



MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT
4th QUARTERLY REPORT
(OCTOBER 1, 2003 – DECEMBER 31, 2003)

Action Items

1. Storm water
 - a. Retrofit drainage in remaining areas of Miami River starting with Pinehurst neighborhoods

Status: The conceptual design phase was completed on approximately September 2003. The final design phase is anticipated to begin by February 15, 2004. Estimated total project cost is \$ 1,500,000. This project is fully funded by city local funds supplemented by SFWMD grants in the amount of \$ 1.2 million.

The project boundaries are bounded on the north by N.W. 28th Street, on the south by N.W. 20th Street, on the west by N.W. 17th Avenue and on the east by N.W. 12th Avenue.

- b. Little Havana Storm Sewer Rebuilding Project

Status: The construction for this project was completed on October 2002.

The project location is S.W. 10th Terrace between S.W. 27th and S.W. 28th Avenue.

- c. Allapattah Storm Sewer Project

Status: Funding has been allocated for this project. Construction for this project is in progress and anticipated to be completed in March 2003. Estimated total project cost is \$ 256,000.

This project is located along N.W. 15th Street between 13th Court and 14th Avenue and along 13th Court between 15th and 16th Street.

d. Downtown Storm Sewers Rebuilding Project

Status: This project is divided in two phases: Phase I (S.W. 15th Road) and Phase II (North Bay Shore Drive at N.E. 18 Street). Phase I was completed on August 2002.

The Phase II design plans have been 80% completed by Milian Swain & Associates (MSA). However, this project was closed on July 3, 2003. Special permits required for new condominium developments of regional impact changed the characteristics of North Bay shore Drive and N.E. 18 Street. The required elevation of the new development is significantly higher than the surrounding roadway elevations causing major grade changes to these roadways and the reevaluation of a new drainage approach to this area.

e. Wagner Creek Dredging Project, Phase IV

Status: The City of Miami is awaiting approved permits from Miami-Dade County Department of Environmental Resources Management (MDC-DERM), Army Corp of Engineers (ACOE), and the Florida Department of Environmental Protection (FDEP) prior to starting the dredging activities.

The design phase is 90% completed by Consulting Engineering & Science (CES), Inc. Prior to the implementation of the dredging activities, a Corrective Action Plan (CAP) will be submitted to the Pollution Remediation Section (PRS) of MDC-DERM for approval by February 13, 2004. PRS may take approximately 30 days to provide comments to the City of Miami. The CAP must include, at a minimum, the following:

- 1) a timetable for the dredging activities;
- 2) a post-dredging surface water sampling plan;
- 3) a Sediment Sampling Plan (SSP) to characterize the dredged sediment (in-situ) for proper disposal;
- 4) identification and description of the staging area for the temporary storage and drying of the dredged sediment prior to landfill disposal, which addresses issues such as site security (e.g., fence) to control human contact, collection and proper disposal of runoff water, odor control, etc.;
- 5) identification of the intended disposal site maybe a Class I Landfill. Disposal to a Class I landfill is contingent upon the additional disposal characterization sample results (item no. 3) being consistent with previous preliminary

characterization sample results completed around June 2003.

The SSP (item no. 3) included in the CAP has been completed and has been submitted to MDC-DERM on November 7, 2003. A temporary spoil storage site (item no. 4) has been identified on the permits as NW 7th Avenue and NW 17th Street.

At this time, it is the City's intention to dredge the creek by crane and bucket (clamshell method). An optional method of dredging (hydraulic dredging in combination with a centrifugal dewatering system) is under investigation which can eliminate the need to identify and utilize a temporary storage site for dewatering.

The design completion date including approval of all permitting has been moved forward and is anticipated to be completed by September 2004.

However, the project schedule may be further delayed because of its dependency on the approval of the various agency permits mentioned above and Miami Dade County Board of County Commission approval that will be required prior to the dredging activities. Furthermore, any amendment made to the permits for a change in the temporary spoil storage or change in method of dredging may also delay the schedule.

The City anticipates to group Phases IV and V together and advertise for bids subsequent to the completion of the design phase.

