

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

Third Quarterly Report, 2025
(April – June 2025)

Action Item:

4. Monitoring and Research

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

Lead Agency:	Miami-Dade County Regulatory and Economic Resources, Division of Environmental Resources Management (DERM)
Contact Names	Pamela Sweeney or Charles Groppe, DERM
Address	701 NW 1 st Court Miami, FL 33136
Telephone	(305) 372-6594 or (786) 221-6079
Fax	(305) 372-6649
E-mail	pamela.sweeney@miamidade.gov charles.groppe@miamidade.gov

Action Item Status:

Miami-Dade County (the County) has continued collecting monthly water quality samples in the Miami River and its tributaries (including Tamiami Canal, Comfort Canal, and Wagner Creek). Due to the time it takes for analytical laboratories to provide sample results, and additional time for data quality assurance/quality control, the County can only report on the previous quarter's results. During the third quarter (April-June) of 2025, samples were collected at each of the eleven (11) stations in the river and tributaries on the first Tuesday of the month in April, May, and June. Costs for sampling (including salaries and fringe and analysis) have been calculated at approximately \$394 per station per month. No sewage spills were reported during this quarter.

The Florida Department of Environmental Protection (FDEP) revised the human health-based surface water quality criteria in Chapter 62-302, F.A.C that are designed to ensure that Floridians can safely eat Florida fish and drink local tap water. Figures 1-3 below depict where monthly results for stations along the Miami River and the vicinity exceed the single sample standard of 130 cfu/100 mL for *Enterococcus* spp.—the applicable indicator for saline locations. Figure 4 shows a quarterly composite of Enterococci results from station locations on the Miami River and its tributaries showing how frequently the results at each station exceeded the standard during the third quarter of the year. Table 1 lists the observed *Enterococcus* values, as well as *Escherichia coli* levels in Wagner Creek and its confluence with the Miami River (MR03) for April-June.

**Biscayne Bay Surface Water Quality Monitoring Program
 Enterococci Bacteria Sample Compliance
 April 2025
 Miami River and Tributaries**

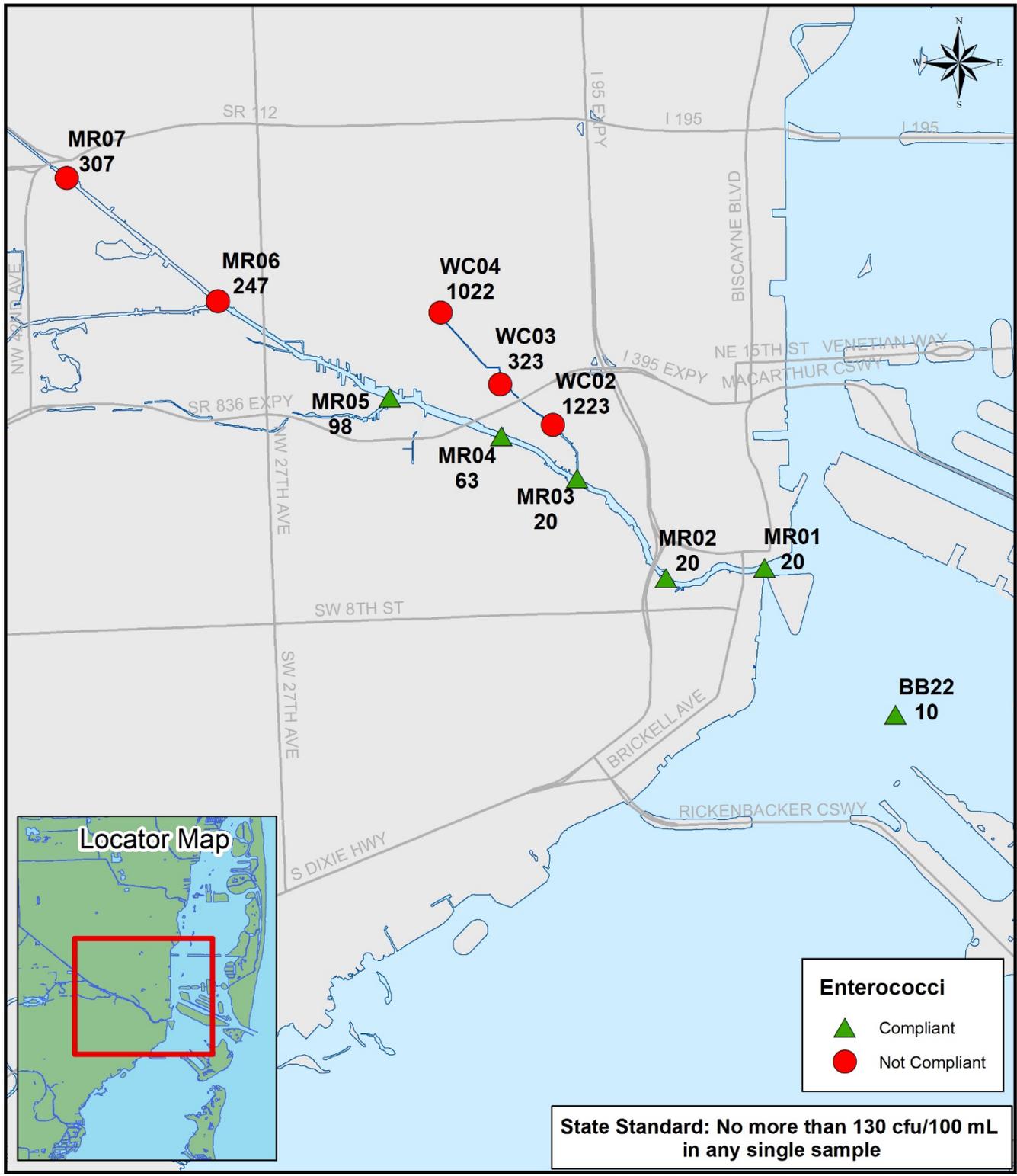


Figure 1

**Biscayne Bay Surface Water Quality Monitoring Program
 Enterococci Bacteria Sample Compliance
 May 2025
 Miami River and Tributaries**

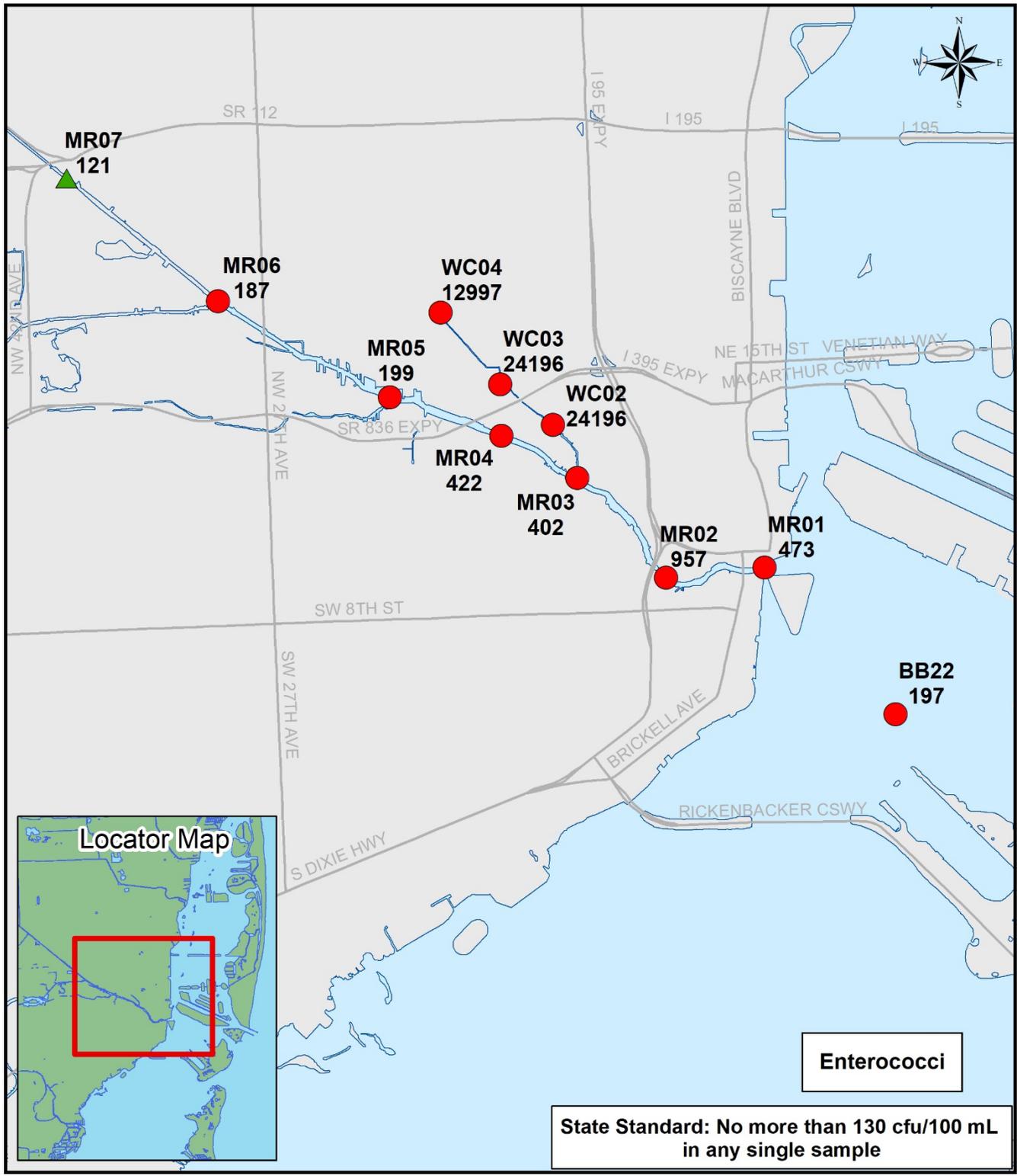


Figure 2

**Biscayne Bay Surface Water Quality Monitoring Program
 Enterococci Bacteria Sample Compliance
 June 2025
 Miami River and Tributaries**

