

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	0.05	0.77		0.31	
2	TNT-02	Taunton R. Br, Plain St., Taunton	0.41	0.23	0.30	0.49	0.28	0.77		0.41	
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	0.42	0.26	0.31	0.48	0.51	0.71		0.46	
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	0.57	0.34	0.39	1.62	1.06	0.89		0.86	
5	ASO-01	Assonet R. Bridge, Rt 79	0.06	0.06	0.06	0.05	0.05	0.05		0.05	
6	SEG	Segregansett R. Br, Brook St. Dighton	0.16	0.16	0.26	0.23	0.17	0.30		0.22	
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	0.33	0.44	0.98	0.68	1.06	1.11		0.85	
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	0.16	0.19	0.35	0.43	0.22	0.79		0.39	
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	0.26	0.19	0.03	0.53	0.40	1.11		0.45	
10	TMR-03	Three Mile R. Br, Crane St., Norton	0.20	0.14	0.17	0.24	0.12	0.07		0.15	
11	MIL-01	Mill R., Ingell St., Taunton	0.08	0.07	0.05	0.51	0.26	0.17		0.21	
12	MIL-02	Mill R., Washington St., Taunton	0.07	0.05	0.05	0.23	0.27	0.15		0.15	
13	MIL-03	Mill R., Whittendon St., Taunton	0.06	0.05	0.05	0.17	0.14	0.09		0.10	
14	FORGE	Forge R. Br, Rt 44, Raynham	0.25	0.15	0.15	0.20	0.16	0.25		0.18	
15	COT-01	Cotley R., Middleboro Ave, Taunton	0.11	0.11	0.16	0.13	0.17	0.08		0.13	
16	FBR-01	Furnace Brk., River St., Raynham	0.14	0.14	0.10	0.15	0.11	0.12		0.12	
17	CHU-01	Taunton River Br, Church St., Raynham	0.46	0.30	0.31	0.52	0.44	1.29		0.57	
18	TWH-01	Town R., Br, Hayward St., Bridgewater	0.17	0.14	0.19	1.01	1.50	1.47		0.86	
19	MAT-01	Matfield R., Br, High St., Bridgewater	0.88	0.55	0.55	0.84	1.24	0.58		0.75	
20	NEM-01	Nemasket R., Murdock St., Middleboro	0.23	0.23	0.08	0.17	0.24	0.33		0.21	
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	0.25		BL 1	<0.0500				
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2	1.22		BL 2	<0.0500				
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1	0.08		BL 1	<0.0500				
	MIL-01	Mill R., Ingell St., Taunton	DUP 2	0.21		BL 2	<0.0500				
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	0.172	0.134		0.120	
2	TNT-02	Taunton R. Br, Plain St., Taunton	0.037	0.071	0.069	0.234	0.070	0.050		0.099	
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	0.037	0.065	0.074	0.078	0.050	0.064		0.066	
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	0.043	0.066	0.089	0.071	0.063	0.081		0.074	
5	ASO-01	Assonet R. Bridge, Rt 79	0.018	0.036	0.053	0.056	0.028	0.031		0.041	
6	SEG	Segregansett R. Br, Brook St. Dighton	0.015	0.034	0.046	0.061	0.200	0.052		0.078	
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	0.013	0.031	0.028	0.125	0.022	0.018		0.045	
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	0.024	0.064	0.037	0.115	0.045	0.021		0.056	
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	0.019	0.035	0.038	0.034	0.024	0.027		0.032	
10	TMR-03	Three Mile R. Br, Crane St., Norton	0.015	0.029	0.028	0.037	0.026	0.019		0.028	
11	MIL-01	Mill R., Ingell St., Taunton	0.021	0.038	0.034	0.081	0.037	0.030		0.044	
12	MIL-02	Mill R., Washington St., Taunton	0.020	0.031	0.029	0.033	0.031	0.021		0.029	