Estimated total project cost is \$ 1,812,000. This phase has been fully funded by local city funds supplemented with a SFWMD grant in the amount of \$ 1,000,000 that will be utilized for phases IV and V.

The project limits are along Wagner Creek between 14th Avenue and N.W. 15th Street.

f. Wagner Creek Dredging Project, Phase V

Status: The City of Miami is awaiting approved permits from Miami-Dade County Department of Environmental Resources Management (MDC-DERM), Army Corp of Engineers (ACOE), and the Florida Department of Environmental Protection (FDEP) prior to starting the dredging activities.

The design phase is 90% completed by Consulting Engineering & Science (CES), Inc. Prior to the implementation of the dredging activities, a Corrective Action Plan (CAP) will be submitted to the Pollution Remediation Section (PRS) of MDC-DERM for approval by February 13, 2004. PRS may take approximately 30 days to provide comments to the City of Miami. The CAP must include, at a minimum, the following:

- 6) a timetable for the dredging activities;
- 7) a post-dredging surface water sampling plan;
- 8) a Sediment Sampling Plan (SSP) to characterize the dredged sediment (in-situ) for proper disposal;
- 9) identification and description of the staging area for the temporary storage and drying of the dredged sediment prior to landfill disposal, which addresses issues such as site security (e.g., fence) to control human contact, collection and proper disposal of runoff water, odor control, etc.;
- 10) Identification of the intended disposal site maybe a Class I Landfill. Disposal to a Class I landfill is contingent upon the additional disposal characterization sample results (item no. 3) being consistent with previous preliminary characterization sample results completed around June 2003.

The SSP (item no. 3) included in the CAP has been completed and has been submitted to MDC-DERM on November 7, 2003. A temporary spoil storage site (item no. 4) has been identified on the permits as NW 7th Avenue and NW 17th Street.

At this time, it is the City's intention to dredge the creek by crane and bucket (clamshell method). An optional method of dredging (hydraulic dredging in combination with a centrifugal dewatering system) is under investigation which can eliminate the need to identify and utilize a temporary storage site for dewatering.

The design completion date including approval of all permitting has been moved forward and is anticipated to be completed by September 2004.

However, the project schedule may be further delayed because of its dependency on the approval of the various agency permits mentioned above and Miami Dade County Board of County Commission approval that will be required prior to the dredging activities. Furthermore, any amendment made to the

permits for a change in the temporary spoil storage or change in method of dredging may also delay the schedule.

The City anticipates to group Phases IV and V together and advertise for bids subsequent to the completion of the design phase.

Estimated total project cost is \$ 2,530,215. This phase has been fully funded by local city funds supplemented with a SFWMD grant in the amount of \$ 1,000,000 that will be utilized for phases IV and V.

The project limits are along Wagner Creek between 15th Street and N.W. 11th Street.

g. Wagner Creek Dredging Project, Phase III

Status: This project is currently under design by PHS Engineering Corp., the city consultants. The design phase is 40% completed. Design and permitting is anticipated to be completed by November 2004. Phase III will require the preparation, completion, and approval of a CAP as was needed for Phases IV and V. The estimated total project cost is \$ 1,230,000. This project is partially funded by a combination of Federal Emergency Management Agency (FEMA), State, and local City funds.

The project limits are along Wagner Creek between 20th Street and N.W. 14th Avenue.

h. Install solid waste interceptors at all Miami River Outfalls

Status: The City of Miami is not currently utilizing solid waste interceptors in their projects. However, the City does retrofit storm sewer systems out falling to waterways with pollution retardant control devices (baffle boxes) which inhibit oil and greases from entering the waterways. The devices are not designed to capture solid debris such as trash, etc.

Collect, compile, analyze and report of solid waste data from catch basins

Status: From October 2003 to December 2003 Enviro Waste Services Group contractor working for the City of Miami cleaned

approximately 60,000 LF of storm sewer pipes and 900 storm sewer structures, removing an estimated amount of 90 cu yd. of solid waste (Trash, sediments, litter, debris, etc.). In the same period PW Operations cleaned approximately 15,000 LF of storm sewer pipes and 800 Storm sewer Structures, removing an estimated amount of 210 tons of solid waste. By mechanical street-sweeping along arterial roadways and main commercial corridors of priority basins, the City also removed in that period an estimated amount of 160 cu yd of solid waste (Soil/Dust/Debris).