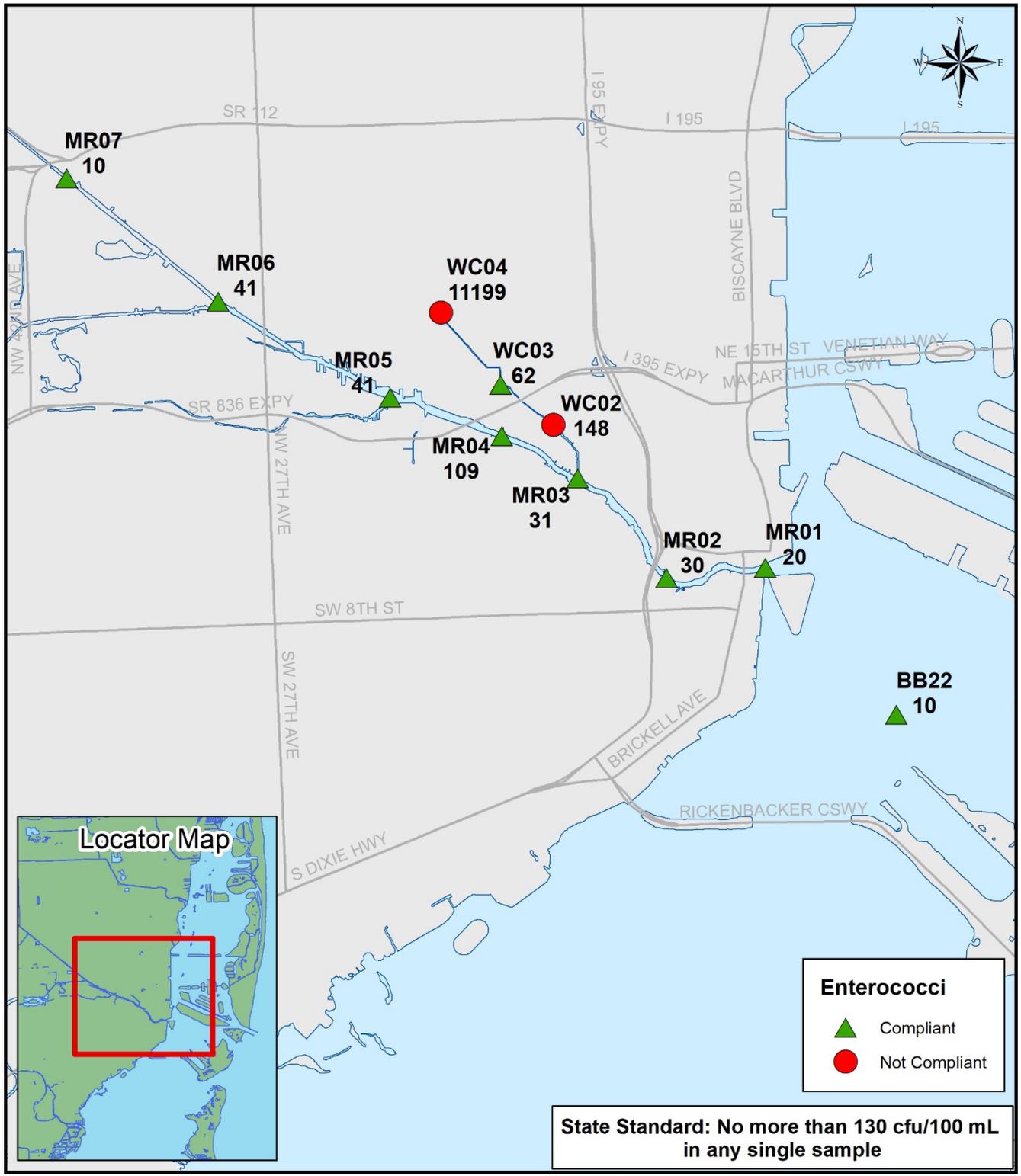


Figure 3

**Biscayne Bay Surface Water Quality Monitoring Program
 Quarterly Summary of Enterococci Bacteria Sample Compliance
 April - June 2025
 Miami River and Tributaries**

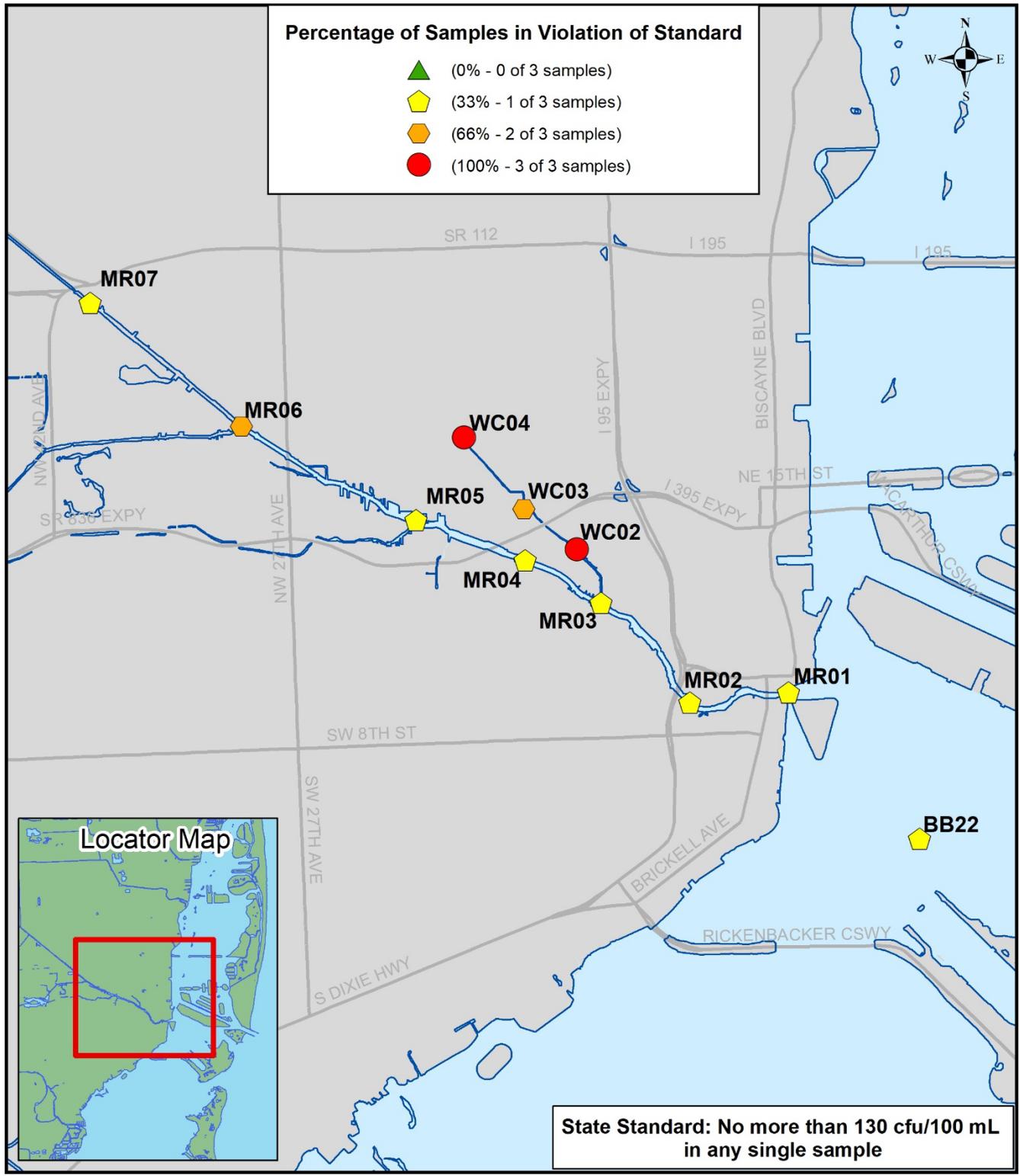


Figure 4

Table 1.

MONTHLY INDICATOR BACTERIA LEVELS (cfu's/100 mL) IN WAGNER CREEK								
	MR03		WC02		WC03		WC04	
Parameter	Enterococci	<i>E. coli</i>	Enterococci	<i>E. coli</i>	Enterococci	<i>E. coli</i>	Enterococci	<i>E. coli</i>
April	20	120	1223*	4884*	323*	379	1022*	1607*
May	402*	2098*	24196*	24196*	24196*	15531*	12997*	9208*
June	31	63	148*	341	62	448*	11199*	24196*

An asterisk (*) indicates a result that exceeds the state standard for Enterococci (130 cfu/100 mL) or *E. coli* (410 cfu/100 mL); a "0" indicates that the true value was below the method detection limit.

