

“MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT”
Action Item Matrix Quarterly Progress Report

First Quarterly Report, 2004
(January-March)

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
Contact Name	Stephen Blair or Susan Kemp, DERM
Address	33 SW 2 nd Ave, Suite 1000 Miami, FL 33130
Telephone	(305) 372-6853 or (305) 372-6855
Fax	(305) 372-6630
E-mail	blairs@miamidade.gov kemps@miamidade.gov

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 second quarter of 2004, samples were collected at each of the ten stations in the River on July 8, August 5, and September 9. 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 - 3** below for maps showing monthly Total Coliform results from January-March at stations in the Miami River and vicinity. **Figure 4** is a quarterly composite of Total Coliform results from station locations on the Miami River and its tributaries showing how frequently the results at each station exceeded the County standard (1000 cfu/100ml) during the fourth quarter of the year.

Biscayne Bay Surface Water Quality Monitoring Program Total Coliform Violations



January 2004
Miami River & Tributaries

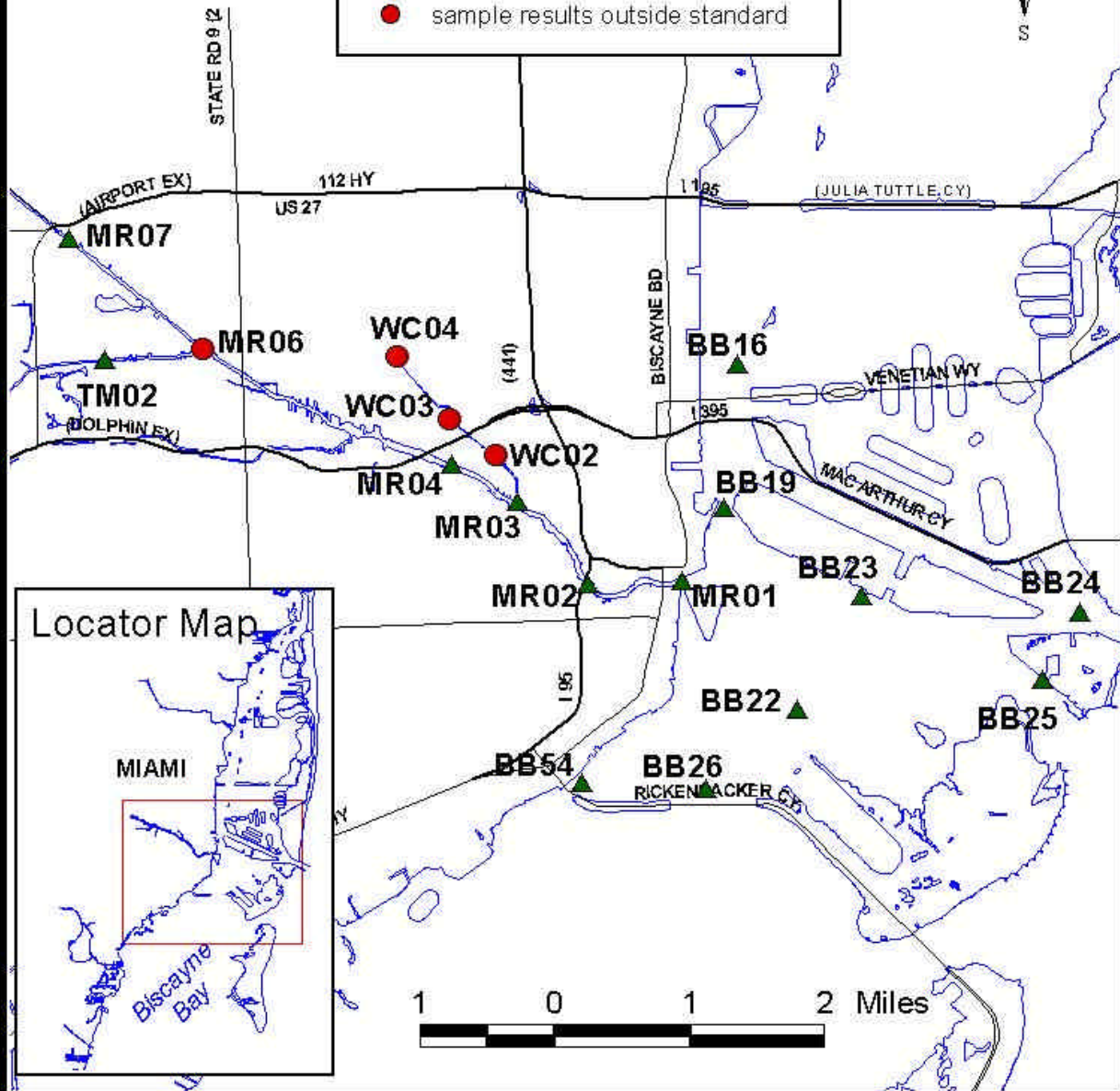
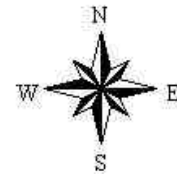


