# "MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT" Action Item Matrix Quarterly Progress Report

Third Quarterly Report, 2002 (July 1 – September 30)

### **Action Item:**

- 3. Enforcement, compliance and education
- e. Continue surveillance and inspections

**Lead Agency:** Miami-Dade County DERM

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### **Action Item Status:**

The Coastal Resources Section of Miami-Dade County Department of Environmental Resource Management conducts routine inspections on the Miami River and also responds to specific public complaints. The following is a summary of the activities performed by the inspectors during the last quarter.

### MIAMI RIVER ENFORCEMENT ACTIVITIES

• Number of routine inspections 30 (93% Compliance)

 Number of enforcement actions 6 (complaints,tickets,notices,warnings)

• Number of interagency coordination meetings 3

8-13-2002 MREG interagency meeting 9-17-2002 MREG facility inspections 9-18-2002 MREG facility inspections

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Third Quarterly Report, 2002 (July 1 – September 30)

#### **Action Item:**

4. Monitoring and Research

a. Continue monthly monitoring for water quality of Wagner Creek, Miami River, and adjoining Biscayne Bay

Lead Agency: Miami-Dade County DERM

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### **Action Item Status:**

Miami-Dade DERM has continued to collect monthly water quality samples in the Miami River and its tributaries (including Tamiami Canal and Wagner Creek). During the third quarter of 2002, samples were collected at each of the ten stations in the River on July 9th, August 6<sup>th</sup>, and September 10<sup>th</sup>. Costs for sampling (including salaries and fringe and analysis) have been calculated at approximately \$320 per station per month. See table provided in the first quarterly report of 2002 for a matrix of parameters collected on the Miami River during DERM's monthly "Bay Run" and the frequency with which various types of parameters are collected. No sewage spills were reported on or around the River during the quarter. Such notification typically results in additional an emergency sampling response.

See **Figures 1 & 2** below for maps showing Total Coliform results from July and August (Septembers results have not yet been reported) at stations in the vicinity of the Miami River. Total Coliform results from station locations on the Miami River and its tributaries have been combined in **Figure 3** to show how frequently the results at each station exceeded the County standard (1000 cfu/100ml) Year to Date.

Figure 1.

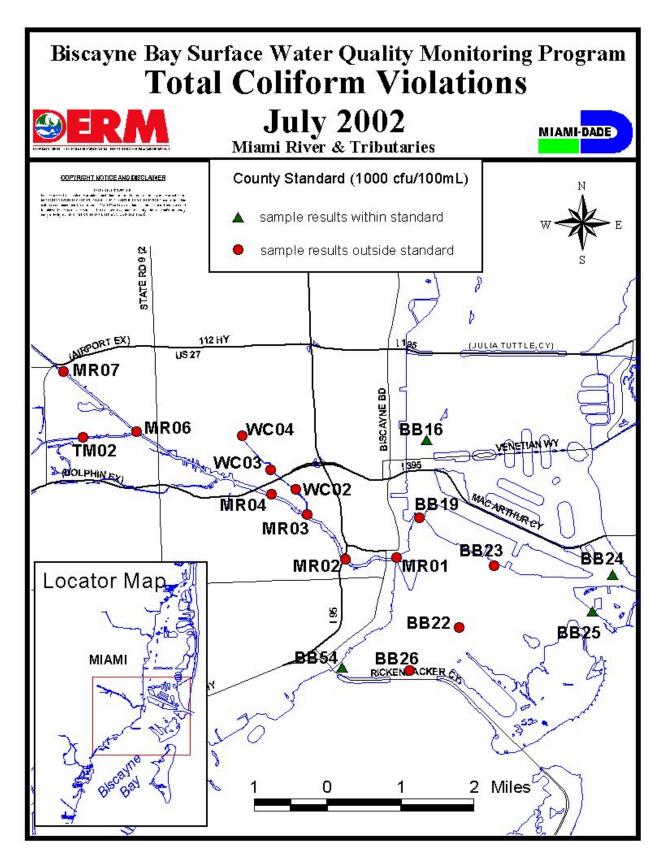


Figure 2.

