

2002 MIAMI RIVER STORMWATER PROGRESS REPORT

On February 4, 2002, the Miami River Commission approved the *Miami River Basin Water Quality Improvement Report*. Over the past year, participating governmental agencies of the Stormwater Subcommittee have been conducting quarterly evaluations of their individual responsibilities as outlined in the Action Plan. Here are some of the highlights:

STORMWATER

- *Retrofit drainage in remaining areas of Miami River starting with Pinehurst neighborhoods*: The funding contract has been executed and the City is in the process of negotiating the final design phase of the project.
- *Little Havana Storm Sewer Rebuilding*: The construction is complete.
- *Allapattah Storm Sewer*: This project has been put on hold until construction funds can be located.
- *Downtown Storm Sewer Rebuilding*: Phase I is complete (SW 15th Road). The design for Phase II is 90% complete (North Bayshore Drive).
- *Wagner Creek Dredging, Phase IV*: The project has been declared an emergency. The City is awaiting approved permits from DERM, USACE, and FDEP.
- *Wagner Creek Dredging, Phase V*: The City is awaiting approved permits.
- *Install solid waste interceptors at all Miami River outfalls*: No new solid waste interceptors were installed in 2002.
- *Collect, compile, analyze and report of solid waste data from catch basins*: City of Miami Public Works cleaned 114 Miami River Catch Basins in 2002. The FEMA grant funding used to contract additional catch basin cleanings, expired in March 2003.
- *Report of on-site stormwater treatment alternatives and BMP's*: Under research by the City of Miami Public Works Department.

WASTEWATER

- *Report on alternatives to find and eliminate leaking or improper laterals*: WASD performs sanitary sewer evaluations on 100% of the main lines owned and operated by the Department. This evaluation includes a close circuit television inspection and smoke testing. The next sanitary sewer evaluation for the Miami River Watershed is scheduled for 2005. WASD is in the process of developing a pressure testing protocol.
- *Eliminate septic tanks with the highest potential risk*: A new collection system was installed on the south side of the River west of 27th Avenue to the salinity dam. As wastewater was hooked up to the new collection system, the old septic tanks were disconnected.
- *Conduct "dye flood" study*: WASD and DERM met and decided that the Wagner Creek area would be the primary focus for this flooding program. DERM will be responsible for providing the subject area for this program. Phase I of this study has been completed and \$24,000 of the \$100,000 allocated by WASD has been spent.
- *Maintain transmission capacity in Miami River Watershed*: All pump stations within the Miami River Watershed have been certified for adequate capacity and can meet or exceed a two-year storm event. All pump stations have a minimum of two pumps where one pump is considered operational standby.

ENFORCEMENT, COMPLIANCE & EDUCATION

- *Set priorities and monitor "high risk NPDES stormwater facilities"*: City of Miami Public Works hired consultant to monitor "high risk NPDES stormwater facilities".
- *Conduct periodic NPDES permit compliance inspections to include public and private facilities*: Inspections are conducted twice per year at Wagner Creek Industrial Facilities. Daily inspections are conducted at work sites. All pump stations have been cleaned. Two notices of violation were issued and both sites came into compliance by cleaning the system.
- *Implement active inspection of sanitary sewer connections and stormwater drainage during construction*: The City of Miami is regularly inspecting new construction as part of the permitting process. The City of Miami Building Department inspects the private side and the Public Works Department inspects the public side. DERM inspects the storm sewer system hook-ups.
- *Achieve compliance with all permits that may affect water quality*: FDEP's Waste Management Program developed a list of all permitted facilities in the Miami River Basin. They found 17 large quantity generators of hazardous waste as well as 1008 locations that have had compliance and enforcement inspections over the past 5 years. Certain facilities from each of these lists will be scheduled for inspections each quarter. Ten facilities have been inspected this past year. The FDEP also helped to coordinate a Pollution Prevention Conference that was held the last week of August on Miami Beach. It has been found that there are no domestic wastewater treatment locations in the Miami River Basin.

