

2025 TRWA Sampling Results for Nitrate (mg/l)			TARGET FOR CONCERN - GREATER THAN 0.4 MG/L							
Sample	Site No.	River & Location Description	April	May	June	July	August	Sept.	Oct.	AVG**
1	TNT-01	Taunton R. Br, Center St., Berkley								
2	TNT-02	Taunton R. Br, Plain St., Taunton								
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater								
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater								
5	ASO-01	Assonet R. Bridge, Rt 79								
6	SEG	Segregansett R. Br, Brook St. Dighton								
7	BER-01	Chuckamucksett Brk. Br, Berkley St.								
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.								
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.								
10	TMR-03	Three Mile R. Br, Crane St., Norton								
11	MIL-01	Mill R., Ingell St., Taunton								
12	MIL-02	Mill R., Washington St., Taunton								
13	MIL-03	Mill R., Whittendon St., Taunton								
14	FORGE	Forge R. Br, Rt 44, Raynham								
15	COT-01	Cotley R., Middleboro Ave, Taunton								
16	FBR-01	Furnace Brk., River St., Raynham								
17	CHU-01	Taunton River Br, Church St., Raynham								
18	TWH-01	Town R., Br, Hayward St., Bridgewater								
19	MAT-01	Matfield R., Br, High St., Bridgewater								
20	NEM-01	Nemasket R., Murdock St., Middleboro								
Month	Site No.	Duplicate and Blank Locations by Month	DUP #	Duplicate Results	BL #	Blank Results	** Avg is for the water quality months of May through October used in NPDES permit TN limitation averaging.			
April	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1		BL 1		NR = Not Reported, no sample			
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2		BL 2					
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1		BL 1		NR = Not Reported, no sample			
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2		BL 2					
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1		BL 1		NR = Not Reported, no sample			
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2		BL 2					
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1		BL 1		NR = Not Reported, no sample			
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2		BL 2					
August	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1		BL 1		NR = Not Reported, no sample			
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2		BL 2					
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1		BL 1		NR = Not Reported, no sample			
	MIL-01	Mill R., Ingell St., Taunton	DUP 2		BL 2					
Oct.	NEM-01	Nemasket R., Murdock St., Middleboro	DUP 1		BL 1		NR = Not Reported, no sample			
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2		BL 2					

2025 TRWA Sampling Results for Total Phosphorus (mg/l)			TARGET FOR CONCERN - GREATER THAN 0.100 mg/l								
Sample	Site No.	River & Location Description	April	May	June	July	August	Sept.	Oct.	AVG**	
1	TNT-01	Taunton R. Br, Center St., Berkley									
2	TNT-02	Taunton R. Br, Plain St., Taunton									
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater									
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater									
5	ASO-01	Assonet R. Bridge, Rt 79									
6	SEG	Segregansett R. Br, Brook St. Dighton									
7	BER-01	Chuckamucksett Brk. Br, Berkley St.									
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.									
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.									
10	TMR-03	Three Mile R. Br, Crane St., Norton									
11	MIL-01	Mill R., Ingell St., Taunton									
12	MIL-02	Mill R., Washington St., Taunton									
13	MIL-03	Mill R., Whittendon St., Taunton									
14	FORGE	Forge R. Br, Rt 44, Raynham									
15	COT-01	Cotley R., Middleboro Ave, Taunton									
16	FBR-01	Furnace Brk., River St., Raynham									
17	CHU-01	Taunton River Br, Church St., Raynham									
18	TWH-01	Town R., Br, Hayward St., Bridgewater									
19	MAT-01	Matfield R., Br, High St., Bridgewater									
20	NEM-01	Nemasket R., Murdock St., Middleboro									
		Duplicate and Blank Locations by Month		Duplicate Results		Blank Results		** Avg is for the water quality months of May through October (season AVG). NPDES permits use TP mo. avg. limits. Based on observations TRWA considers a season AVG ≥ 0.05 mg/l is concern.			
April	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1			BL 1					
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2			BL 2					
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1			BL 1					
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2			BL 2					
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1			BL 1					
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2			BL 2					
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1			BL 1					
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2			BL 2					
August	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1			BL 1					
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2			BL 2					
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1			BL 1					
	MIL-01	Mill R., Ingell St., Taunton	DUP 2			BL 2					
Oct.	NEM-01	Nemasket R., Murdock St., Middleboro	DUP 1			BL 1					
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2			BL 2					