“MIAMI RIVER BASIN WATER QUALITY IMPROVEMENT REPORT” ACTION ITEM MATRIX PROGRESS REPORT

Ammonia Nitrogen Tracking

Ten Year Period: 2015-2025
Lower Miami River

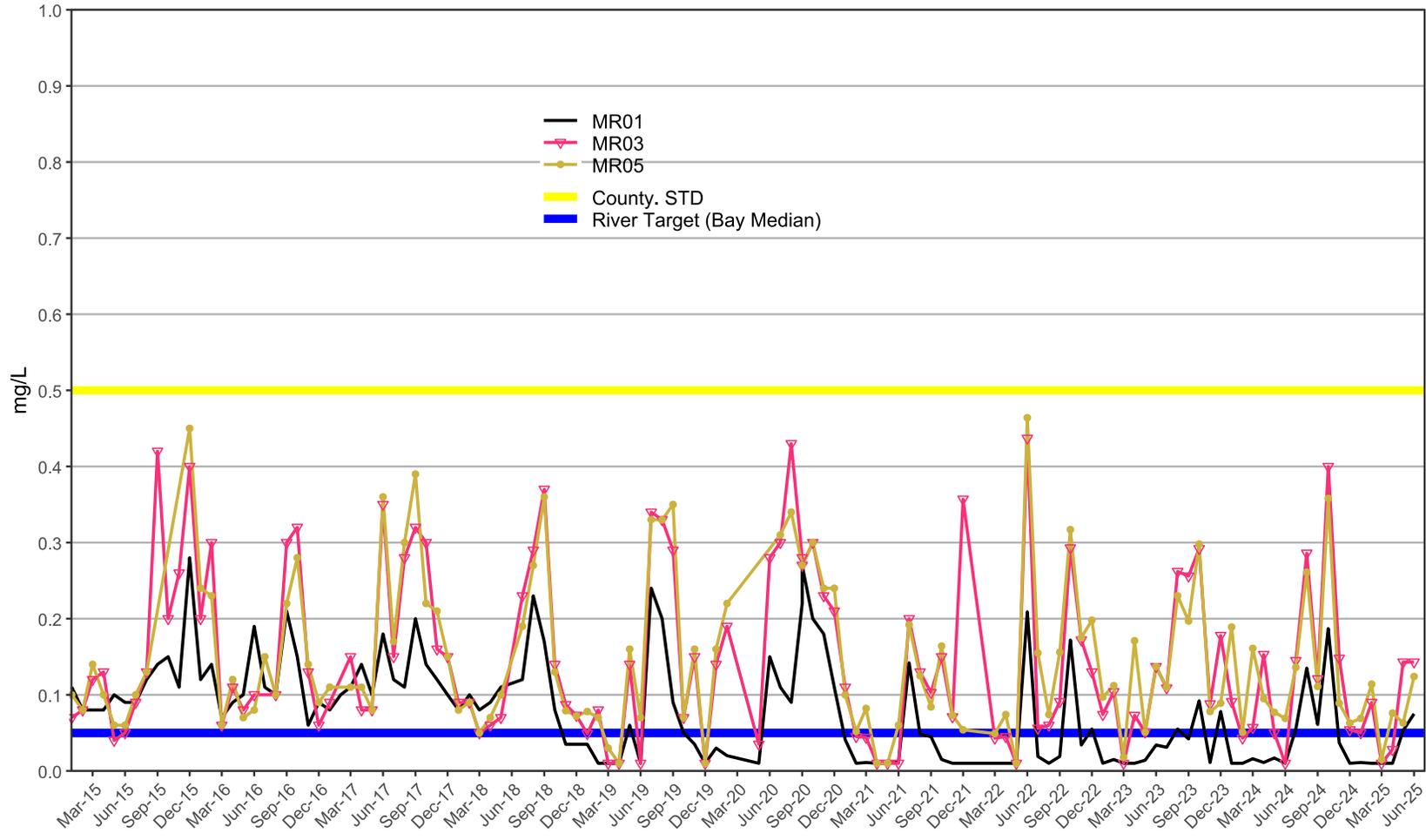


Chart 1

Ammonia Nitrogen Tracking

Ten Year Period: 2015-2025
