

# **Pawcatuck River Watershed Bacteria TMDL**

## **Response to Public Comments Document**

**FINAL**

**September 18, 2014**



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## **Background**

The Connecticut Department of Energy and Environmental Protection (CT DEEP) published a draft of the Pawcatuck River Watershed TMDL on May 8, 2014 and public noticed the availability of the document for review and comment in the New London Day. The public comment period was open on the documents until June 9, 2014. The public notice was also sent via email to municipal CEOs and Public Works department heads in Stonington and North Stonington. There was an informational session on the DRAFT documents held in conjunction with RIDEM staff at the Westerly Town Library on May 14, 2014. There were fifteen people in attendance, excluding State Employees.

Written comments were received from various entities covering a range of suggested changes from typographical and grammatical to erroneous data and information. All comments received are summarized in this document and followed by the official Agency response. Public comment letters and this final document will be posted on the CT DEEP TMDL webpage for the Pawcatuck TMDL that can be found at [www.ct.gov/deep/tmdl](http://www.ct.gov/deep/tmdl).

## **Public Comments**

- 1) *EPA appreciates the opportunity to review and comment on the Pawcatuck River Total Maximum Daily Load (TMDL) for Bacteria-Impaired Waters. The Department's website explains the connection between the Pawcatuck River TMDL and the Statewide Bacteria TMDL very clearly. "A Total Maximum Daily Load (TMDL) document has been drafted for the Pawcatuck River Watershed. This TMDL document is an appendix to the Statewide Bacteria TMDL and follows similar format to the additional 84 appendices already approved by CTDEEP and EPA." EPA requests, for clarity, that this explanation be presented in general public notice letters for future TMDL appendices to the Statewide Bacteria TMDL.* –Mary Garren, Environmental Scientist, EPA Region 1

**The Department will clearly state the appendix structure and formatting for future public notices on additional TMDL appendices. No changes were made to the FINAL version of the TMDL sent to EPA for approval. The cover letter for submission clearly states the appendix format.**

- 2) *Also, in follow-up to our discussion, EPA requests that the transposition errors that were made in Tables 12 and 13 of the TMDL be corrected.* – Mary Garren, Environmental Scientist, EPA Region 1

**The errors in the footnotes for the above tables were revised in the FINAL version of the TMDL sent to EPA for approval.**

- 3) *Finally, EPA would like to acknowledge the cooperative efforts between CT DEEP and RI DEM as each state prepared TMDLs to address this shared water body.* . –Mary Garren, Environmental Scientist, EPA Region 1

**Thank you, it has been a fruitful and enjoyable collaboration with RIDEM. The process has resulted in enhanced protection for a significant waterway. No changes were made to the FINAL version of the TMDL submitted to EPA for approval.**

- 4) *In figure 3 on page 14, the impaired segments do not match up with the Rhode Island segments. For example, the RIDEM segment, RI0008038E-01A, is further south than the CTDEEP segment CT-E1\_001-SB. This causes confusion from a public perspective in terms of understanding the boundaries. Why are these lines different and is it possible to move these boundaries so that they are consistent across state/town borders.* – Dave Prescott, South County Coastkeeper, Save the Bay

**The segment under question and its borders were developed 15-20 years ago. Estuary segments went through a resegmentation process in 2006, but the inner estuary segments were not adjusted as part of this process. There are many variables that could have been considered during the creation of the segment. These include: habitat areas, discharges, accessibility, and other characteristics. The concern over current segment borders will be forwarded to the DEEP Monitoring Group to consider for resegmentation of the estuary segment while developing the next Integrated Water Quality Report. No changes were made in the FINAL TMDL submitted to EPA for approval.**

- 5) *Figure 4 on page 15 places our sampling station, WW442, on the Connecticut side of the river. The station is clearly located on the Rhode Island side of the Pawcatuck River. – Dave Prescott, South County Coastkeeper, Save the Bay*

**This map has been updated with correct GPS coordinates in the data. The new image has been included in the FINAL TMDL submitted to EPA for approval.**