2025 TRWA Sampling Results for Enterococci (CFU/100 ml)			TARGET FOR CONCERN - GREATER THAN 35 CFU/100 ML (Class B & SB waters)							
Sample	Site No.	River & Location Description	April	May	June	July	August	Sept.	Oct.	90 Day Geo Mean July to Sept
1	TNT-01	Taunton R. Br, Center St., Berkley (SB Cr. 104)								
2	TNT-02	Taunton R. Br, Plain St., Taunton (SB Cr. 104)								
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater								
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater								
5	ASO-01	Assonet R. Bridge, Rt 79								
6	SEG	Segregansett R. Br, Brook St. Dighton								
7	BER-01	Chuckamucksett Brk. Br, Berkley St.								
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.								
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.								
10	TMR-03	Three Mile R. Br, Crane St., Norton								
11	MIL-01	Mill R., Ingell St., Taunton								
12	MIL-02	Mill R., Washington St., Taunton								
13	MIL-03	Mill R., Whittendon St., Taunton								
14	FORGE	Forge R. Br, Rt 44, Raynham								
15	COT-01	Cotley R., Middleboro Ave, Taunton								
16	FBR-01	Furnace Brk., River St., Raynham								
17	CHU-01	Taunton River Br, Church St., Raynham								
18	TWH-01	Town R., Br, Hayward St., Bridgewater								
19	MAT-01	Matfield R., Br, High St., Bridgewater								
20	NEM-01	Nemasket R., Murdock St., Middleboro								
		Duplicate and Blank Locations by Month		Duplicate Results		Blank Results		** Geometric Mean for any 90 days		
April	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1			BL 1		shall not exceed 35 CFU/100ml.		
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2			BL 2		No more than 10% of all samples		
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1			BL 1		collected shall exceed 130 CFU/100ml.		
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2			BL 2		Standard effective 11/12/2021.		
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1			BL 1				
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2			BL 2		Results reported as 2000 were		
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1			BL 1		reported as > 2000 colonies by		
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2			BL 2		Microbac Lab (max that could be		
August	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1			BL 1		measured). 2000 used to calculate		
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2			BL 2		the geometric mean.		
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1			BL 1				
	MIL-01	Mill R., Ingell St., Taunton	DUP 2			BL 2				
Oct.	NEM-01	Nemasket R., Murdock St., Middleboro	DUP 1			BL 1				
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2			BL 2				

Sample Analysis, Collection Method - Standard Operating Procedures (SOP) and Instream Target Values									
Samples Are Analyzed by:									
Microbac, Dayville, CT					A MassDEP Certified Laboratory				
https://www.microbac.com/our-laboratories/dayville-connecticut/#services									
Samples Are Collected by Trained TRWA Volunteers Using An SOP Jointly Developed by TRWA and Veolia North America see TRWA website:									
https://savethetaunton.org/water-quality-monitoring/									
Sampling Locations Map May Be Found At:									
https://www.google.com/maps/d/edit?mid=zhnldTn8bGeU.kyo7mjqZ3YFQ&usp=sharing									
Water Quality Protection Instream Target Values:									
Nitrate									
Water Quality Target Values for Nitrogen are expressed as <u>Total</u> Nitrogen = Nitrate + Organic Nitrogen + Ammonia + Nitrite									
Like most environmental groups TRWA measures only Nitrate because of its low cost (\$12 / sample) and low reporting level (0.05 mg/l). The MassDEP in a large number of TMDLs for estuaries has recommended <u>TN</u> values between 0.39 to 0.5 mg/l for estuaries <u>without eel grass</u> in good to fair condition. The Cape Cod Commission recommends values 0.34 to 0.39 while the Buzzards Bay Project/ Massachusetts Coastal Zone Management recommends 0.39 to 0.44 mg/l. After consultation with MassDEP and Rhode Island DEM (downstream state) EPA selected a TN target estuary value of 0.45 mg/l as a medium target for the Taunton River.									
Because Nitrate is <u>only a portion of Total Nitrogen</u> we consider Nitrate values > 0.4 mg/l high for both the tidal portion of the estuary below Route 24 at the Raynham/Taunton Bridge and above because of transport concerns to the salt waters of the estuary.									
Total Phosphorus									
The Water Quality Target Values for Total Phosphorus are 0.100 mg/l for freshwaters in free flowing streams and 0.050 mg/l in lakes, ponds, impoundments and streams tributary to them. These Targets are from the EPA Suggested Criteria for Water sometimes called the Gold Book.									
Based on observation and photos of the shallow effluent dominated freshwaters of the watershed TRWA considers average TP greater than 0.05 mg/l a value for concern in addition to single month samples > 0.100 mg/l.									
Bacteria - Enterococci									
The Water Quality Target Value used for enterococci is 35 colony-forming units (CFU) per 100 ml as a geometric mean for any 90 day or smaller interval and no more than 10% of all samples collected within that interval shall exceed the statistical threshold value of 130 CFU/100ml. (Standard effective 11/12/2021).									
These targets are from the MA Water Quality Standards 314 CMR for Class B and SB waters.									