COPYRIGHT NOTICE AND DISCLAIMER

DERM is not responsible for any errors or omissions in this report. The user assumes all liability for any use of the information contained herein. This report is for informational purposes only and does not constitute a warranty of any kind. The user should consult with a professional engineer or other qualified person for more information.

County Standard (1000 cfu/100mL)

- ▲ sample results within standard
- sample results outside standard



“MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT”
Action Item Matrix Quarterly Progress Report

Biscayne Bay Surface Water Quality Monitoring Program Total Coliform Violations



February 2004
Miami River & Tributaries

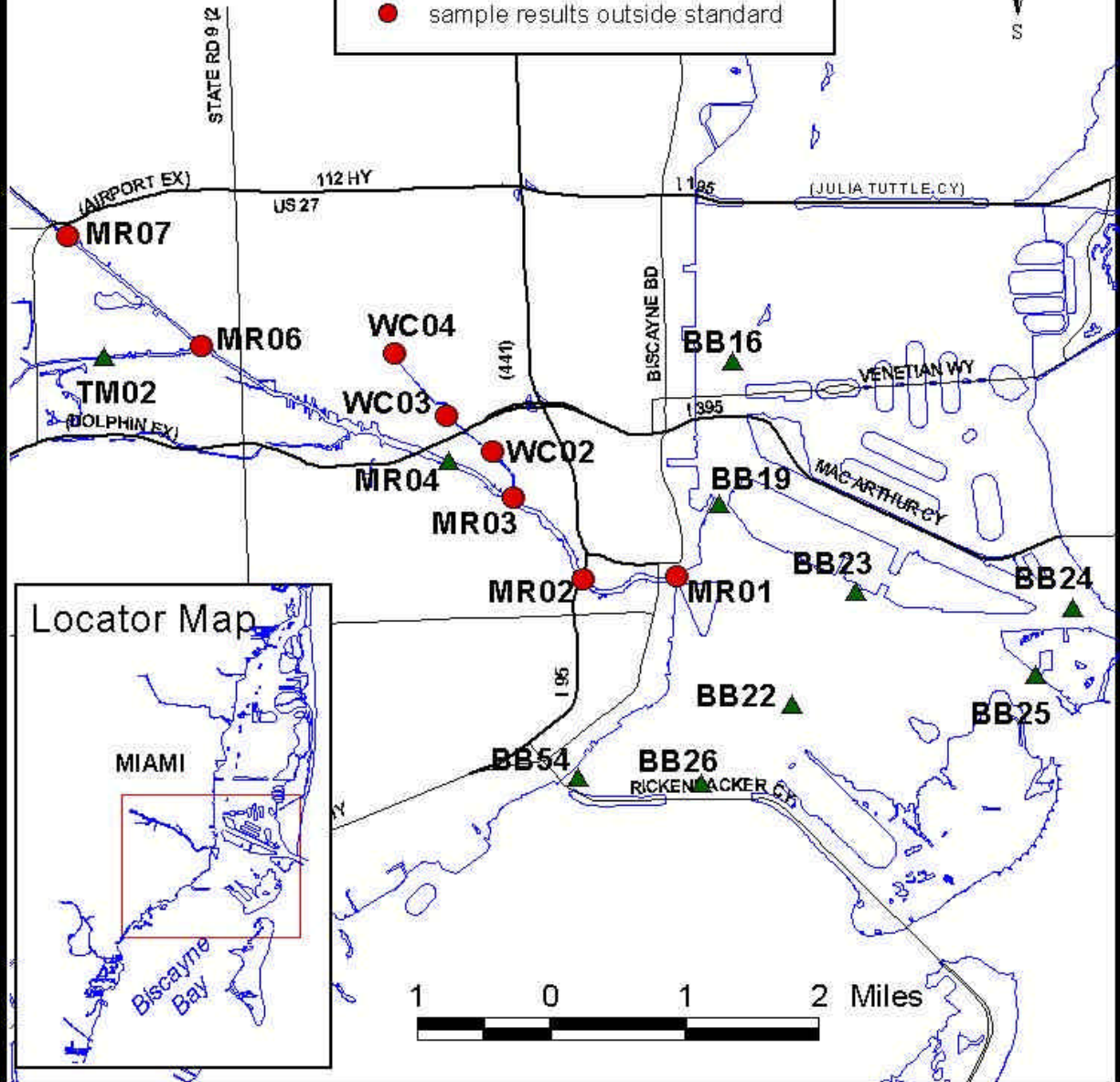
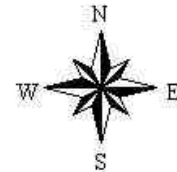