- 6) *On page 23, within Table 3, the wrong GPS coordinates are provided for station WW443. Our station, WW443, is actually located at the same coordinates as RIDEM's station 12-3. Our station identification number is actually the number provided by the University of Rhode Island's Watershed Watch. We have corrected the error in coordinates on our side. – Dave Prescott, South County Coastkeeper, Save the Bay*

**The coordinates have been changed to the correct location in the FINAL TMDL document submitted to EPA for approval.**

- 7) *On pages 75-86, tables 22 and 23 contain sampling data from RIDEM. The newest data goes back to 2010. Since 2011, Save The Bay has been providing boat support to RIDEM to collect bacteria data within the estuary. Currently there are three additional years of data (2011-2013) from this sampling that should be used to update these tables and percent reductions. Save The Bay would also be happy to provide CTDEEP the same opportunity to come out with RIDEM and coordinate sampling within the estuary if interested. – Dave Prescott, South County Coastkeeper, Save the Bay*

**The offer of additional information is appreciated by the Department. The additional information has been reviewed by CT DEEP staff and incorporated into the data tables. The newly included data did not result in any increased reduction goals for the affected segments. Additionally, CT DEEP would like to thank Save the Bay and Dave Prescott in particular, for the assistance with data collection provided to CT DEEP during the development of the TMDL. The Department also appreciates the offer of future help with sampling on the Pawcatuck River estuary. These changes, of adding more recent data, have been made in the FINAL version of the TMDL submitted to EPA for approval.**

- 8) *More open and transparent communication needs to occur between the two states and two towns, especially now that there are TMDLs for both sides of the river. As the towns work to implement some of the strategies outlined in the TMDLs, it is essential that resources are shared, joint funding opportunities are pursued, and information on projects is communicated. – Dave Prescott, South County Coastkeeper, Save the Bay*

**CT DEEP agrees with the goal of shared communication and efforts. Throughout the development of the Pawcatuck TMDL, close communication, data sharing, and sample collection efforts were shared with RIDEM staff. CT DEEP will continue collaboration with involved parties in either State in support of our shared water resource. No changes were made in the FINAL TMDL submitted to EPA for approval.**

- 9) *A wildlife management plan for waterfowl within the town of Stonington is essential. Since RIDEM released their bacteria TMDL for the Pawcatuck River estuary in 2010, Stonington has taken steps to address illegal feeding of waterfowl. However, more should be done on both sides of the river to*

*address this persistent problem with waterfowl. A management plan needs to be developed by both state agencies and both neighboring towns in order to reduce this population. Guidance from the USEPA and US Fish and Wildlife will be especially important as well. Waterfowl, specifically swans and Canada geese, continue to have a detrimental effect on localized water quality as well as lead to the destruction of coastal habitats, such as salt marshes and coastal buffers. – Dave Prescott, South County Coastkeeper, Save the Bay*

**Additional text detailing the creation of a wildlife management plan for Stonington has been added to the FINAL version of the TMDL submitted to EPA for approval. CT DEEP does not develop specific management plans for municipalities. But any municipality, home owner's association, or non-profit land-holding organization can develop a plan. If there are any takings of Canada geese, CT DEEP needs to approve the plan prior to any action taking place. Relevant language can be found in Connecticut General Statutes Chapter 490 Section 26-91.**

*10) In addition, a thorough public education and outreach program to address feeding of local waterfowl along the river is also an important step to informing the public about their individual actions. This program needs to be presented to landowners and the public on both sides of the river. – Dave Prescott, South County Coastkeeper, Save the Bay*

**CT DEEP supports municipal efforts to initiate an awareness program for dealing with feeding of local waterfowl. DEEP Wildlife staff have worked with town officials to curtail feeding waterfowl. To this end, the TMDL document also encourages the municipality to distribute educational information on feeding waterfowl. As resources become available materials and connections will be shared with local municipal officials. Guidance documents or other files that are found to be relevant to local waterfowl issues will be posted on the TMDL webpage. No changes were made to the FINAL version of the TMDL submitted to EPA for approval.**

