

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	0.43	0.23	0.41	0.08				0.24	
2	TNT-02	Taunton R. Br, Plain St., Taunton	0.41	0.23	0.30	0.49				0.34	
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	0.42	0.26	0.31	0.48				0.35	
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	0.57	0.34	0.39	1.62				0.78	
5	ASO-01	Assonet R. Bridge, Rt 79	0.06	0.06	0.06	0.05				0.06	
6	SEG	Segregansett R. Br, Brook St. Dighton	0.16	0.16	0.26	0.23				0.22	
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	0.33	0.44	0.98	0.68				0.70	
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	0.16	0.19	0.35	0.43				0.32	
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	0.26	0.19	0.03	0.53				0.25	
10	TMR-03	Three Mile R. Br, Crane St., Norton	0.20	0.14	0.17	0.24				0.18	
11	MIL-01	Mill R., Ingell St., Taunton	0.08	0.07	0.05	0.51				0.21	
12	MIL-02	Mill R., Washington St., Taunton	0.07	0.05	0.05	0.23				0.11	
13	MIL-03	Mill R., Whittendon St., Taunton	0.06	0.05	0.05	0.17				0.09	
14	FORGE	Forge R. Br, Rt 44, Raynham	0.25	0.15	0.15	0.20				0.17	
15	COT-01	Cotley R., Middleboro Ave, Taunton	0.11	0.11	0.16	0.13				0.13	
16	FBR-01	Furnace Brk., River St., Raynham	0.14	0.14	0.10	0.15				0.13	
17	CHU-01	Taunton River Br, Church St., Raynham	0.46	0.30	0.31	0.52				0.38	
18	TWH-01	Town R., Br, Hayward St., Bridgewater	0.17	0.14	0.19	1.01				0.45	
19	MAT-01	Matfield R., Br, High St., Bridgewater	0.88	0.55	0.55	0.84				0.65	
20	NEM-01	Nemasket R., Murdock St., Middleboro	0.23	0.23	0.08	0.17				0.16	
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	0.12		BL 1	<0.0500				
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2	0.35		BL 2	<0.0500				
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1	0.14		BL 1	<0.0500				
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2	0.19		BL 2	<0.0500		NR = Not Reported, no sample		
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1	0.29		BL 1	<0.0500				
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2	0.06		BL 2	<0.0500				
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1	0.22		BL 1	<0.0500				
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2	0.47		BL 2	<0.0500				
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 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	0.069	0.036	0.092	0.163				0.097	
2	TNT-02	Taunton R. Br, Plain St., Taunton	0.037	0.071	0.069	0.234				0.125	
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	0.037	0.065	0.074	0.078				0.072	
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	0.043	0.066	0.089	0.071				0.075	
5	ASO-01	Assonet R. Bridge, Rt 79	0.018	0.036	0.053	0.056				0.049	
6	SEG	Segregansett R. Br, Brook St. Dighton	0.015	0.034	0.046	0.061				0.047	
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	0.013	0.031	0.028	0.125				0.061	
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	0.024	0.064	0.037	0.115				0.072	
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	0.019	0.035	0.038	0.034				0.036	
10	TMR-03	Three Mile R. Br, Crane St., Norton	0.015	0.029	0.028	0.037				0.031	
11	MIL-01	Mill R., Ingell St., Taunton	0.021	0.038	0.034	0.081				0.051	
12	MIL-02	Mill R., Washington St., Taunton	0.020	0.031	0.029	0.033				0.031	
13	MIL-03	Mill R., Whittendon St., Taunton	0.019	0.031	0.027	0.035				0.031	
14	FORGE	Forge R. Br, Rt 44, Raynham	0.029	0.069	0.115	0.090				0.091	
15	COT-01	Cotley R., Middleboro Ave, Taunton	0.011	0.018	0.019	0.022				0.020	
16	FBR-01	Furnace Brk., River St., Raynham	0.016	0.048	0.049	0.077				0.058	
17	CHU-01	Taunton River Br, Church St., Raynham	0.039	0.068	0.081	0.068				0.072	
18	TWH-01	Town R., Br, Hayward St., Bridgewater	0.039	0.066	0.099	0.139				0.101	
19	MAT-01	Matfield R., Br, High St., Bridgewater	0.050	0.072	0.085	0.074				0.077	
20	NEM-01	Nemasket R., Murdock St., Middleboro	0.033	0.044	0.053	0.038				0.045	
		Duplicate and Blank Locations by Month		Duplicate Results	Blank Results		** Avg is for the water quality months				
April	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1	0.011	BL 1	<0.0106	of May through October (season AVG).				
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2	0.014	BL 2	<0.0106	NPDES permits use TP mo. avg. limits.				
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1	0.044	BL 1	<0.0106	Based on observations TRWA considers				
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2	0.033	BL 2	<0.0106	a season AVG ≥ 0.05 mg/l is concern.				
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1	0.070	BL 1	<0.0106					
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2	0.049	BL 2	<0.0106					
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1	0.069	BL 1						
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2	0.075	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 May to July
1	TNT-01	Taunton R. Br, Center St., Berkley (SB Cr. 104)	80	50	100	205				101
2	TNT-02	Taunton R. Br, Plain St., Taunton (SB Cr. 104)	30	90	50	186				94
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	50	100	30	69				59
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	100	150	80	488				180
5	ASO-01	Assonet R. Bridge, Rt 79	10	20	60	272				69
6	SEG	Segregansett R. Br, Brook St. Dighton	20	40	100	204				93
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	140	40	300	517				184
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	40	10	20	260				37
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	10	40	70	387				103
10	TMR-03	Three Mile R. Br, Crane St., Norton	30	90	30	1226				149
11	MIL-01	Mill R., Ingell St., Taunton	40	10	90	248				61
12	MIL-02	Mill R., Washington St., Taunton	90	10	10	980				46
13	MIL-03	Mill R., Whittendon St., Taunton	120	10	90	1203				103
14	FORGE	Forge R. Br, Rt 44, Raynham	30	50	60	548				118
15	COT-01	Cotley R., Middleboro Ave, Taunton	10	50	150	687				173
16	FBR-01	Furnace Brk., River St., Raynham	30	30	20	273				55
17	CHU-01	Taunton River Br, Church St., Raynham	90	30	40	435				81
18	TWH-01	Town R., Br, Hayward St., Bridgewater	50	50	90	326				114
19	MAT-01	Matfield R., Br, High St., Bridgewater	200	80	50	2420				213
20	NEM-01	Nemasket R., Murdock St., Middleboro	30	10	50	125				40
		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	10		BL 1	<10		shall not exceed 35 CFU/100ml.	
	BER-01	Chuckamucksett Brk. Br, Berkley St.	DUP 2	80		BL 2	<10		No more than 10% of all samples	
May	FBR-01	Furnace Brk., River St., Raynham	DUP 1	10		BL 1	<10		collected shall exceed 130 CFU/100ml.	
	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	DUP 2	20		BL 2	<10		Standard effective 11/12/2021.	
June	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1	30		BL 1	<10			
	ASO-01	Assonet R. Bridge, Rt 79	DUP 2	500		BL 2	<10		Results reported as 2420 were	
July	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	DUP 1	198.8		BL 1	<1		reported as > 2420 colonies by	
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2	45.2		BL 2	<1		Microbac Lab (max that could be	
August	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1			BL 1			measured). 2420 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				

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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.kyo7mjgZ3YFQ&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.									