Upper Miami River

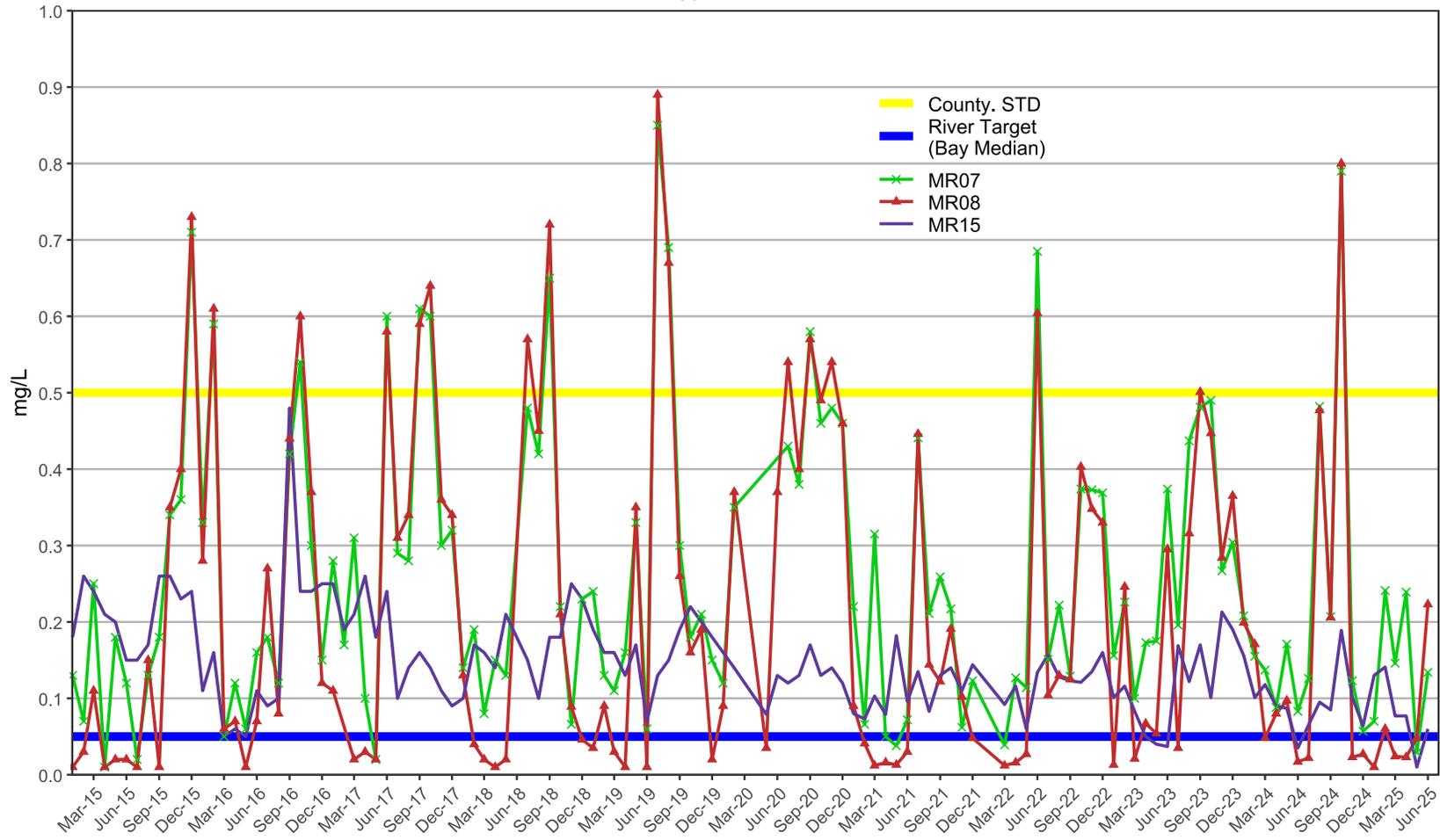


Chart 2

Ammonia Nitrogen Tracking

Ten Year Period: 2015-2025
Wagner Creek

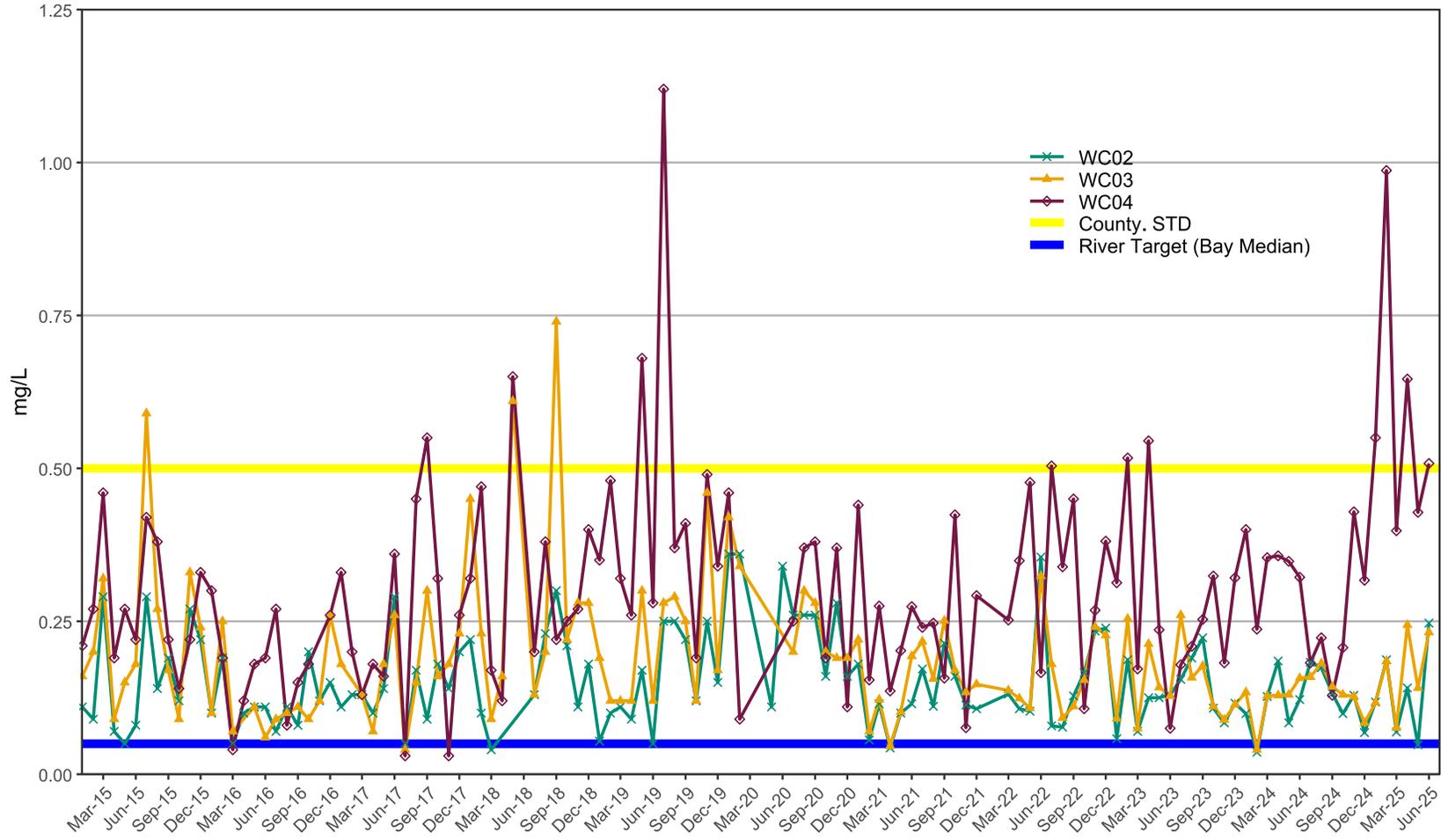


Chart 3

Total Phosphorus Tracking

Ten Year Period: 2015-2025
Lower Miami River