*11) Approved harbor management plans for both Westerly and Stonington need to be completed and approved. This will give authority to the local harbormasters to enforce No Discharge laws. While the two towns have an incredible marine pump-out program, more on-the-water enforcement is essential– Dave Prescott, South County Coastkeeper, Save the Bay*

**CT DEEP believes that harbor management plans can play a key role in protecting our coastal natural resources. These documents must be drafted and approved at the municipal level. CT DEEP is supportive of Stonington municipal officials working to complete and approve a plan. Some additional text encouraging harbor management plans was added to the FINAL TMDL submitted to EPA for approval.**

*12) Enforcement by CTDEEP and RIDEM along the river and within the Bay has been almost completely absent over the past several years. A continued enforcement presence in the river and on the Bay is vital. It is our hope that the both states can provide enforcement vessels and staff that will be able to patrol these waters. – Dave Prescott, South County Coastkeeper, Save the Bay*

**This comment refers to enforcement of shellfishing requirements in the estuary sections of the Pawcatuck River. In Connecticut, these waters are currently listed as SB waters which means that only commercial shellfishing is allowed and any shellfish harvests should go through depuration prior to consumption. The CT Department of Agriculture Bureau of Aquaculture**

**(DA/BA) has regulatory oversight for shellfishing resources. These concerns will be shared with DA/BA staff that have collaborated with CT DEEP to develop this TMDL. No additional changes were made to the FINAL TMDL that was submitted to EPA for approval.**

- 13) *Save The Bay would like to see a more thorough list of implementation strategies within this TMDL. While the strategies listed are a good start, more guidance from the state would be helpful to the towns especially in terms of clearly identifying priority areas. Additional techniques and needs that could be pursued by both the state and town include continued sampling for personal care products and pharmaceuticals to identify illicit discharges, reviewing and potentially revising existing development regulations/town ordinances to offer more protection to the river, identification of potential funding sources, and a town-wide needs assessment for structural BMPs.* – Dave Prescott, South County Coastkeeper, Save the Bay

**The TMDL is focused on achieving reductions of bacteria levels in the impaired waters included in the document. CT DEEP staff are available to discuss selection of MS4 monitoring locations with municipal staff. CT DEEP Staff can also assist with prioritizing areas that may be contributing larger loads of bacteria to the impaired waterways in the Pawcatuck TMDL, but local knowledge of a watershed can be more useful for determining priorities. Illicit discharge and detection is one of the minimum control measures required in the current MS4 permits and is included in the Current Practices section of the TMDL.**

**No changes were made to the FINAL version of the TMDL submitted to EPA for approval.**

- 14) *Table 1, Pages 8-11 and Appendices 3 and 4: RIDEM evaluated the consistency of the impairments on adjacent waters in the two states. RI assessments are a little different. RI has its Freshwater Pawcatuck River segment (RI0008039R-18E) impaired for fish and wildlife habitat (lead, iron, non-native aquatic plants) and not assessed for fish consumption. Connecticut has both of these uses as fully supporting (CT10000-00\_01). We would be interested in any data that Connecticut has used to assess this segment for fish consumption. RI has the lower estuarine Pawcatuck River (RI0008038E-01B) impaired for recreational uses, whereas Connecticut has not assessed its adjacent segment (CT-E1\_002-SB) for recreational uses.* – Heidi Travers PE, Senior Engineer, RIDEM

**There are impairments for Rhode Island waters dealing with metals. In response to these impairments, CT DEEP staff collected some samples that were analyzed for metals concentrations during bacteria data collection efforts. While this data does not factor into the recreational and shellfishing impairments covered under the TMDL, the data is included as an appendix to the TMDL for informational purposes and a comparison with appropriate WQ criteria provided in a table. The policy for determining fish consumption status is defined in the CT Consolidated Assessment and Listing Methodology (CT CALM). In the CALM Fully Supporting for Fish Consumption is defined as, “No consumption advisory for any fish species or any consumer group, other than the statewide advisory for Mercury in freshwater fish or PCBs in migratory saltwater fish. Advisories in Connecticut are based on risk assessments conducted by CT Department of Public Health using fish tissue contaminant data. It is likely that there is no data for the segment, and the default listing status is fully supporting. Additional questions on the data available for the segment can be directed to Chris Bellucci in the CT DEEP monitoring program at 860-424-3736.**

