

State of Rhode Island and Providence Plantations

State House, Room 224 Providence, Rhode Island 02903 401-222-2080

Lincoln D. Chafee Governor

December 22, 2014



Curt Spalding
Regional Administrator
U.S. Environmental Protection Agency, Region 1
5 Post Office Square
Boston, MA 02109-3912

Re: NPDES Permit for Taunton Wastewater Treatment Facility, #MA0100897

Dear Administrator Spalding:

I am writing to urge you to finalize the permit that the Environmental Protection Agency (EPA) issued in draft form for the Taunton wastewater treatment facility more than 18 months ago. Based on the information available to me, it appears that further delay will unnecessarily postpone much needed improvements in the "wild and scenic" Taunton River in Massachusetts, as well as Narragansett Bay in Rhode Island, to which it is a major tributary.

As you well know, Narragansett Bay is one of Rhode Island's most significant, environmental as well as economic assets. Over sixty percent of its watershed is actually located within Massachusetts, which sets up a special dynamic. As we try to meet our environmental and wastewater management objectives on either side of the border, we have no choice but to look beyond that border. Both the law and common sense require as much.

What happens upstream affects the environment, and economy, downstream. It has been well documented that tributaries like the Blackstone and Taunton rivers are significant sources of nutrient loading to Narragansett Bay, including the portion designated as Mt. Hope Bay, where nutrient pollution continues to affect our water quality and our fisheries, to the point that it is no longer tenable to let an upstream wastewater treatment facility (WWTF) operate without a limit on nutrients, such as Total Nitrogen. In Rhode Island, we require WWTFs to meet such limits, and ratepayers and taxpayers have or will invest approximately \$250 M to achieve needed upgrades. These are rendered less than fully effective, and cost-effective, if discharges upstream continue without (adequate) limits. Accordingly, we in Rhode Island have a direct interest in seeing limits established for nutrient discharges from upstream WWTFs that are consistent with the limits we impose. Specifically, in this case, we support the proposed 3.0 milligrams/liter limit on total nitrogen as both feasible and necessary.

Ex. 6 1 of 26

Curt Spalding December 22, 2014 Page 2

As Governor, and former Mayor of the City of Warwick, I am well aware of the challenges associated with the cost of facility upgrades. I do not take the burden placed on ratepayers lightly. I firmly believe, however, that it is necessary to reduce nutrient loading from WWTFs, as well as nonpoint sources, to protect key assets like the Taunton River and Narragansett Bay, because of the environmental, economic and community benefits they provide. Experience also suggests that it is more prudent to focus on finding the most cost-effective strategies to achieve reduction goals, than to spend hundreds of thousands, if not millions, of dollars on lawyers and consultants fighting such goals.

Finally, because Rhode Island and Massachusetts share the Narragansett Bay watershed, and because federal and state agencies, as well as several nonprofit organizations, already are hard at work in this watershed and in the Taunton River sub-watershed, there is an opportunity for coordination and collaboration on cost-effective and perhaps cost-saving strategies that I hope will be pursued as part of the longer term resolution of this permitting case. I know that agencies and organizations like the Department of Environmental Management, the Narragansett Bay Estuary Program and Save the Bay are already engaged in this approach with counterparts and partners in the Taunton watershed and urge both EPA and the City to consider collaborating through this partnership.

Sincerely,

Lincoln D. Chafee

Governor

cc: Senator Jack Reed Senator Sheldon Whitehouse Congressman James Langevin Congressman David Cicilline

Ex. 6 2 of 26



Taunton River Watershed Alliance, Inc

1298 Cohannet Street PO Box 1116
Taunton MA 02780
Tel. 508-828-1101
www.savethetaunton.org

December 10, 2014

Curt Spalding, Administrator Environmental Protection Agency, Region 1 5 Post Office Square Boston MA 02109-3912

Re: National Pollutant Discharge Elimination Permit (NPDES) for Taunton Wastewater Treatment Facility, #MA0100897

Via e-mail: spalding.curt@epa.gov

Dear Administrator Spalding:

Since its formation in 1988, the Taunton River Watershed Alliance (TRWA) in collaboration with other state and regional environmental organizations has advocated for the reduction of pollutant levels in the Taunton River and the restoration of aquatic health to the entire river system. As you know, the lower reaches of the Taunton River and Mount Hope Bay have been listed by the Commonwealth of Massachusetts as "impaired waters" under Section 303 (d) of the Clean Water Act as a result of well-documented organic enrichment. Conditions of eutrophication of water bodies cause excessive plant growth and low oxygen levels that are harmful to fish and other aquatic life. Nitrogen has been specifically identified as the cause of this impairment.