COPYRIGHT NOTICE AND DISCLAIMER

DERM, the logo, and the text "DERM" are registered trademarks of the Department of Environmental Regulation, Miami-Dade County, Florida. All other trademarks are the property of their respective owners. This document is for informational purposes only and does not constitute a contract or warranty of any kind. The information contained herein is subject to change without notice. The user assumes all responsibility for the use of this information.

County Standard (1000 cfu/100mL)

- ▲ sample results within standard
- sample results outside standard



Biscayne Bay Surface Water Quality Monitoring Program Total Coliform Violations



March 2004

Miami River & Tributaries

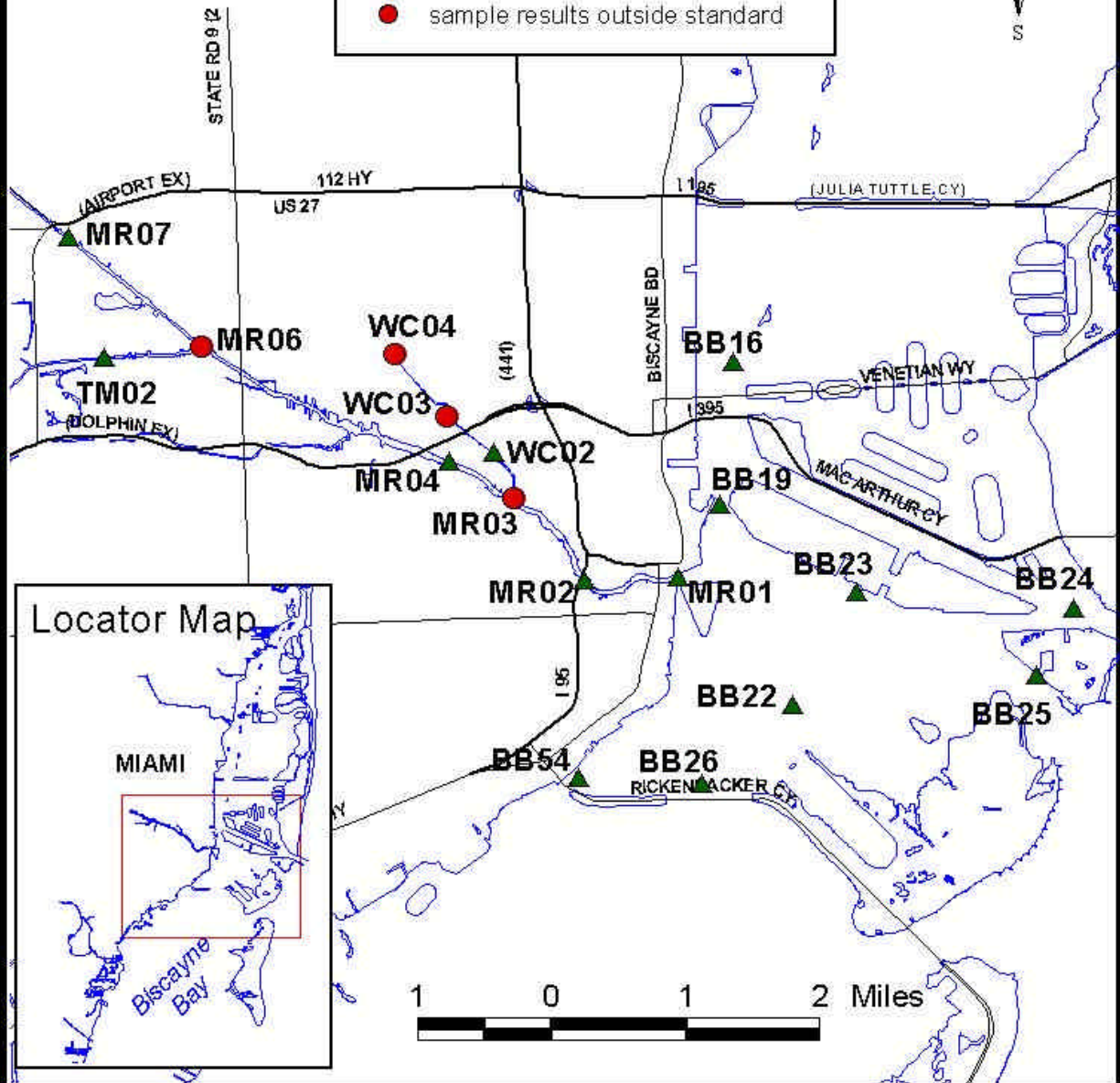
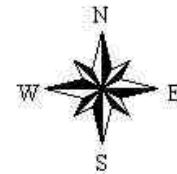