**CT DEEP utilizes enterococci for marine recreation assessments. CT DEEP had not collected any data in the segment to make any decisions on impairment listing. RIDEM produced a TMDL for the adjacent segment (RI0008038E-01B) that included a limited dataset of**

enterococci results from Save the Bay in 2008-2009. A quick review of these values shows that this dataset does not exceed CT Water Quality Criteria. No changes were made on the FINAL TMDL document submitted to EPA for approval.

- 15) Page 12, Text Edit: The 2014 updates to the 2011 RI Statewide Bacteria TMDL includes the segment of the freshwater Pawcatuck River that forms the Rhode Island and Connecticut border. These new waterbody summaries address bacteria impairments to ~~its~~ two upstream freshwater Pawcatuck River segments, including not the segment that forms the Rhode Island and Connecticut border. The third summary addresses bacteria impairments on Spring Brook, a tributary to the furthest downstream freshwater Pawcatuck River segment.  
– Heidi Travers PE, Senior Engineer, RIDEM

**These text changes have been made in the FINAL version of the TMDL submitted to EPA for approval.**

- 16) Page 12, Text Edit: RIDEM suggests deleting the criteria values in the bullets for each waterbody classification and using the following tables instead. The text as written does not reflect the Rhode Island recreational criteria. The information in the Table is directly from the Rhode Island Water Quality Regulations.
- Class SA waters are designated for shellfish harvesting for direct human consumption; primary and secondary contact recreational activities, and fish and wildlife habitat. ~~SA waters shall not exceed a geometric mean of 14 cols/100mls and not more than 10% of samples shall exceed an MPN value of 49 for a 3-tube decimal dilution.~~
  - Class SA{b} have the same ~~designations-criteria~~ as SA waters, except that they are in the vicinity of marinas and/or mooring fields and therefore seasonal shellfish harvesting closures may occur in the segment.
  - Class SB waters are designated for primary and secondary contact recreational activities, shellfish harvesting for controlled relay and depuration; and fish and wildlife habitat. ~~SB waters shall not exceed a geometric mean of 50 cols/100mls and not more than 10% of samples shall exceed an MPN value of 400 for a 3-tube decimal dilution.~~
  - Class SBI ~~are~~ have the same criteria as Class SB waters, except that primary contact activities may be impacted due to approved wastewater discharges.
  - Class B waters are designated for primary and secondary contact recreational activities and fish and wildlife habitat. ~~B waters shall not exceed a geometric mean of 200 cols/100mls and not more than 10% of samples shall exceed an MPN of 400 for a 3-tube decimal dilution.~~
- Heidi Travers PE, Senior Engineer, RIDEM

**The text above was extracted from a RIDEM TMDL document and represent criteria for the State of Rhode Island that have changed since the publication of the Rhode Island document. The revised text and submitted table from RIDEM were added to the FINAL version of the CT DEEP TMDL submitted to EPA for approval.**

- 17) Page 13, Text Edit: Clarify that Rhode Island only applies the single sample maximum at designated bathing beaches. Rhode Island utilizes ~~single sample maximum criteria of 61 cols/100mls and a~~

geometric mean of 54 cols/100mls ~~for~~ at non-designated bathing beaches– Heidi Travers PE, Senior Engineer, RIDEM

**The text was revised in the FINAL version of the TMDL submitted to EPA for approval.**

- 18) Page 26: RIDEM has two segments, not four segments on the Pawcatuck River estuary. All monitored stations on these two segments violate the geometric mean and/or 90<sup>th</sup> percentile criteria for fecal coliform in wet and dry weather conditions. The other two segments are located in Little Narragansett Bay and Watch Hill Cove. Several stations in these segments meet on or both parts of the criteria in dry weather. All segments violate Rhode Island criteria and a TMDL was completed in 2010 – Heidi Travers PE, Senior Engineer, RIDEM

**The text was revised in the FINAL version of the TMDL submitted to EPA for approval.**

- 19) Stream Stats, Pages 26-27 and Appendix 2: Stream Stats may have value when comparing relative source strength, but RIDEM has concerns about applying Stream Stats in the manner that it is being applied here. RIDEM does agree with the document’s conclusion that due to the differential in flow, the loads from the tributary streams to the main stem Pawcatuck River are not likely the driving force of water quality exceedances. RIDEM would note that the tributary streams represent a bacteria source that should be addressed and that they can contribute to elevations in bacteria concentrations.