To this end, we have strongly supported the efforts of Region I of the Environmental Protection Agency (EPA) to include limits on nutrients, including nitrogen in effluent discharged from wastewater treatment plants located on the Taunton River and its tributaries. Our written comments of 6-13-2013 regarding the 3-3-2013 Draft NPDES Permit for the Taunton Wastewater Treatment Facility (WWTF) urged EPA to move forward to adopt the proposed limit for Total Nitrogen (TN) of 3.0 mg/l. We are extremely concerned that while nearly 18 months have elapsed since the close of the public comment period, EPA has not issued the final permit for this facility. We request that you issue a final decision either granting or denying an NPDES permit for this facility within the next few weeks.

We are aware that the City of Taunton submitted lengthy comments on the Draft Permit which required review and response from EPA. TRWA believes that the information provided in the Fact Sheet that accompanied the Draft Permit clearly demonstrated the scientific basis for the proposed TN discharge limit. The Fact Sheet included reference to the monitoring study conducted by the School for Marine Science and Technology at UMass Dartmouth (SMAST) and EPA's analysis of nitrogen loading to the Taunton River and its tributaries using the USGS LOADEST program, among other information. Section 122 of CFR 40 (the regulations to

implement the federal Clean Water Act) addresses the establishment of limitations, standards and other NPDES permit conditions, and states at 122.44(d)(1)(i): "Limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause or contribute to an excursion above any state water quality standard." Because (as noted above), nitrogen loading is well recognized as a major cause of nutrient enrichment, eutrophication and subsequent oxygen depletion, it is EPA's responsibility to establish TN effluent limits for facilities discharging to the Taunton River Estuary.

Reduction of TN discharge from this facility has already been delayed significantly. As you know, the WWTF is currently operating under a NPDES Permit issued in March of 2001. TRWA and other environmental organizations submitted comments on a draft reissuance permit which EPA circulated in 2007, urging that effluent limits be established for nitrogen and phosphorus; however a final permit was never issued. The current Draft Permit (Section G, page 18) proposes a five-year compliance schedule to meet the new requirements. Under this schedule, providing that the Final Permit is issued early in 2015, the 3.0 mg/l concentration level may not be achieved until 2019. Additional delay in addressing the eutrophic conditions in the Taunton River estuary and Mount Hope Bay is unacceptable.

In conclusion, we reiterate our request that you issue a final decision either granting or denying an NPDES permit for the Taunton WWTF within the next few weeks. Thank you for considering this request and for providing a prompt response to this letter.

Sincerely,

Marta J. Nover, President

Marta Mr

Taunton River Watershed Alliance, Inc.

cc: Kenneth Moraff, EPA Region 1
David Ferris, Massachusetts Department of Environmental Protection
Mayor Thomas Hoye
Rachel Calabro, Save the Bay
Heidi Ricci, Mass Audubon
Alison Bowden, The Nature Conservancy
Zak Griefin, Conservation Law Foundation
Thomas Borden, Narragansett Bay Estuary Program

Office of U.S. Representative Joseph Kennedy III



Taunton River Watershed Alliance, Inc

1298 Cohannet Street PO Box 1116
Taunton MA 02780
Tel. 508-828-1101
www.savethetaunton.org

February 5, 2015

Curt Spalding, Administrator Environmental Protection Agency, Region 1 5 Post Office Square Boston MA 02109-3912

Re: National Pollutant Discharge Elimination Permit (NPDES) for Taunton Wastewater Treatment Facility, #MA0100897 Via e-mail: spalding.curt@epa.gov

Dear Administrator Spalding:

Thank you for your letter of January 7 responding to TRWA's letter of December 10 (2014) regarding issuance of the NPDES Permit for the Taunton Wastewater Treatment Plant. We were pleased to hear that we are in agreement on the importance of reducing nutrient loads to address eutrophic conditions in the lower reaches of the Taunton River and in Mount Hope Bay. However, we are disappointed that your response contained no firm date for permit reissuance. In addition, we believe that your letter inappropriately places the blame for delay on state certifications processes that are long past due and should be considered waived by Region I of the Environmental Protection Agency (EPA). Regarding these processes, we urge you to take the actions described below immediately and proceed as expeditiously as possible to issue the permit.

