

[illegible]

Water Quality Protection Insteam Target Nitrate Value (0.4 mg/l) Basis:												
Water Quality Target Values for Nitrogen are expressed as Total Nitrogen (TN) = Nitrate + Organic Nitrogen + Ammonia + Nitrite . Like many												
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 TN values between 0.39 to 0.5 mg/l for estuaries <u>without</u>												
<u>eel grass</u> in good to fair condition. The Cape Cod Commission recommends values 0.34 to 0.39 while the Buzzards Bay Project /MACZM												
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. Had EPA and MassDEP decided to protect for eelgrass which												
existed in Mount Hope Bay prior to 1930 (excellent water quality), the TN target would be lower or approximately 0.35 mg/l TN.												
Because Nitrate is <u>only a portion of Total Nitrogen</u> we consider Nitrate values greater than 0.4 mg/l high for both the tidal portion												
of the estuary below Route 24 at the Raynham/Taunton Bridge (SB) and above because of transport concerns to the salt waters of the												
estuary . When measured nitrate values begin to approach 0.4 mg/l TRWA will begin measuring TN periodically.												
Sample Location Map, Collection Method - Standard Operating Procedures (SOP), and Sample Analysis Contractors												
Sampling Locations Map May Be Found At:												
https://www.google.com/maps/d/edit?mid=zhnldTn8bGeU.kyo7mjqZ3YFQ&usp=sharing												
Samples Are Collected by Trained TRWA Volunteers Following Chain of Custody and SOP Procedures Developed by TRWA and Veolia North America:												
https://savethetaunton.org/wp/wp-content/uploads/2019/06/TRWA-Sampling-SOP-3-16-2019.pdf												
Samples Analyzed by:												
2016 -2018												
Microbac, Dayville, CT A MassDEP Certified Laboratory												
https://www.microbac.com/our-laboratories/dayville-connecticut/#services												
2015 - 2004												
R.I. Analytical, Warwick, RI A MassDEP Certified Laboratory												
http://www.rianalytical.com/pages/cfHome.cfm												
2003												
US Filter - Taunton, MA												