While RIDEM has not applied Stream Stats, we caution that when applied, it should be applied to watersheds within recommended watershed sizes and that it not be applied downstream of dams or other activities that impact flow. Selected flows from Stream Stats should be representative of flows on the monitoring day (i.e. low flows selected on dates where flows were low and higher flows selected on dates when flow were higher). – Heidi Travers PE, Senior Engineer, RIDEM

**The TMDL contained an evaluation of the bacterial loadings in order to understand the relative contributions of bacteria to the mainstem of the Pawcatuck River. Even if the analysis showed that for the mainstem of the river, a particular waterbody had a lower or higher potential contribution, in all cases, load reductions were proposed to restore each individual waterbody consistent with applicable standards. The tributary streams are identified as impaired in this TMDL document and CT DEEP has calculated load reduction goals for bacteria in each waterbody. Some additional text further describing these tributary streams as impaired for recreation has been added to the text. The loading analyses were provided to inform implementation activities and does not absolve any responsibility to attain water quality goals within each individual waterbody.**

**Stream Stats was used in this document was intended to support the loading analysis. No regulatory decisions are being made based on the estimated flow rates in Stream Stats software. Factors of watershed size and characteristics are considered with any conclusions made through this new approach of investigating our impaired waterways. CT DEEP agrees with the suggestion to use flow rates that are reflective of watershed conditions on the day of sampling. A new stream flow characteristic from Stream Stats has been chosen for the dry weather date and the wet weather date analyzed in this**

**report. D99\_07\_10 (July to October flow exceeded 99 percent of the time) has been selected for the dry weather date of 7/6/2011. There was no measureable rainfall for that date nor the previous 48 hours. D50\_07\_10 (July to October flow exceeded 50 percent of the time) was selected for the wet weather date of 8/15/2011. Rainfall on that date was 2.79 inches according to NOAA weather data. Flow rates and loads were recalculated for tables and charts included in the FINAL version of the TMDL submitted to EPA for approval.**

*20) Page 29: Why are point sources that violate criteria allowed to address these violations through voluntary reduction measures? Is compliance with applicable water quality standards a requirement of the CT permits? – Heidi Travers PE, Senior Engineer, RIDEM*

**Language from the General Permit for Discharge of Stormwater Associated with Industrial Activity addresses this comment. Most of the applicable language is in section 5 of the permit. Subsection (c) deals with conditions and authorization for the permit. Subsection (e) deals with monitoring requirements for impaired waters, with or without a TMDL. Subsection (g) describes conditions for discharges to impaired waters and the requirements to be consistent with the Waste Load Allocations given in the TMDL.**

**The TMDL also establishes a Waste Load Allocation (WLA) that must be achieved within the TMDL waters. Those point source discharges that are non-stormwater must meet permit limits. In SA waters no NPDES discharges are permitted and SB waters must meet the corresponding CT WQS.**

**Additional language highlighting the above sections of the permit is included in the text of the FINAL TMDL submitted to EPA for approval.**

*21) Page 36: See Section 5.5 of the 2010 RIDEM TMDL for CT Stormwater recommendations. In its TMDL, RIDEM included data on stormwater outfalls in Connecticut that was collected by CT personal in 2006 and by RIDEM personal following rain events. Can you confirm whether any additional monitoring or follow-up was completed on CT102 or CT400? Also, does Stonington implement their Phase 2 program town-wide or do they only implement it in the regulated areas. – Heidi Travers PE, Senior Engineer, RIDEM*