- *Continue surveillance and inspections:* DERM has conducted 128 routine inspections and attended 9 interagency coordination meetings over the past year.
- *Provide Environmental Education:* SFWMD implemented the DiscoverBiscayneBay.org website in July 2002. SFWMD also partnered with CFABSF to develop and implement a new comprehensive Biscayne Bay environmental education program for all segments of the Miami-Dade County community. The MRC has been providing free river tours to students and community organizations in Miami. On April 20, 2002 the MRC, MRMG, CFABSF, DERM and the East Little Havana NET organized the 6th Annual Miami RiverDay Festival.
- *Point Park Environmental Center:* The City of Miami has obtained partial funding for this project from a Community Development Block Grant. The City of Miami is in the process of submitting a joint application with DERM to apply for a FIND grant to fund the remainder of this project. The FDEP permit has been approved.

MONITORING & RESEARCH

- *Continue monthly monitoring for water quality of Wagner Creek, Miami River and adjoining Biscayne Bay:* DERM continues to collect monthly water quality samples in the Miami River and its tributaries.
- *Complete special studies required under NPDES:* The City of Miami Public Works Department is in the planning stages of scheduling training and certifying selected City staff for stormwater, erosion and sedimentation control inspections. This department will also require consulting engineering designers to implement necessary BMP's in the construction drawings for public works projects.
- *Extend the stormwater bacterial survey farther upstream:* Under research by the City of Miami Public Works Department NPDES program.
- *Research to determine the source of Escherichia coli bacteria in Wagner Creek:* SFWMD and DERM will develop a project scope of work to accurately identify how much funding will be required.
- *Generate "user-friendly" water quality reports for the Miami River and Wagner Creek:* Maps and graphs have been integrated into DERM's quarterly reports over the past year. Now that water quality targets have been developed, maps and graphs will become a regular portion of the quarterly reports. These items can be viewed on the MRC website.
- *Finalize water quality targets for key parameters:* DERM, SFWMD and FDEP developed water quality concentration targets for 10 key parameters in the Miami River.

Parameters (units)	County or State Class III Marine Standard (whichever is stricter)	Median Biscayne Bay Concentration (TARGET)	Median Upper Miami River Concentration (TARGET)
Management Objective	Never Exceed	Prevent degradation of Bay	Prevent degradation of River
Total Ammonia Nitrogen (mg/l)	0.5 (County)	0.06	0.3
Total Nitrate/Nitrite (mg/l)		0.02	0.11
Total Phosphorous (mg/l)	0.1 (State)	0.006	0.02
Turbidity (NTU)	29 above background (County)	2.5	1.8
Cadmium (ug/l)	9.3 (State)	0.1	0.1
Copper (ug/l)	2.9 (State)	0.6	2.0
Lead (ug/l)	0.35 (State)	0.3	0.52
Zinc (ug/l)	86.0 (State)	3	3.0
Total Coliform (cfu/100ml)	1000 (County)	40	1900
Fecal Coliform (cfu/100ml)	800 (State)	10	500

MANAGEMENT

- *Enhance the authority and leadership role of the Stormwater Subcommittee:* Diligent efforts have continued to lead to improvements of the stormwater system.
- *Identify specific action tasks and responsible parties:* The Miami River Basin Water Quality Improvement Report has a matrix which outlines specific action tasks and the corresponding lead agency.
- *Integrate stormwater management goals and Upper Wagner Creek tasks and objectives into the activities of related Miami River committees:* An implementation step of the Urban Infill Plan is to operate a clean-up vessel on the River. The newly built sections of the Greenway will stop stormwater runoff due to their design parameters.
- *Establish standardized water quality tracking for key characteristics:* Representative stations and parameters have been selected and plotted against a linear trend line for the Miami River over the past 10 years and the existing State or County standard for each parameter.
- *Standardize reporting format and publish results regularly:* Quarterly reports are submitted by the governmental agencies and the results are posted on the MRC website at: www.miamirivercommission.org.
- *Conduct an annual evaluation and "report card":* The 2002 Miami River Stormwater Progress Report serves as the annual evaluation on the status of each action item.

LAND PLANNING

- *Report on "green" overlay with current and expected level of commitment:* On September 2, 2002, the Miami River Commission approved the Miami River Corridor Urban Infill Plan as our adopted strategic plan.