COPYRIGHT NOTICE AND DISCLAIMER

DERM does not warrant the accuracy of the information presented in this report. The information is provided for informational purposes only and should not be used for any other purpose. The user assumes all liability for any use of the information.

County Standard (1000 cfu/100mL)

- ▲ sample results within standard
- sample results outside standard



Biscayne Bay Surface Water Quality Monitoring Program Total Coliform Violations



Jan - Mar 2004
Miami River & Tributaries

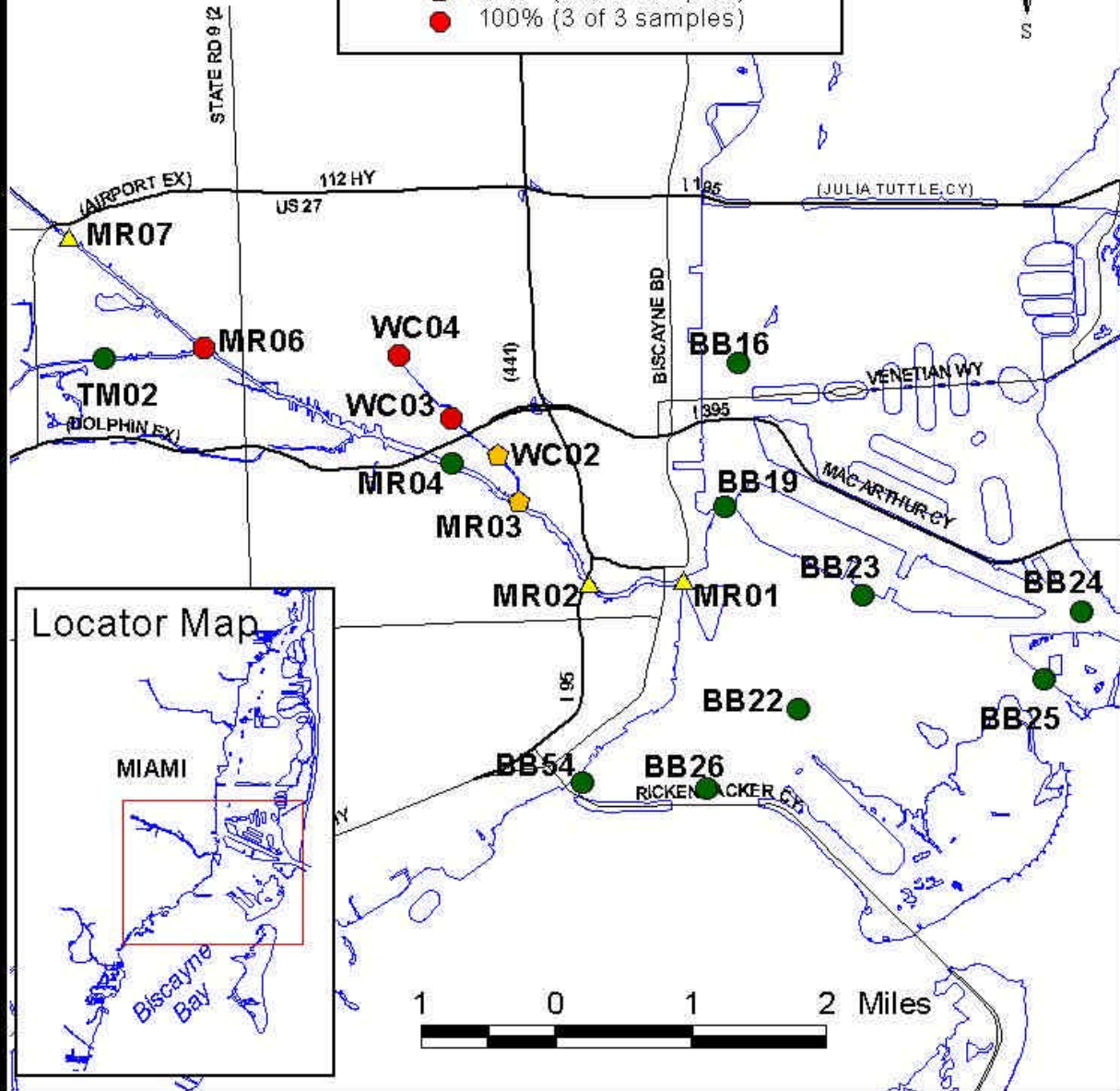
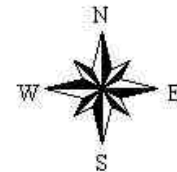