As you are aware, the federal Clean Water Act Section 401(a)(1) states that EPA may not issue a permit until a certification is granted or waived in accordance with that section by the State in which the discharge originates or will originate. However, federal regulations concerning state certification (40 CFR 124.53) specify that a "State will be deemed to have waived its right to certify unless that right is exercised within a specified reasonable time not to exceed 60 days from the date the draft permit is mailed to the certifying State agency unless the Regional Administrator finds that unusual circumstances require a longer time." EPA mailed this permit to the Massachusetts Department of Environmental Protection (MassDEP) with a request for certification on March 20, 2013 when the draft was put on public notice. TRWA requests that EPA immediately advise the MassDEP that its 60 days to grant water quality certification expired over 20 months ago and that EPA now considers state certification waived.

A very important limitation on the scope or state certifications is contained in 40 CFR 124.55(c) which specifies that "A State may not condition or deny a certification on the grounds that State law allows a less stringent permit condition. The Regional Administrator shall disregard any such certification conditions, and shall consider those conditions or denials as waivers of certification." This means that the only valid reason for a state to delay water quality or CZM certification is to provide time for development of more stringent permit conditions to meet water quality standards or Coastal Zone Management consistency requirements. MassDEP has had over 22 months to request any more stringent requirements it believes are necessary, well past any reasonable time to exercise its certification responsibilities. It is doubtful, at this late date, that MassDEP has developed more stringent permit conditions and not informed EPA or MA CZM.

The federal regulations concerning Coastal Zone Management Federal Consistency Certification Concurrence with federal Clean Water Act permits are found at 15 CFR 930. Regarding timing of these determinations, Section 930.62(a) states:

"At the earliest practicable time, the State agency shall notify the Federal agency and the applicant whether the State agency concurs with or objects to a consistency certification. The State agency may issue a general concurrence for minor activities (see §930.53(b)). Concurrence by the State agency shall be conclusively presumed if the State agency's response is not received within six months following commencement of State agency review."

We do not believe that the Massachusetts Office of Coastal Zone Management (MA CZM) has a difficult finding to make that an updated water quality based permit developed by the subject matter expert federal agency (EPA) to replace an outdated 14 year old permit is consistent with the Coastal Zone Management Plan. In fact MA CZM should go on record as supporting the draft as beneficial and necessary to plan implementation.

TRWA requests that EPA advise the Massachusetts Office or Coastal Zone Management that MassDEP's water quality certification has been waived because MassDEP failed to request any more stringent limitations within the time allowed by regulation; also that EPA expects MA CZM certification as soon as possible in accordance with 40 CFR 930.62(a), but in no event later than 14 days unless CZM needs more time to develop more stringent limitations that it wishes to impose. If CZM wishes to impose more stringent limitations EPA should offer to discuss an extension of time and the types of more stringent conditions CZM has in mind. In the event MA CZM balks at providing certification without first having MassDEP certification EPA should request Federal review of the Massachusetts CZM program by NOAA and the Secretary of Commerce.

As we noted in our letter of December 10, TRWA has strongly supported the efforts of Region I of the Environmental Protection Agency (EPA) to include limits on nutrients, including nitrogen in effluent discharged from wastewater treatment plants located on the Taunton River and its tributaries. Reduction of TN discharge from this facility has already been delayed significantly and is long overdue. As we noted previously, the current Draft Permit (Section G, page 18) proposes a lenient five-year compliance schedule to meet the new requirements. Under this schedule, providing that the Final Permit is issued early in 2015, the proposed 3.0 mg/l concentration level for Total Nitrogen may not be achieved until 2020. Additional delay in

addressing the eutrophic conditions in the Taunton River estuary and Mount Hope Bay is unacceptable.

In conclusion, we urge you to take immediate action to resolve the issues regarding state certification (as discussed above) and once again we request that you move expeditiously to issue or deny an NPDES permit for the Taunton WWTF within the next few weeks.