13	MIL-03	Mill R., Whittendon St., Taunton	0.019	0.031	0.027	0.035	0.032	0.022		0.029	
14	FORGE	Forge R. Br, Rt 44, Raynham	0.029	0.069	0.115	0.090	0.069	0.050		0.079	
15	COT-01	Cotley R., Middleboro Ave, Taunton	0.011	0.018	0.019	0.022	0.013	0.018		0.018	
16	FBR-01	Furnace Brk., River St., Raynham	0.016	0.048	0.049	0.077	0.064	0.073		0.062	
17	CHU-01	Taunton River Br, Church St., Raynham	0.039	0.068	0.081	0.068	0.041	0.054		0.062	
18	TWH-01	Town R., Br, Hayward St., Bridgewater	0.039	0.066	0.099	0.139	0.154	0.152		0.122	
19	MAT-01	Matfield R., Br, High St., Bridgewater	0.050	0.072	0.085	0.074	0.055	0.061		0.070	
20	NEM-01	Nemasket R., Murdock St., Middleboro	0.033	0.044	0.053	0.038	0.038	0.019		0.038	
		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	<0.0106				
	SEG	Segregansett R. Br, Brook St. Dighton	DUP 2	0.075		BL 2	<0.0106				
August	TNT-02	Taunton R. Br, Plain St., Taunton	DUP 1	0.068		BL 1	<0.0106				
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2	0.054		BL 2	<0.0106				
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1	0.020		BL 1	<0.0106				
	MIL-01	Mill R., Ingell St., Taunton	DUP 2	0.030		BL 2	<0.0106				
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)	80	50	100	205	39	548		164
2	TNT-02	Taunton R. Br, Plain St., Taunton (SB Cr. 104)	30	90	50	186	43	60		78
3	BED-01/TNT-03	Taunton R., Rt 18, Bedford St., Bridgewater	50	100	30	69	31	107		61
4	CHE-01/TNT-04	Taunton R. Br, Cherry St., Bridgewater	100	150	80	488	20	128		107
5	ASO-01	Assonet R. Bridge, Rt 79	10	20	60	272	117	649		274
6	SEG	Segregansett R. Br, Brook St. Dighton	20	40	100	204	480	361		328
7	BER-01	Chuckamucksett Brk. Br, Berkley St.	140	40	300	517	980	435		604
8	TMR-01	Three Mile R. Br, Rt 138, Somerset Ave.	40	10	20	260	1	210		38
9	TMR-02	Three Mile R. Br, Rt 44, Cohannet St.	10	40	70	387	38	110		117
10	TMR-03	Three Mile R. Br, Crane St., Norton	30	90	30	1226	107	140		264
11	MIL-01	Mill R., Ingell St., Taunton	40	10	90	248	579	162		286
12	MIL-02	Mill R., Washington St., Taunton	90	10	10	980	222	190		346
13	MIL-03	Mill R., Whittendon St., Taunton	120	10	90	1203	387	136		399
14	FORGE	Forge R. Br, Rt 44, Raynham	30	50	60	548	387	210		354
15	COT-01	Cotley R., Middleboro Ave, Taunton	10	50	150	687	167	206		287
16	FBR-01	Furnace Brk., River St., Raynham	30	30	20	273	91	44		103
17	CHU-01	Taunton River Br, Church St., Raynham	90	30	40	435	48	39		93
18	TWH-01	Town R., Br, Hayward St., Bridgewater	50	50	90	326	23	950		193
19	MAT-01	Matfield R., Br, High St., Bridgewater	200	80	50	2420	52	199		293
20	NEM-01	Nemasket R., Murdock St., Middleboro	30	10	50	125	36	30		51
		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	<1		BL 1	8.5		measured). 2420 used to calculate	
	MAT-01	Matfield R., Br, High St., Bridgewater	DUP 2	34.1		BL 2	<1		the geometric mean.	
Sept.	COT-01	Cotley R., Middleboro Ave, Taunton	DUP 1	100		BL 1	<10			
	MIL-01	Mill R., Ingell St., Taunton	DUP 2	70		BL 2	<10			
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.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.									