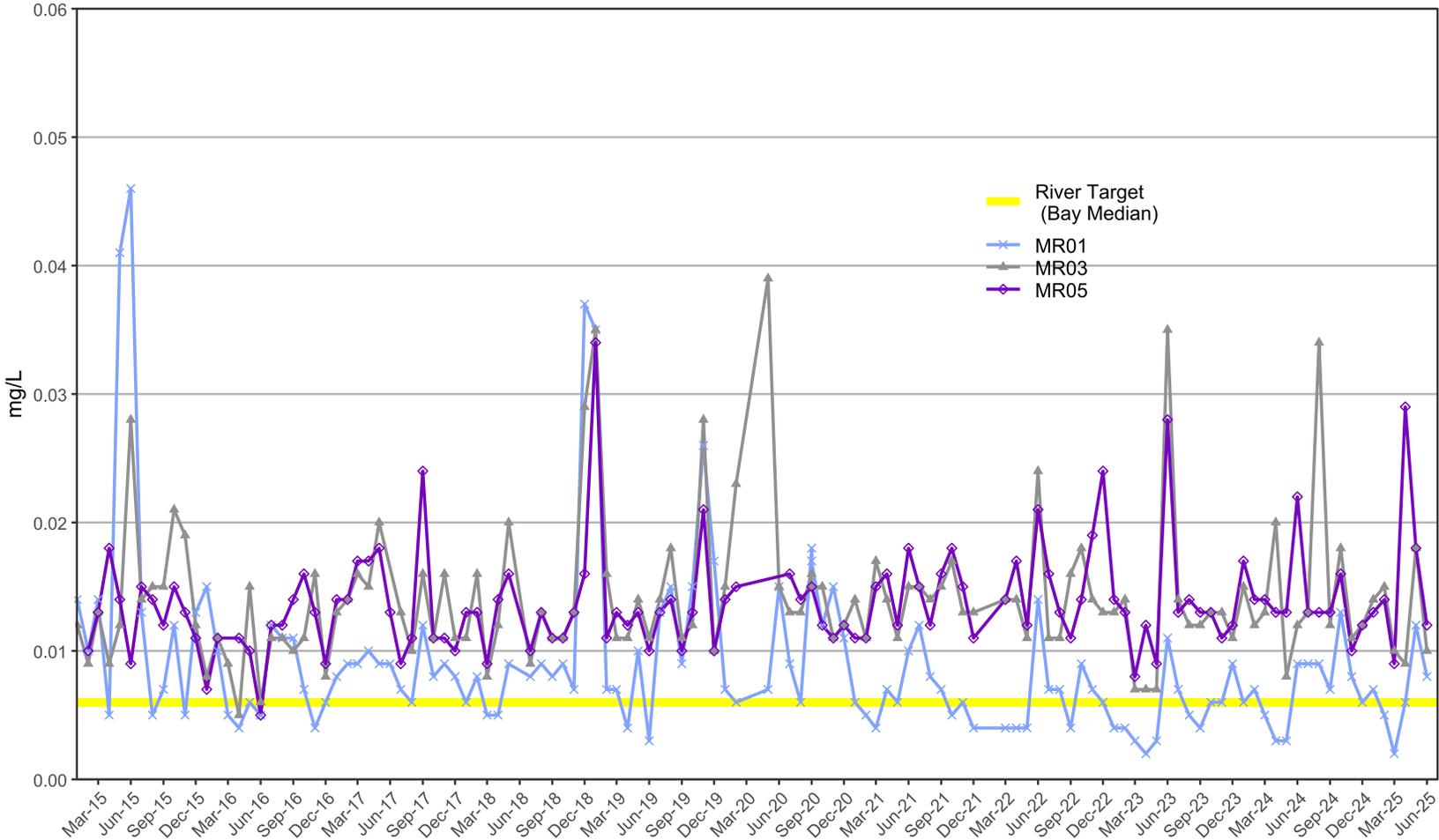


Chart 4

Total Phosphorus Tracking

Ten Year Period: 2015-2025

Upper Miami River

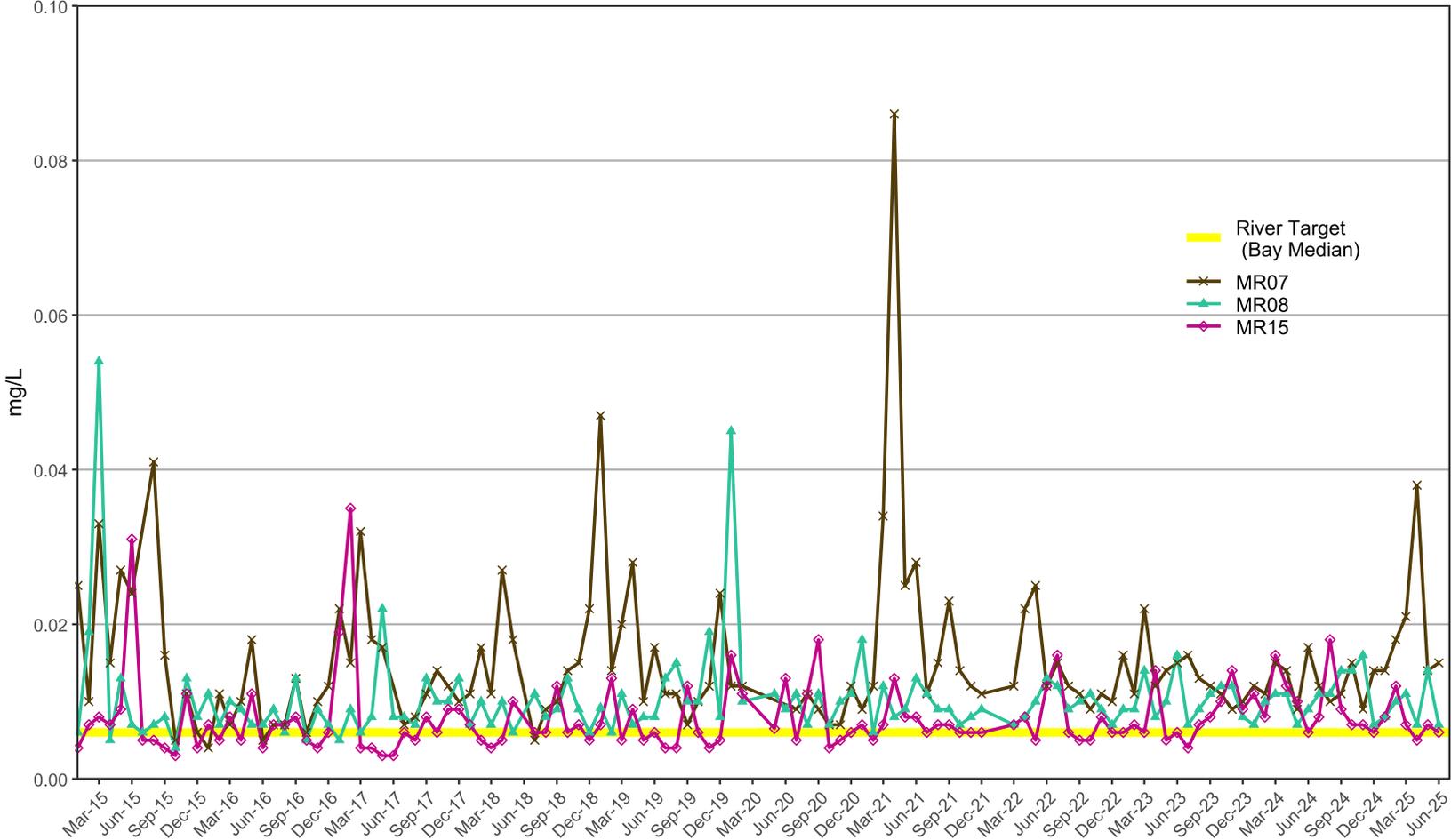


Chart 5

Total Phosphorus Tracking

Ten Year Period: 2015-2025

Wagner Creek

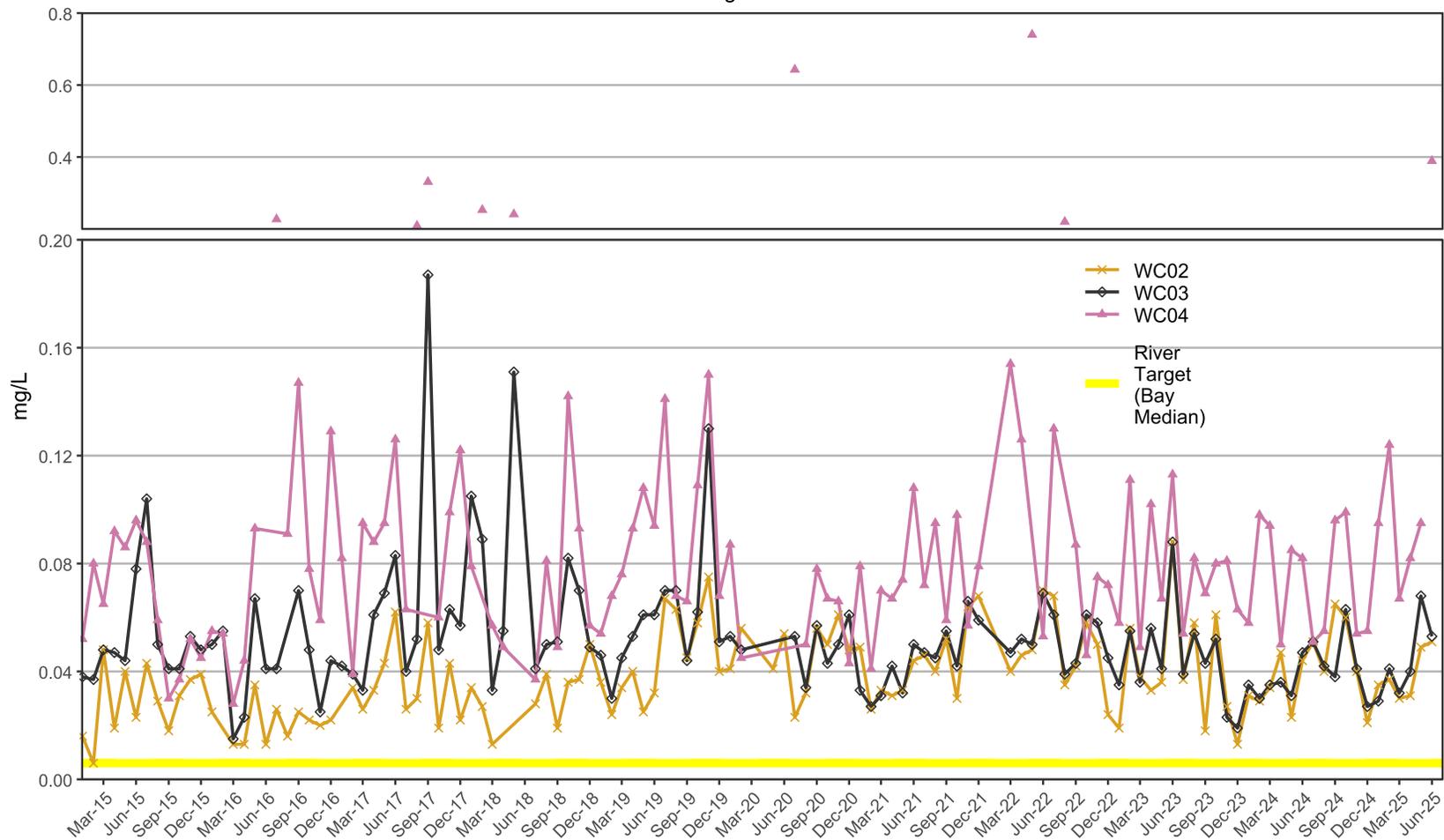