Sincerely yours,

Marta J. Nover, President

Marta Mn

Taunton River Watershed Alliance, Inc.

cc: Kenneth Moraff, EPA Region 1

Martin Suuberg, Commissioner Massachusetts Department of Environmental Protection

Bethany Card, MassDEP

Mayor Thomas Hoye

Rachel Calabro, Save the Bay

Heidi Ricci, Mass Audubon

Alison Bowden, The Nature Conservancy

Peter Shelley, Interim President Conservation Law Foundation Massachusetts

Zak Griefin, Conservation Law Foundation

Thomas Borden, Narragansett Bay Estuary Program

Office of U.S. Representative Joseph Kennedy III

Senator Marc Pacheco

Betsey Nicholson, Northeast Region NOAA Office for Coastal Zone Management

David Janik, MA CZM South Coastal Regional Coordinator

Ex. 6



United States Department of the Interior

NATIONAL PARK SERVICE

Northeast Region Office 15 State Street Boston, Massachusetts 02109-3572

IN REPLY REFER TO:

June 17, 2013

Kenneth Moraff, Acting Director Office of Ecosystem Protection U.S. Environmental Protection Agency, Region 1 5 Post Office Square Boston, MA 02109

Rebecca Weidman, Director
Bureau of Resource Protection
Division of Watershed Management
MA Department of Environmental Protection
1 Winter Street
Boston, MA 02108

Re: Comments of NPS and Taunton River Stewardship Coundl

Dear Mr. Moraff and Ms. Weidman,

Thank you for the opportunity to submit comments on the Draft NPDES permit for City of Taunton (MA 0100897). As you know, 40 miles of the Taunton River, from its headwaters to Mt Hope Bay, have been designated as a National Wild and Scenic River. The River has been recognized because of its unique resource values including ecology and biological diversity, fisheries, estuarine resources, recreation and history. The National Park Service, working with the Taunton River Stewardship Council, is responsible for protecting these resource values and the river in general. NPS has reviewed the Draft Taunton permit with the Stewardship Council, and submits the following comments for consideration as a joint comment of the NPS and Taunton River Stewardship Council.

Generally we believe that this draft permit strengthens the protection of water quality and dependent river resources and is an improvement over the current permit. The draft permit corrects and clarifies the water quality standard as Class SB – Shellfishing (R) and CSO. Class SB waters are designated as a habitat for fish, other aquatic life and wildlife and for primary and secondary contact recreation— these are all resource values identified in the Wild and Scenic River Stewardship Plan.

We commend EPA and DEP for not increasing the permitted design flow until a thorough antidegradation review is completed. The Fact Sheet recognizes that The Taunton River is an effluent dominated river, that effluent has contributed to violations in water quality standards and that these violations (especially of nitrogen) have resulted in impacts on the river and in Mt Hope Bay. All efforts should be placed on improving water quality to avoid these violations in the future. Perhaps with improved storm water management and reduction of inflow and infiltration, additional flow capacity will not be needed.

In addition we support the inclusion of a nitrogen limit in order to move towards meeting water quality standards. These limits will be beneficial both in the river and in Mt Hope Bay. We recommend that ambient monitoring continue in order to assess the impact of these limits on the River and Bay. It would be helpful to have monitoring through the winter months as well when there will not be a limit imposed to confirm that the nitrogen moves through the system as expected. In order to fully address nitrogen issues, local communities must also address nonpoint source s of pollution.

Although phosphorus is not generally the limiting factor in nutrient enrichment of marine systems, the Taunton River at the point of discharge is only slightly saline, and phosphorus could in fact have an influence on eutrophication. We support the monitoring requirement for phosphorus and encourage this monitoring to be done year round. Data in other parts of Massachusetts indicates that phosphorus may remain in the water system through the winter months, so it would be important to track this.

Addressing combined sewer overflows is another important part of helping to reach water quality standards. We support the added focus on working with the City of Taunton to minimize inflow and infiltration within the sewer system. System mapping and development of a maintenance plan may also help to decrease outfall flows, and may lessen the need for a permitted increase in design flows in the future.

We commend EPA and DEP for putting forth a permit that contributes to the attainment of water quality standards in the Taunton River. Good water quality helps to support the ecology, fisheries, biological diversity and recreational opportunities for which the river is so highly valued. Thank you for the opportunity to comment.