COPYRIGHT NOTICE AND DISCLAIMER

DERM, the logo, and the text "MIAMI-DADE COUNTY" are registered trademarks of the Miami-Dade County Department of Environmental Resources Management. All other trademarks are the property of their respective owners. This map is for informational purposes only and does not constitute a warranty of any kind. The user assumes all liability for any use of this map.

Percentage of Samples in Violation of Standard (>1000 cfu/100mL)

- 0% (0 of 3 samples)
- ▲ 33% (1 of 3 samples)
- ◆ 67% (2 of 3 samples)
- 100% (3 of 3 samples)



MONTHLY TOTAL COLIFORM LEVELS (cfu's/100 ml) IN WAGNER CREEK				
	WC04	WC03	WC02	MR03
January	5300*	13000*	7800*	410
February	10000*	2400*	1200*	3000*
March	8000*	2100*	300	5000*

A * indicates results that exceed the County Standard (1000 cfu/100ml).

First Quarterly Report, 2004
(January - March)

Action Item:

- 5. Management
 - d. Establish standardized water quality tracking for key characteristics

Lead Agency: Miami-Dade County DERM

Contact Name Omar Abdelrahman DERM
Address 33 SW 2nd Ave, Suite 1000
Miami, FL 33130

Telephone (305) 372-6858

Fax (305) 372-6630

e-mail abdelo@miamidade.gov

Action Item Status:

This report presents selected results of the water quality monitoring that occurred in the First quarter (January through March) of 2004. Due to the extensive nature of the database, it is not 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 4.a 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 (1994 - 2004) period. For further comparative purposes, the target values developed under Action Item 4.f are plotted, and where applicable, the existing state or county standard for each parameter is shown.

Chart 1.

Ammonia Nitrogen Tracking
Ten Year Period: 1994 - 2004
First Quarter 2004 Data (January - March) Highlighted