**No additional sampling by CT DEEP has occurred at CT102 and CT400 after the original 2006 trips. These are stormwater outfalls and do not match up with locations that the municipality has monitored for their MS4 requirements. As this TMDL is implemented, additional data may be taken from these highlighted locations to determine impacts of implementation efforts in the basin.**

**At RIDEM's request, CT DEEP did previously send out a field inspector to evaluate a pumping station near a marina in the basin. No releases were discovered through these efforts.**

**The Town of Stonington is covered by the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems in Connecticut. The general permit and its minimum control measures cover the entire town although a few measures are specific to the urbanized areas within the town. The town also coordinates some of its MS4 measures, such as sampling, with the Borough of**

**Stonington. These two entities will likely be combined as co-permittees when Connecticut's MS4 general permit is reissued in the near future.**

22) *Tables 22-24, Pages 75-113: In Bi-State Waters, if states have differing numeric criteria for the same parameter, both states must be protective of the more stringent criteria. The Rhode Island fecal coliform geometric mean criterion for the Class SB estuarine Pawcatuck River is 50 MPN/100 mL, while the Connecticut criterion is a geometric mean of 88 MPN/100 mL. Connecticut should setting the geometric mean criterion for segments CT-E1\_001-SB and CT-E1\_002-SB to be protective of the Rhode Island waters. Similarly, the water quality goal for station 12-8/19.2 in lower Pawcatuck River is situated in Class SA Rhode Island waters. The goal for this station should be set to the Class SA geometric mean and 90<sup>th</sup> percentile criteria. – Heidi Travers PE, Senior Engineer, RIDEM*

**CT DEEP has recalculated reduction goals based on the most protective criteria for each segment. The new comparison utilizes available fecal coliform data and the most conservative criteria from either State, which appears to be the SA criteria for Connecticut, which features a 14col/100mls for geomean comparison and 90% of samples less than 31cols/100ml. These values are for direct consumption of shellfish from the CT Water Quality Standards. The affected data tables are updated with new reduction goals, information and footnotes explaining the criteria selection process of most protective for water quality in the FINAL version submitted to EPA for approval.**

23) *Tables 22-24, Pages 75-113: The water quality goal for the monitoring station in SB waters closest to SA waters should be set to the Class SA criteria to be protective of the SA waters. This means the water quality goal for station 12-7 should be set to the Class SA criteria. – Heidi Travers PE, Senior Engineer, RIDEM*

**The Department agrees that it is important to address how the quality of upstream waters impacts the attainment of water quality uses and criteria in downstream segments. At this point, the station is located in an SB segment, so the goal for the station in question will continue to be for SB waters at this time. Through adaptive management of the waterbody as other loading sources are reduced and eliminated additional monitoring will be conducted on the segment and downstream segments. As downstream sources are eliminated, if it appears that the upstream segment is a major contributor to the impairment new goals and efforts will be evaluated and implemented as appropriate to meet water quality goals. No changes were made to the FINAL version of the TMDL submitted to EPA for approval.**

24) *Tables 22-24, Pages 75-113: RIDEM does not believe that two samples generate enough data to calculate geometric mean and 90<sup>th</sup> percentile statistics for a waterbody segment. While this data was available and was used to characterize wet weather sources, RIDEM did not use this data to set percent reductions from these waterbody segments. – Heidi Travers PE, Senior Engineer, RIDEM*

**In concept CT DEEP agrees with the limited dataset for this segment. Moving forward efforts will be made to utilize larger datasets for calculations. A decision was made to utilize the values resulting in the largest criteria exceedances for setting TMDL reduction goals on the segment in question, which also recorded other significant geomean exceedances. This is a conservative approach and allows for the most protection of water quality when goals are met in the segment. No changes were made to the FINAL version of the TMDL submitted to EPA for approval.**

25) *Tables 22-24, Pages 75-113: The 90<sup>th</sup> Percentile values are not shown in these tables. The footnote in the table mentions a fecal coliform single sample value, which is not part of the criteria evaluating shellfishing use. Is a single sample maximum being compared to the 90<sup>th</sup> percentile criterion? Cells are highlighted in such a way to indicate that they violate a single sample maximum.* – Heidi Travers PE, Senior Engineer, RIDEM