The City inspected through its consultant Marlin Engineering, Inc. and its NPDES certified inspectors, all pipes and structures cleaned by Enviro Waste Services Group.

i. Report of on-site storm water treatment alternatives and BMP's

Status: There are at the present time 71 major construction sites within the City limits that are inspected every week for compliance with the EPA Best Management Practices (BMP's) regulations for erosion and sedimentation control in all approved Engineered Design Plans. The City of Miami Department of Public Works regulates and enforces the BMP's through its NPDES Program. BMP's inspected for compliance during the construction phase of projects are the following: silt fences, the filtering of turbid water during dewatering processes, floating turbidity barriers for sites near water bodies (Miami River, Biscayne Bay, Canals, etc.), straw bale barriers, block and gravel drop inlet sediment filters and high pressure water cleaning combined with temporary gravel construction entrances.

2. Wastewater

a. Conduct "dye flood" study

Status: In year 2003 no new illegal connections between storm water and sanitary sewer systems have being identified and reported within city limits by MDWASD.

The illegal connection locations listed below were disconnected under a City contract completed by Metro Express, Inc. on June 2002:

1) NE 79 St. and NE 3 Court

- 2) 2005 SW 3 Street
- 3) 2175 NE 2 Avenue
- 4) NW 18 Avenue and NW 1 Street
- 5) 101 SW 26 Road

3. Enforcement, compliance and education

- c. Implement active inspection of sanitary sewer connections and storm water drainage during construction

Status: The City of Miami is regularly inspecting new construction of storm sewer and sanitary infrastructure as part of the on-going procedures of the permitting process. The City of Miami Building Department inspects the private side and Public Works Department line and grade inspector inspects the public side. The Miami-Dade DERM inspects storm sewer system hook-ups.

- g. Point Park Environmental Center

Status: The estimated cost to build the Spring Garden Point Park project is \$370,000. FIND will contribute with \$138,000, DERM with another \$138,000 and the balance of \$94,000 will come from the City of Miami Community Development funds.

On December 2003, the lease agreement between the State of Florida and the City of Miami to use the sovereign submerged land adjacent to the Park was finalized and signed by both parties.

The City of Miami granted the Spring Garden Civic Association \$271,000 to purchase the two story building adjacent to the park and to pay for the consultant design firm that prepared the plans for renovations to the building. The Association is requesting the City an additional \$296,000 to complete such renovations for a total of \$569,000 City's Community Development funds.

4. Monitoring and Research

- b. Complete special studies required under NPDES

Status: As required by the NPDES permit, on November 24, 2003, Elyrosa Estevez, P.E. III City of Miami Public Works Qualified Storm water Management Instructor by the Department of Environmental Protection (FDEP), conducted a

Storm water, Erosion and Sedimentation Control Inspector Training Program to certify new inspectors in the Department of Public Works NPDES Division. As a result, 13 new inspectors were trained and currently hold certification in Storm water, Erosion and Sedimentation Control by the Florida Department of Environmental Protection (FDEP).

NPDES city staff regularly attends seminars, conferences and exhibits hosted by the Florida Stormwater Association on Storm Management and Utilities, Watershed Protection and Total Maximum Daily Loads (TMDL's), to acquire the required knowledge of environmental regulations and to be informed of innovative solutions to the stormwater problems used and tested by other agencies and municipalities.

As part of the permitting process, the City of Miami Public Works Department requires that consulting engineering designers, implement the necessary Storm water Best Management Practices for Construction Activity in the construction drawings for public works and capital improvement projects, and contractors to implement these BMP's during construction.

- c. Extend the storm water bacterial survey farther upstream

Status: On December 2003 the City of Miami Public Works Department in conjunction with Miami-Dade Water and Sewer Department, conducted the isolation pilot survey on the Wagner Creek portion between NW 15th Ave and NW 22nd Ave on 20th Street to verify the accuracy of the MDWASD CAD drawings, to measure water flows and to obtain other parameters of interest in the Pollution Source Identification and Abatement Project. The City of Miami provided the SSC copies of the completed section of the isolation pilot survey.