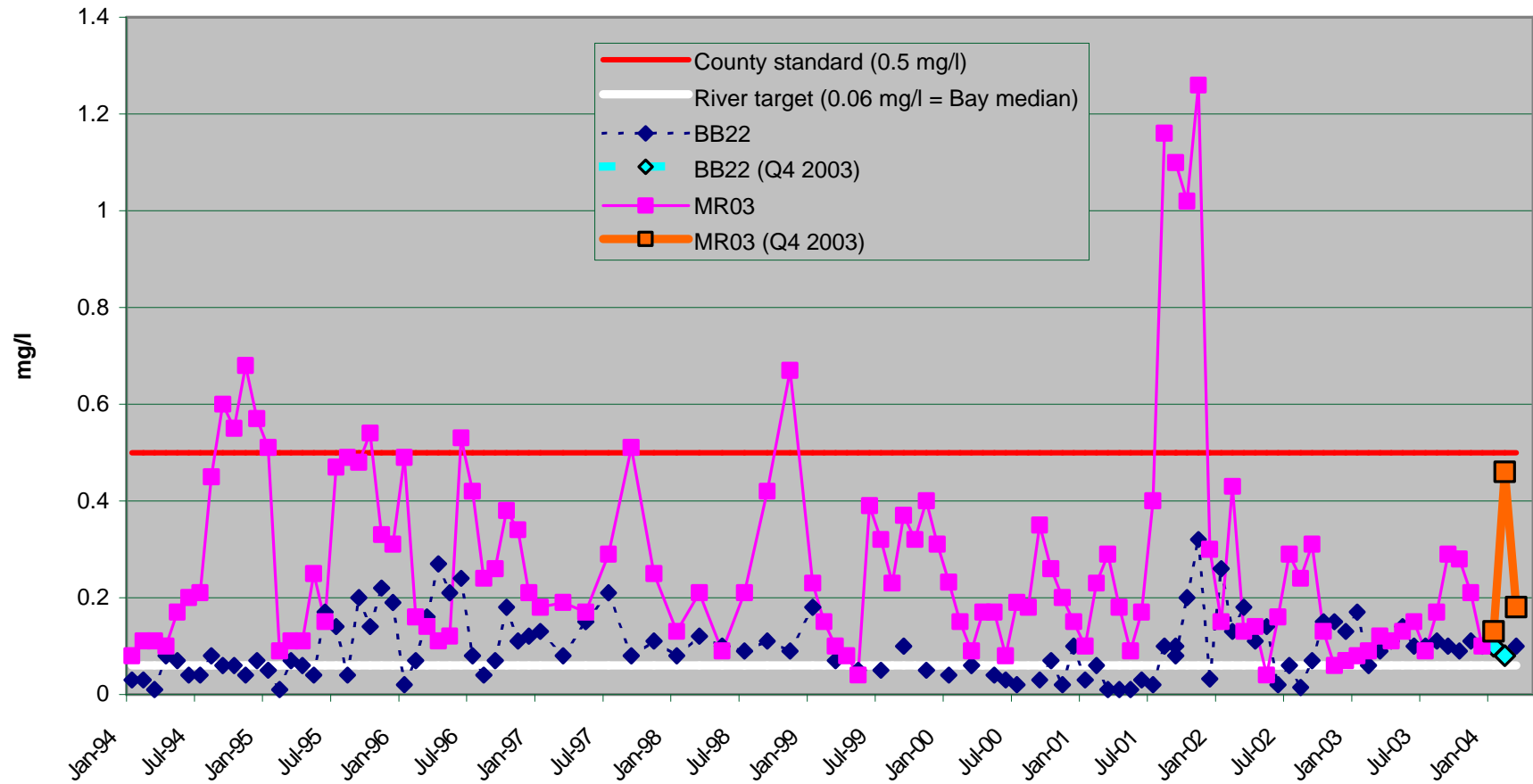


Chart 2.