**CT DEEP does not utilize a 90th percentile criterion in its Water Quality Standards. The Standards do state a goal of 90% of samples less than 31/100ml for SA waters and 90% of samples less than 260/100ml in SB waters. For example, within a 10 sample dataset, 9 samples must have a result lower than the 31 or 260 value depending on classification. The highlighted cells in question represent a result larger than either the 31 or 260 value depending on water quality goal. A 90<sup>th</sup> percentile column was added to each table to assist RIDEM with comparison of data and analysis in the FINAL version of the TMDL submitted to EPA for approval.**

26) *Tables 22-24, Pages 75-113: What does the last column in table (Reduction of Exceeding Samples) mean? Does this relate to the 90<sup>th</sup> percentile?* – Heidi Travers PE, Senior Engineer, RIDEM

**This value is the percent of samples that need to meet criteria for the dataset to meet the CT WQS of 90% of samples less than criteria. The value in these cells plus 10% equals the percentage of samples that have a bacteria concentration above criteria. No changes were made in the FINAL version of the TMDL submitted to EPA for approval.**

27) *Page 92, Appendix I: There is no applicable Rhode Island single sample maximum at any of these stations. The word load should be changed to concentration.* – Heidi Travers PE, Senior Engineer, RIDEM

**The text was revised in the FINAL version of the TMDL submitted to EPA for approval.**

28) *In Appendices 3 and 4, Connecticut included information that it had regarding metals in the study area. The limited information that Connecticut has indicates that there may be some metal problems along some of the Connecticut freshwater streams, but that the main stem did not exhibit elevated metals concentrations with the limited data collected. RIDEM has a few notes regarding the metals data. RIDEM did not conduct a comprehensive review of all the Connecticut data. It appears hardness values are pretty low in this area. This results in very low detection limits, meaning that the detection limits from the data collected are above criteria for lead, cadmium, copper, etc. No conclusions can be drawn regarding violations, as the detection limits are too high for the hardness*

*values. Also, the dissolved aluminum concentrations are compared to the aluminum criteria. The criterion is a total (not dissolved) criteria. This would result in many more violations than they previously state.* – Heidi Travers PE, Senior Engineer, RIDEM

**The metals results were included as ancillary data given that RIDEM has listings for some of the metals in the CT DEEP dataset. The tables in Appendices 3 and 4 include some limited metals results from the study area. The data was included as informational results only and no assessment conclusions are being drawn from the data. These results were included primarily due to RIDEM having listings for some of the metals in the dataset. Additional highlights were inserted to show exceedances for total aluminum values above CT DEEP criteria. These highlighted changes were made in the FINAL version of the TMDL submitted to EPA for approval.**

29) *Appendix 3, Page 100: Text Edit. Table 3A and 3B are below* – Heidi Travers PE, Senior Engineer, RIDEM

**The text was revised in the FINAL version of the TMDL submitted to EPA for approval.**

30) *Appendix 4, Page 108: Text Edit: Table 4A and 4B are below.* – Heidi Travers PE, Senior Engineer, RIDEM

**The text was revised in the FINAL version of the TMDL submitted to EPA for approval.**

31) *Appendix 4, Page 108: Can you provide more information concerning station locations for these samples?* – Heidi Travers PE, Senior Engineer, RIDEM

**Additional station information is provided in Table 4 of the TMDL document on page 23. The table of stations in Appendix 4 utilized CT DEEP station numbering for identification. A column was added to the table giving alias information that links the data to the other corresponding station numbers previously provided in the document. The changes are reflected in the FINAL version of the TMDL submitted to EPA for approval.**

32) *Appendix 4, Page 109: Can you double-check the NO3 value for 17675 on 10/6/2011?* – Heidi Travers PE, Senior Engineer, RIDEM

**This value was double checked against hard copy files from Department of Public Health (DPH). An error in the table of the TMDL was found and has been corrected to the value provided by DPH. The changes are reflected in the FINAL version of the TMDL submitted to EPA for approval.**