotte Harbor/Lemon Bay SWIM Program, through the Charlotte Harbor Environmental Center, planned and implemented a three-day water school, reaching an average of 30 participants a day; conducted 40 estuary wading trips; conducted 40 public speaking programs, reaching 761 citizens; developed and distributed a “Keep It Clean” booklet; held a Lemon Bay conference that drew more than 100 citizens; developed a Lemon Bay display and took it to five community events, reaching more than 550 residents; conducted 12 “Journey Through the Estuary” boat trips, reaching 132 residents; produced a Lemon Bay DVD; and conducted two water quality monitoring training sessions, reaching 15 volunteers.

Behavior Change Pilots and Research
Sarasota County NEST Program (L498): Nine Neighborhood Environmental Stewardship Teams (NESTs) have been formed in Sarasota County. NEST teams consist of community leaders and residents who volunteer to coordinate projects such as stormdrain markings and pond restorations. The program is testing the use of community leaders to diffuse social norms throughout a neighborhood, encouraging other residents to also adopt beneficial behaviors. Approximately 1,200 Sarasota County residents were reached in FY2007.