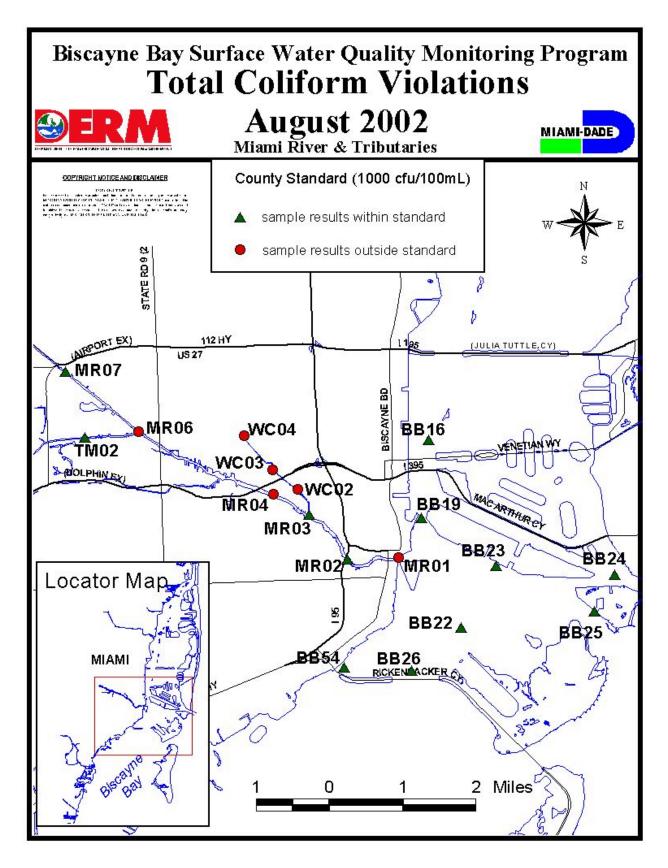
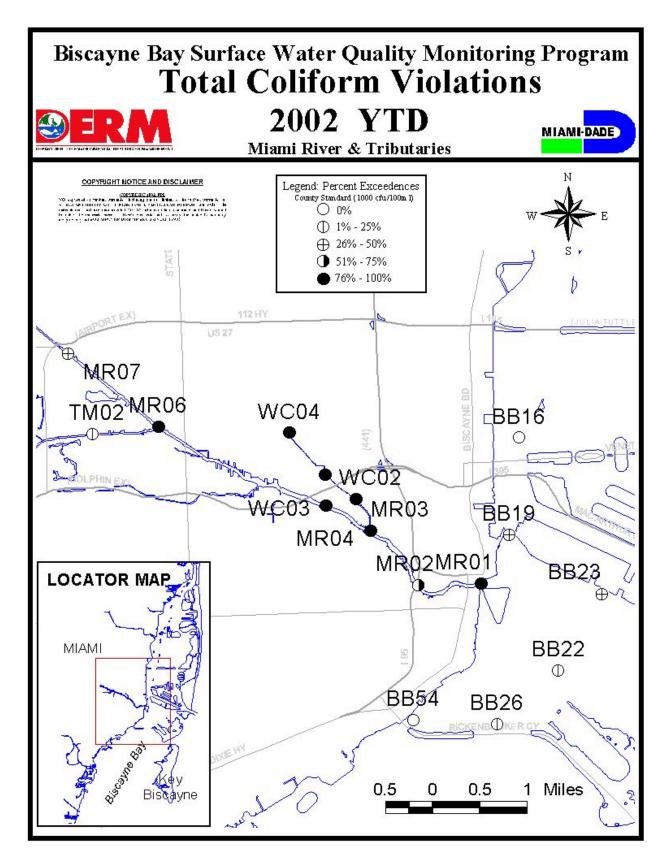


Figure 3.



# "MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT" Action Item Matrix Quarterly Progress Report

Second Quarterly Report, 2002 (April 1 – June 30)

### **Action Item:**

5. Management

d. Establish standardized water quality tracking for key characteristics

**Lead Agency:** Miami-Dade County DERM

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### **Action Item Status:**

Data collected during the third quarter (July through September) of 2002 under DERM's monthly "Bay Run" monitoring program are not yet available for reporting, due to the time consuming process of Quality Assurance and Quality Control (QA/QC) analyses. This report presents the results of the water quality monitoring that occurred in the second quarter (April through June) of this year. Due to the extensive nature of the database, it will not be feasible to track each parameter collected at each station for the period of record. Therefore, representative stations and parameters have been selected to achieve the objective of this Action Item. Current water quality trends will be tracked by plotting the actual sample results of several key parameters (see Charts 1 – 4 for graphs of ammonia nitrogen, total phosphate, total coliform, and turbidity data) from a station representing the Miami River (MR03) against the same parameters evaluated at another station in adjacent Biscayne Bay (BB22). See maps presented under action item 4a for station locations. Data collected at both stations during the most recent quarter are plotted in time series along with historic data from the previous ten year (1992 -2002) period. A linear trendline has been projected over the Miami River station data curve. For further comparative purposes, where applicable, a line indicating the existing state or county standard for each parameter is plotted as well.

Chart 1.