Total Phosphate Tracking

Ten Year Period: 1994 - 2004

First Quarter 2004 Data (January - March) Highlighted

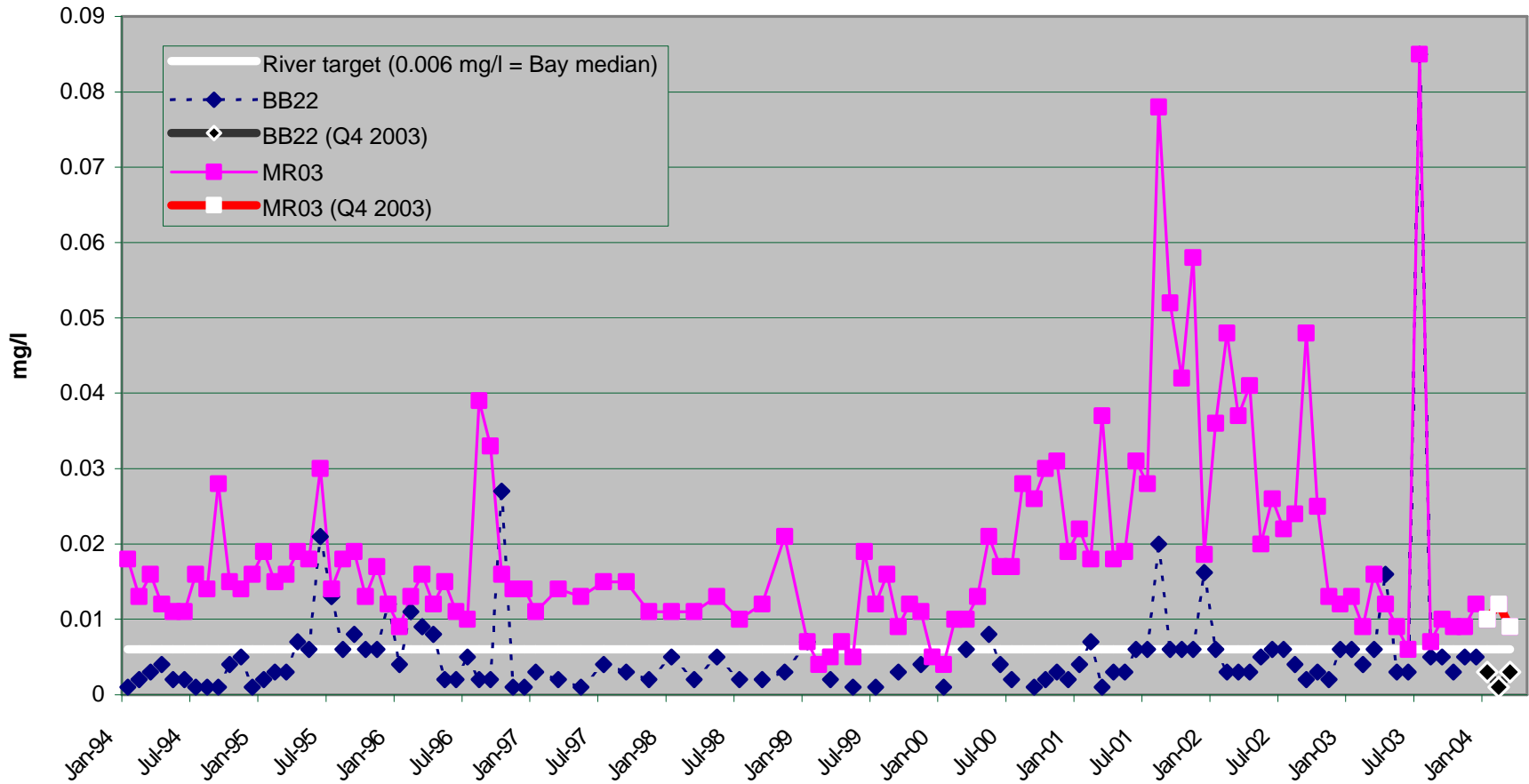
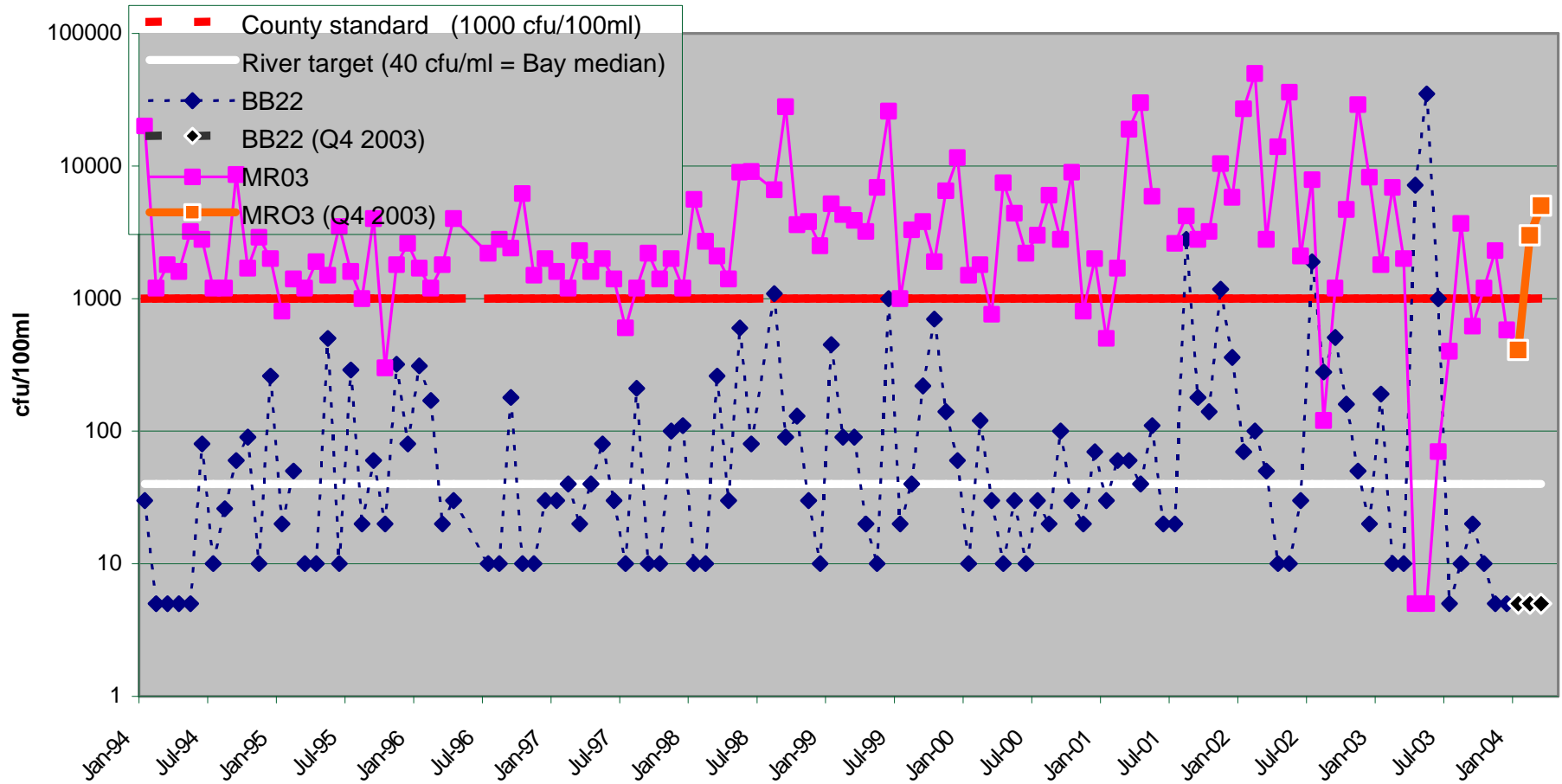


Chart 3.