Chart 6

Enterococci Tracking

Lower Miami River

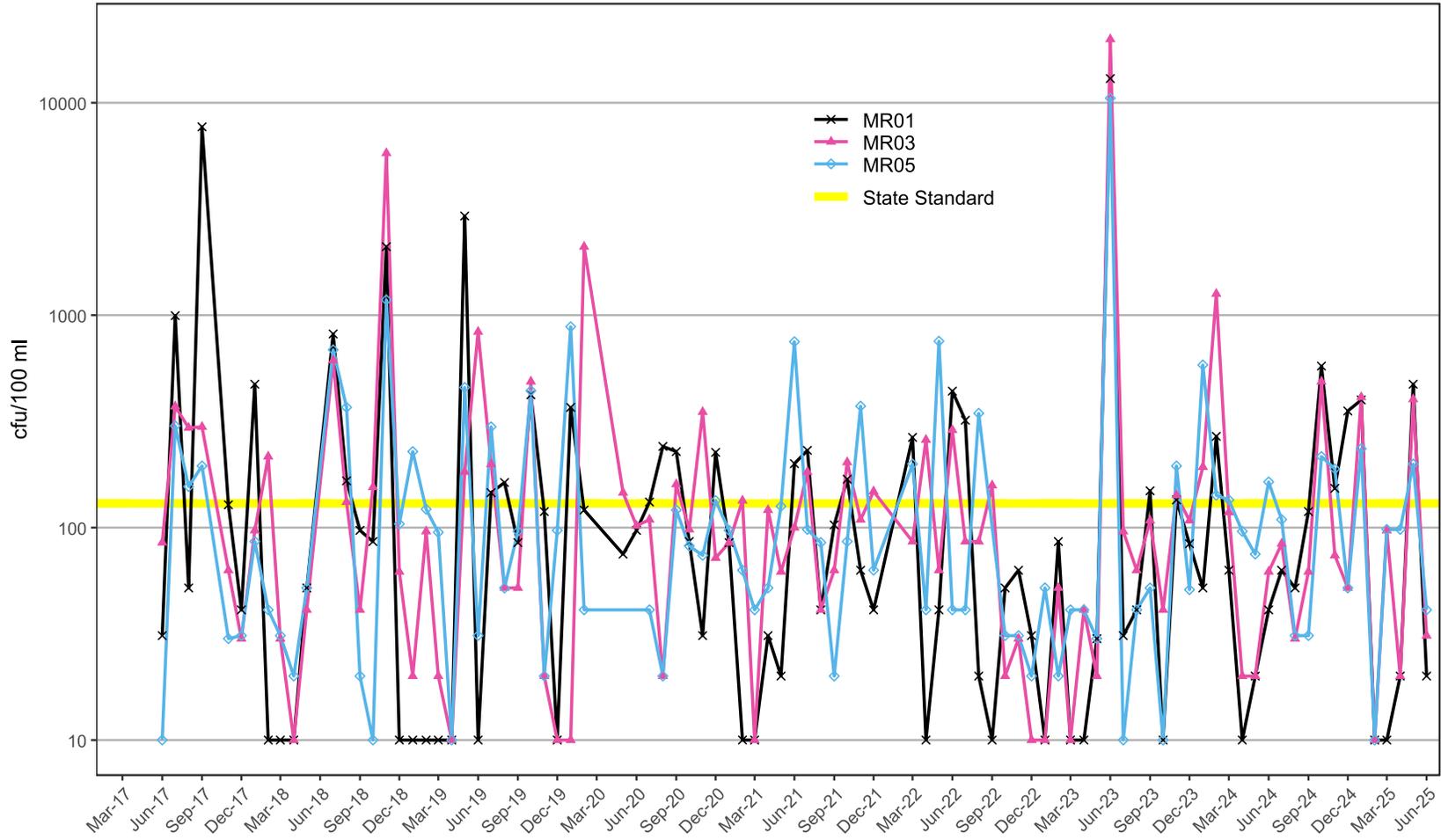


Chart 7

Enterococci Tracking

Wagner Creek

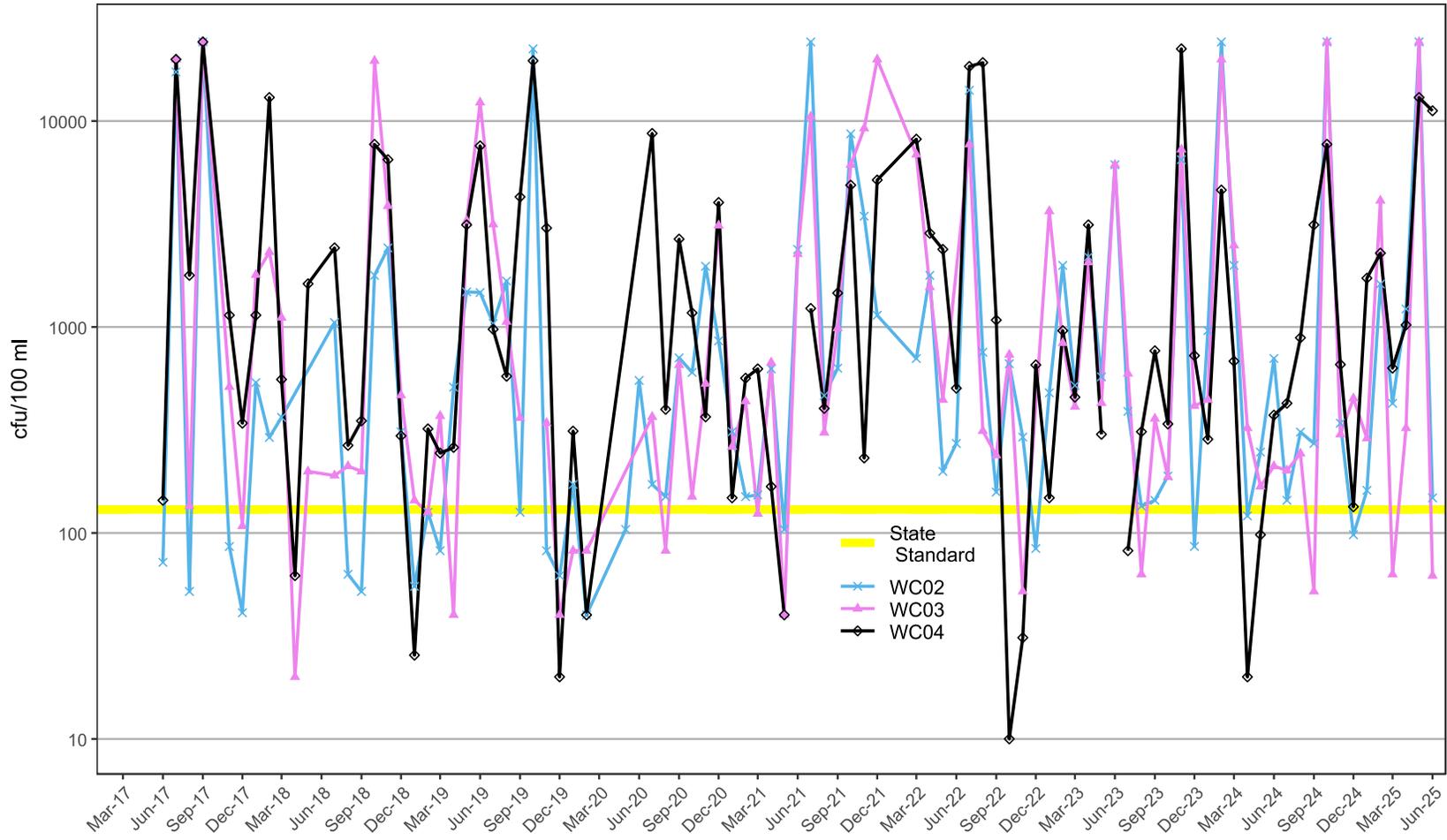


Chart 8

E.coli Tracking

Lower Miami River

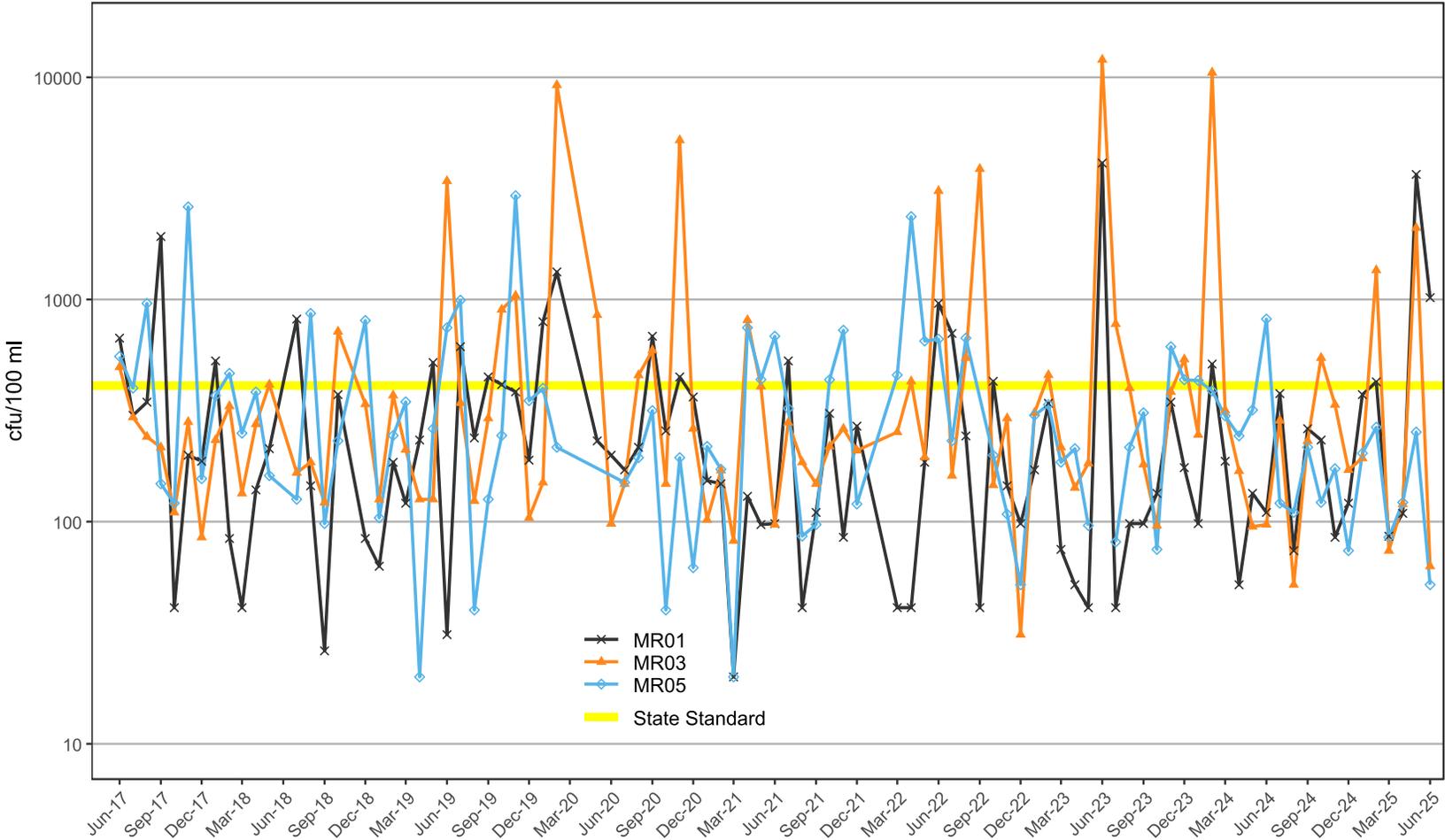