### **Ammonia Nitrogen Tracking**

Ten Year Period: July 1992 - June 2002

Second Quarter 2002 Data (April - June) Highlighted

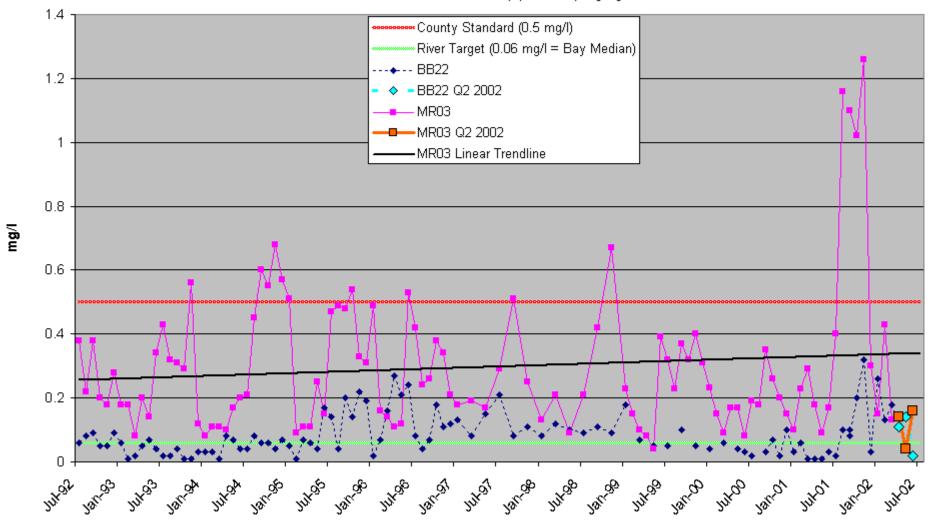


Chart 2.

### **Total Phosphate Tracking**

Ten Year Period: July 1992 - June 2002

Second Quarter 2002 Data (April - June) Highlighted

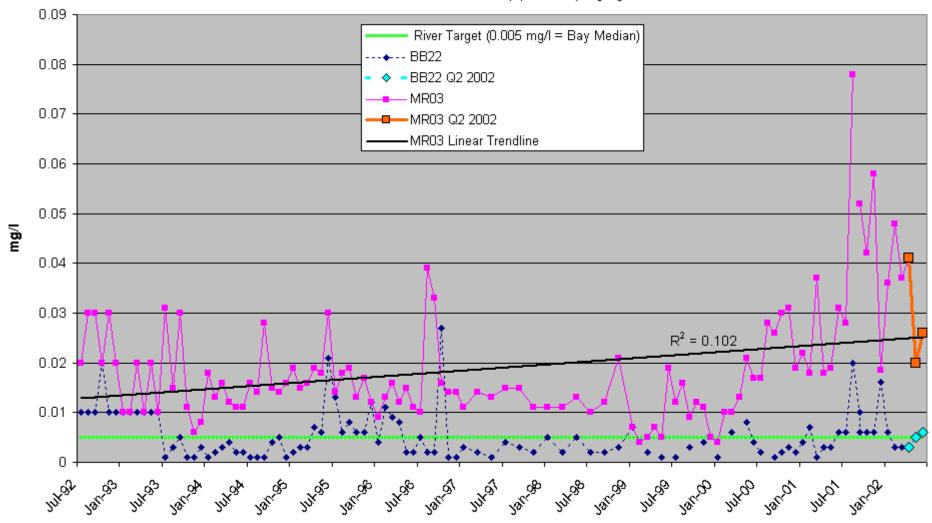


Chart 3.

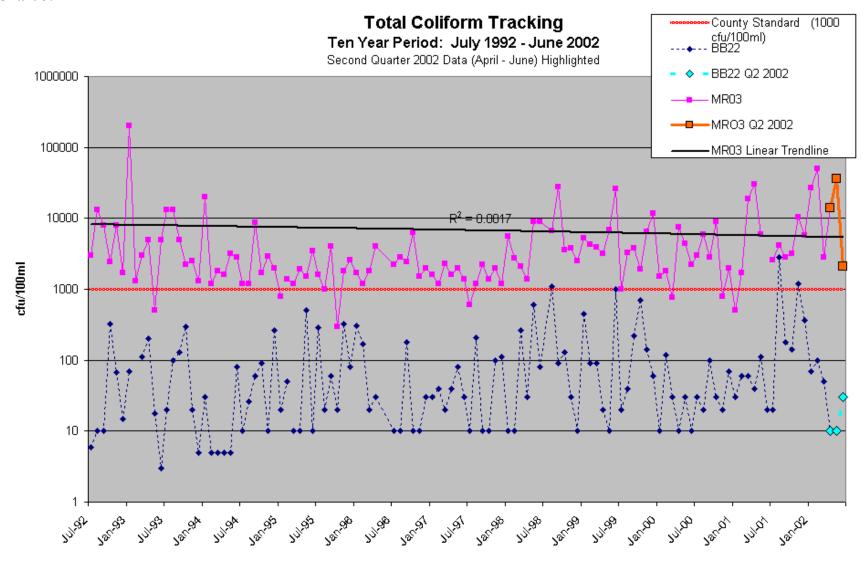


Chart 4.

### Turbidity Tracking Ten Year Period: July 1992 - June 2002

Second Quarter 2002 Data (April - June) Highlighted