Total Coliform Tracking Ten Year Period: 1994 - 2004 First Quarter 2004 Data (January - March) Highlighted



Turbidity Tracking
Ten Year Period: 1994 - 2004
First Quarter 2004 Data (January - March) Highlighted

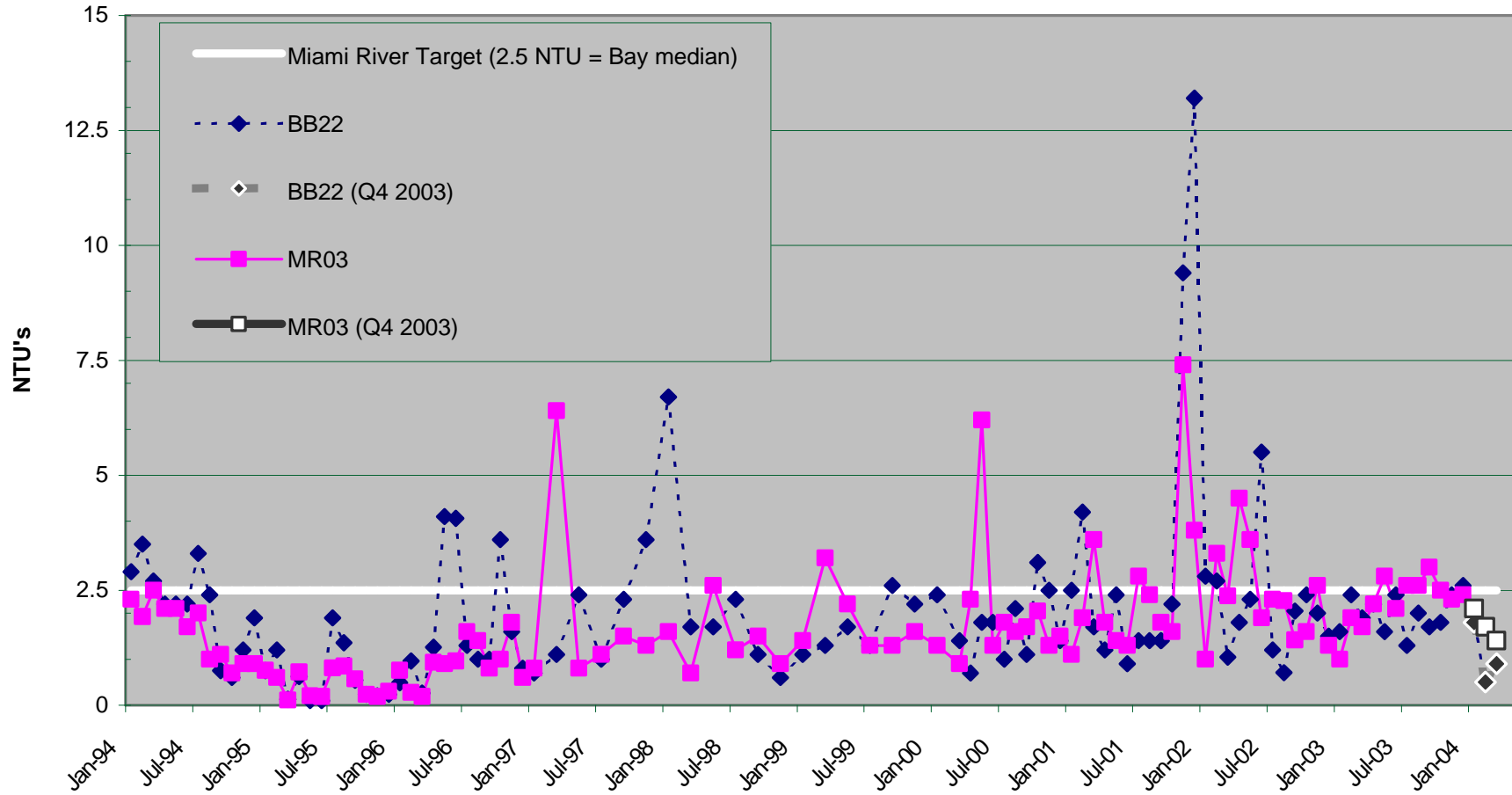


Chart 4.

This page intentionally left blank.