Chart 9

E.coli Tracking

Upper Miami River

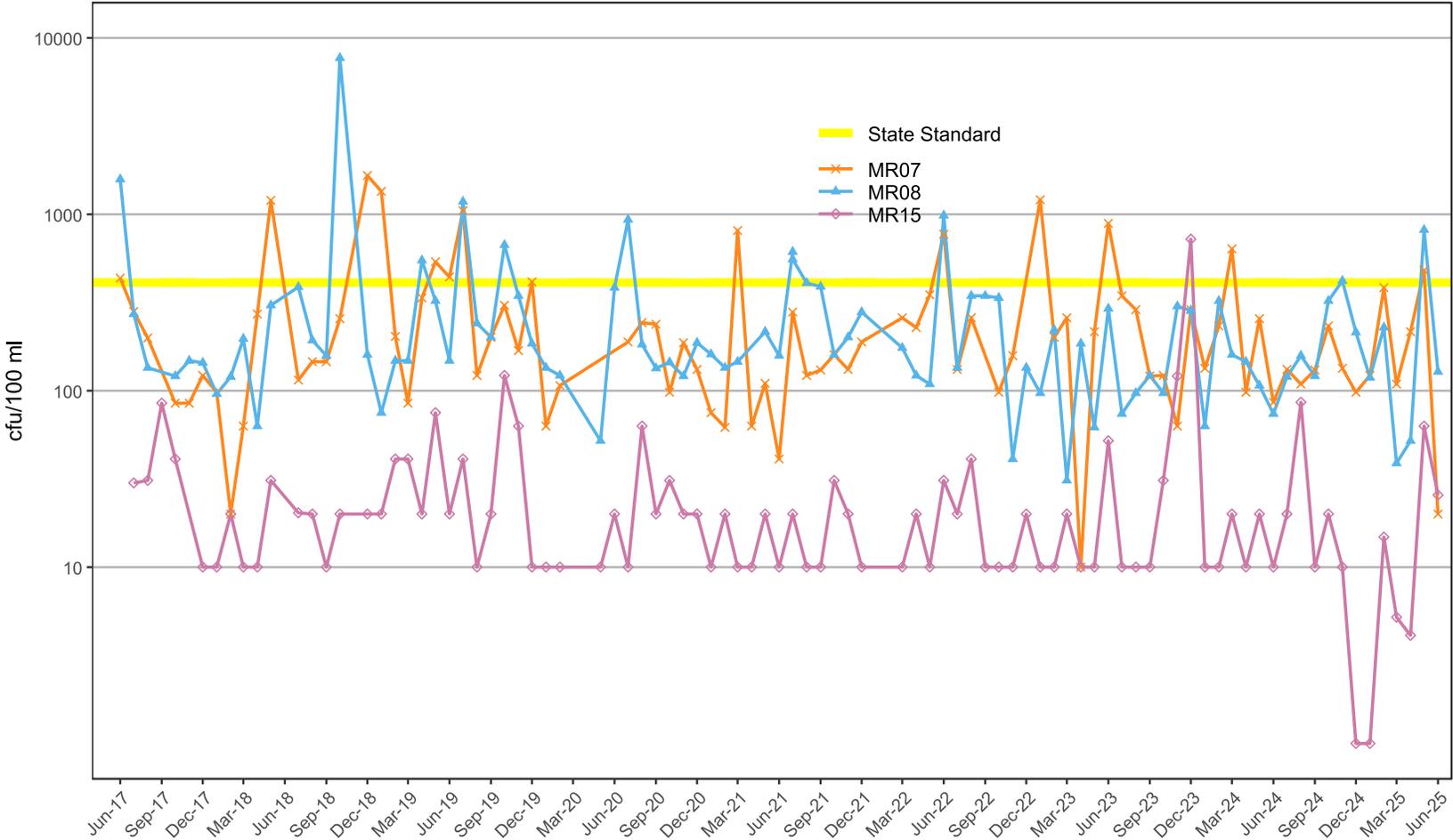


Chart 10

E. coli Tracking

Wagner Creek

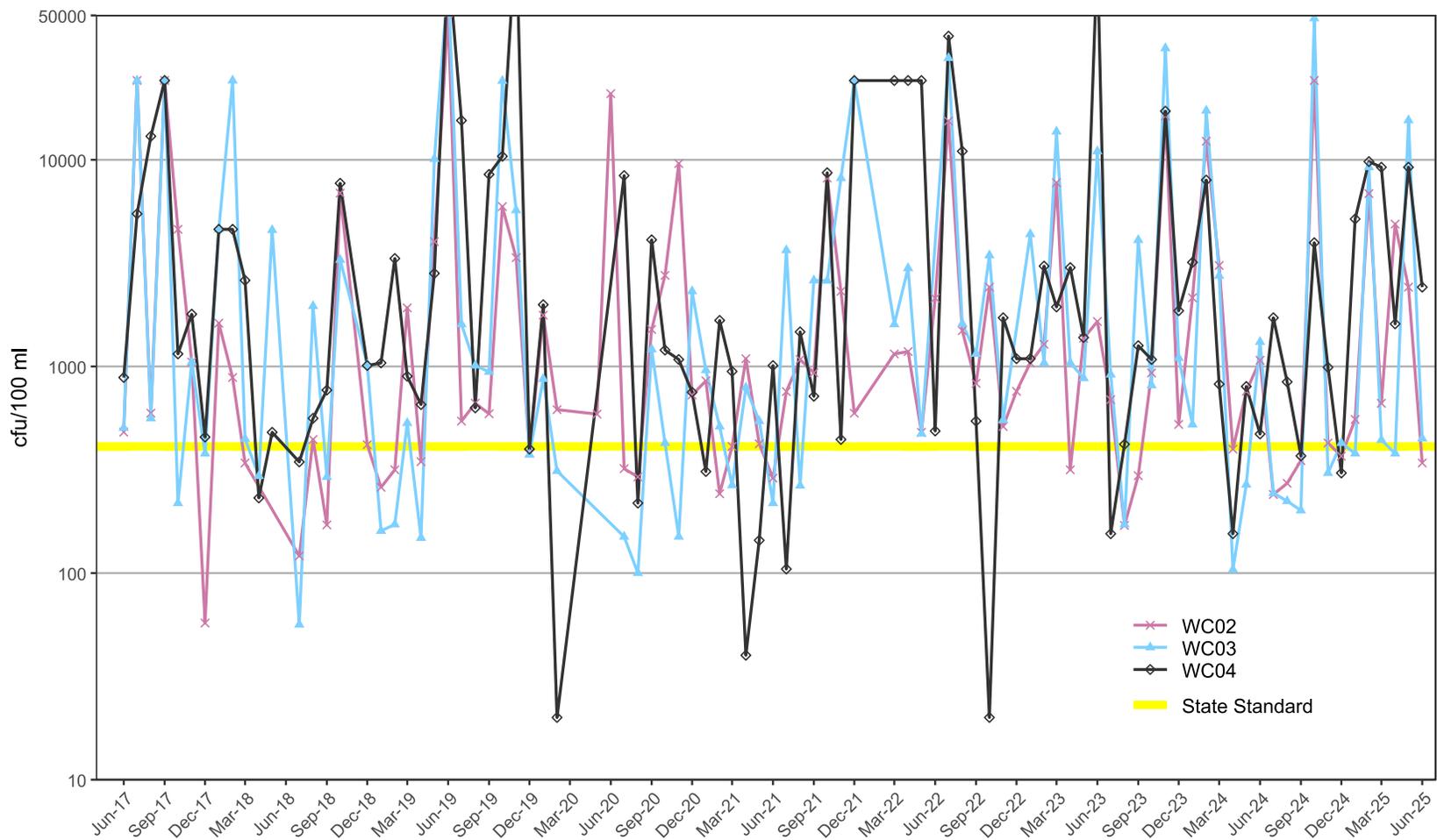


Chart 11

Turbidity Tracking

Ten Year Period: 2015-2025

Lower Miami River

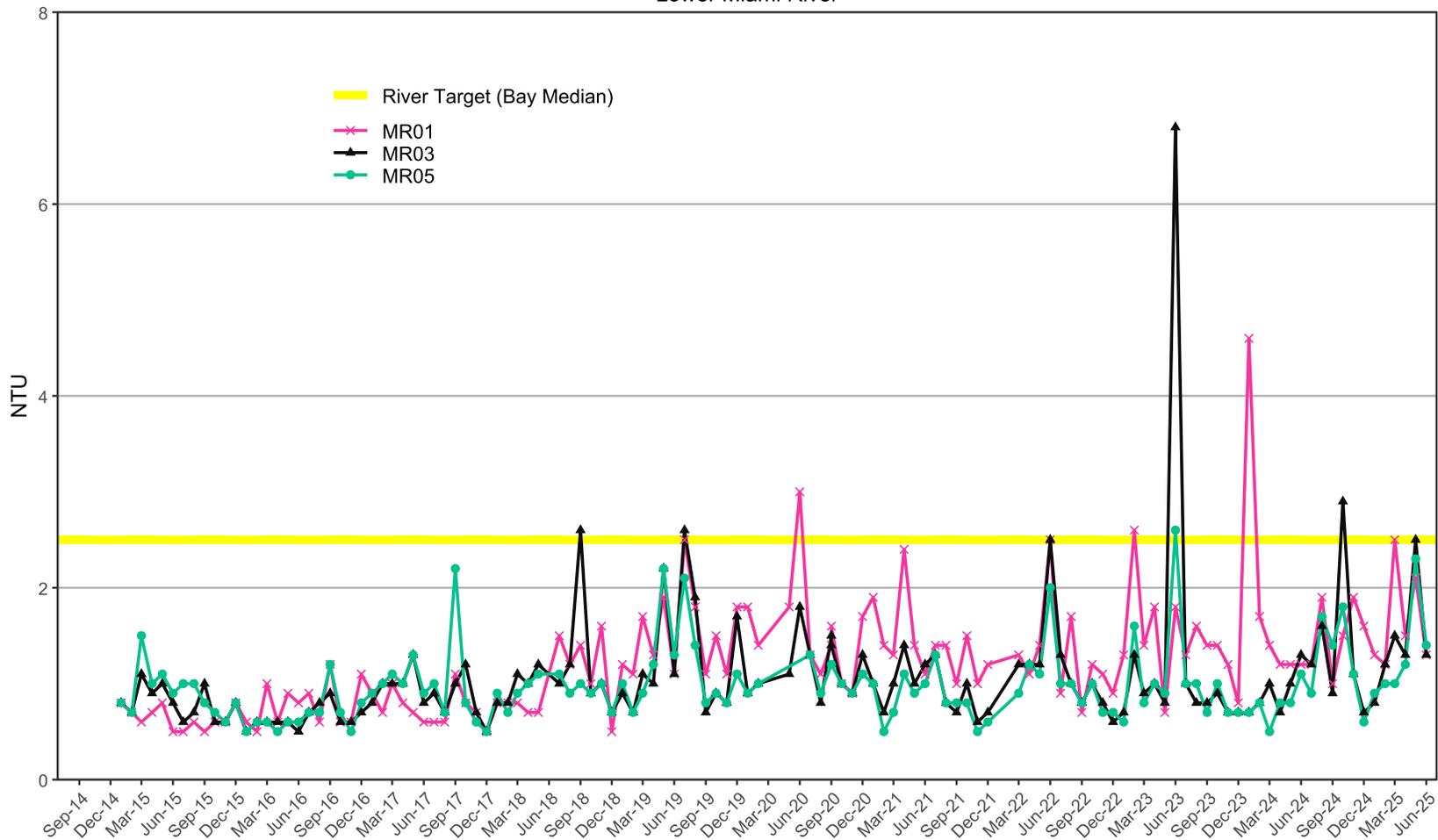


Chart 12

Turbidity Tracking

Ten Year Period: 2015-2025

Upper Miami River

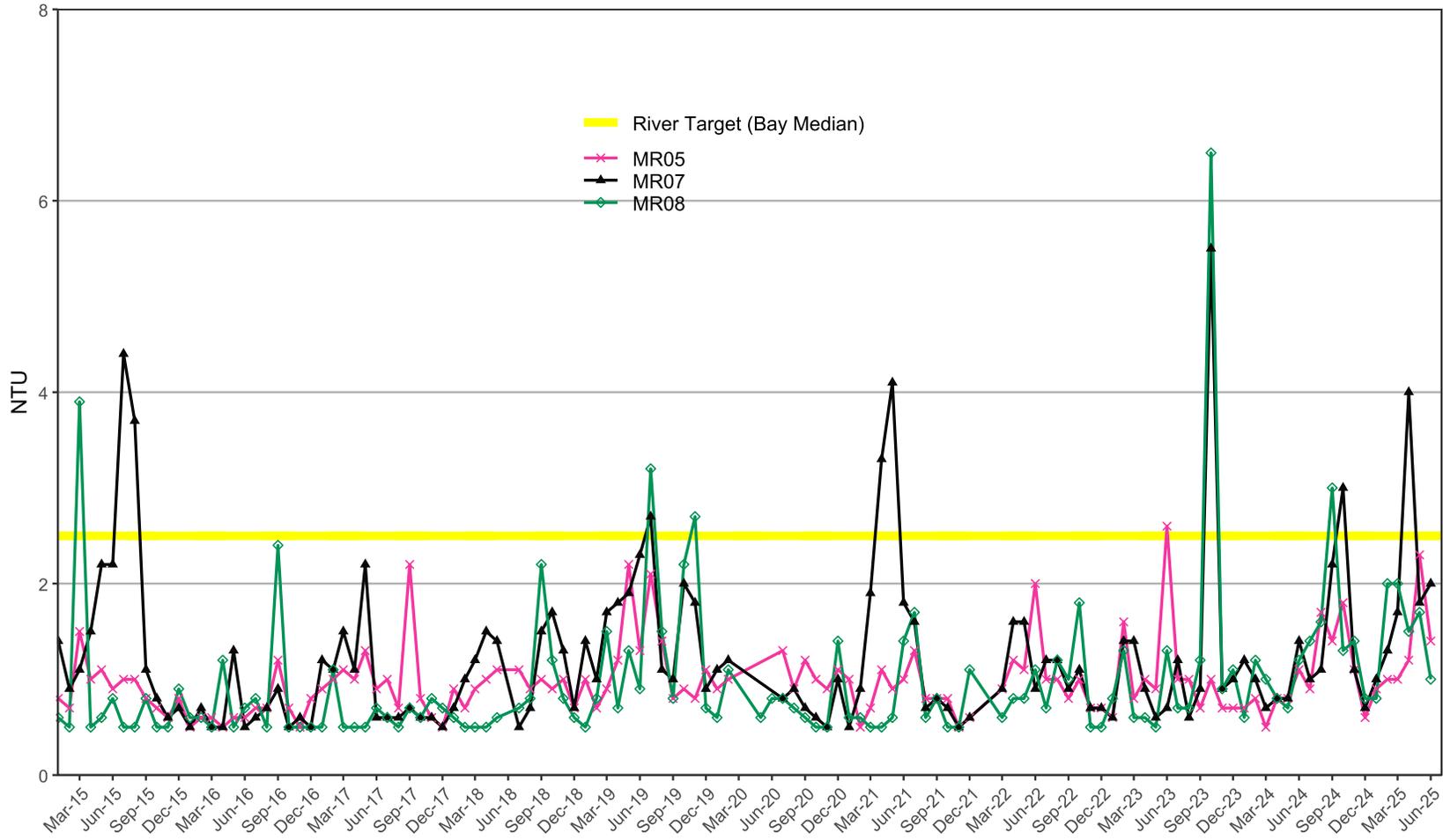


Chart 13

Turbidity Tracking

Ten Year Period: 2015-2025

Wagner Creek

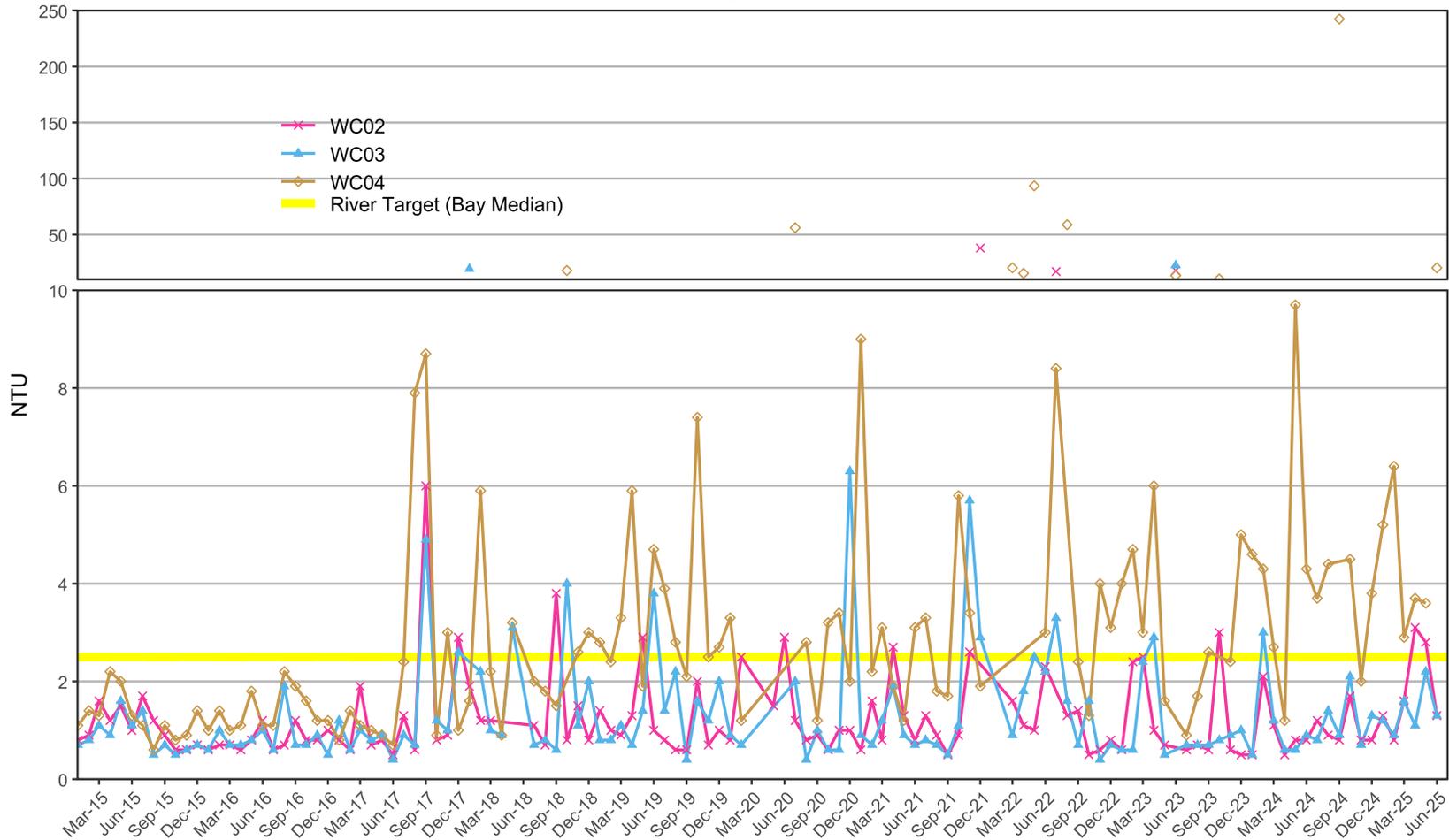


Chart 14