Sincerely,

Hamie Fosburgh, New England Team Leader

Northeast Region Rivers Program

Copy: Taunton River Stewardship Council

Ex. 6 9 of 26

June 17, 2013

Susan Murphy
U.S. Environmental Protection Agency – Region 1
5 Post Office Square, Suite 100 (OEP06-1)
Boston, MA 02109

RE: Taunton Wastewater Treatment Plant; Draft Permit #: MA0100897

Dear Ms. Murphy:

This letter is being written in response to the Rhode Island Department of Environmental Management's (RIDEM's) review of the draft permit for the Taunton Wastewater Treatment Plant (WWTP). The public comment period for this permit was extended and ends June 17, 2013. RIDEM supports the majority of the permit as drafted. However, RIDEM offers the following comments that we would like to formally submit as part of the public record:

- 1) Given that the Rhode Island portion of the downstream receiving waters of Mt. Hope Bay are listed on RIDEM's 2012 303d list (Category 5 waters) as impaired for nitrogen and dissolved oxygen and that the discharge of nitrogen from the Taunton WWTP contributes to the unacceptably high nitrogen load to these waters, DEM strongly supports the Taunton WWTP TN limit of 3.0 mg/l.
- 2) The draft permit authorizes the discharge from one Combined Sewer Overflow (CSO), located at West Water Street, and requires the implementation of Nine Minimum Controls for this CSO. Part I.F.1.c of the permit also requires that the discharge from this CSO "not cause or contribute to violations of federal or state Water Quality Standards." Page 7 of the permit Fact Sheet indicates that the City of Taunton (City) is working under an Administrative Order (AO) to evaluate its ability to eliminate discharges from the CSO through collection system improvements and that, if collection system improvements will not result in the elimination of CSOs, the AO requires the City to submit a plan and schedule for additional options by October 2013. Although the City is currently working towards elimination of CSOs and the permit requires that CSOs not cause or contribute to violations of Water Quality Standards, the permit does not include any CSO monitoring. Therefore, the permit does not allow a determination to be made if the CSO is causing or contributing to a violation of Water Quality Standards. As indicated in the permit Fact Sheet both the Massachusetts and Rhode Island downstream waterbodies are designated for primary and secondary recreation and shellfishing. In addition the permit Fact Sheet indicates that the Taunton River is impaired due to pathogens. Based on this information, if similar monitoring is not already in the AO, the permit should include requirements for 1) monitoring of the CSO discharge that include a) bacteria ambient water sampling up and downstream of the discharge point(s) as well as the combined sewage discharge itself, and b) flow measurements of the combined sewage discharge to determine the total volume of combined sewage, and 2) analysis of the collected data to document that the discharge is not impacting shellfishing use in downstream Massachusetts and Rhode Island waters.
- 3) The draft permit has been updated to reflect the fact that the discharge from the WWTP is to a saltwater waterbody. However, the toxicity testing requirements in the permit are still based on freshwater species. Since the discharge is to a saltwater waterbody, with a salinity of 22.35 ppt (see page 31 of the permit Fact Sheet), the permit should either use saltwater species for toxicity testing or the fact sheet should further explain the basis for conducting toxicity testing using freshwater versus saltwater species. Since the permittee can obtain its dilution water from another source, the DEM does not believe that the source of the dilution water should dictate what species is used in the toxicity testing.

30% post-consumer fiber

Ms. Susan Murphy June 17, 2013 Page 2

4) Finally, RIDEM noted some minor clerical errors that should be corrected. Specifically, Page 11 of the permit Fact Sheet indicates that bacteria "sampling is required three times per week", but page 2 of the permit includes a frequency of "2/week". This discrepancy should be corrected. Also, Table 11 of the permit Fact Sheet lists the median receiving water analytical data for nickel as 24.0 ug/l. At these levels a permit limit would be required. However, based on the data presented in Table 11, it appears that the correct median should be non-detect, which would result in a permit limit not being required as reflected in the draft permit. This typographical error should also be corrected to avoid confusion.

If EPA has any questions regarding RIDEM's comments, feel free to contact me at 401-222-4700, extension 7225.

Sincerely,

Angelo S. Liberti, P.E.

Chief of Surface Water Protection

cc: Joseph Haberek, DEM (electronic)

Claire Golden, MADEP (electronic)

Stephen Perkins, EPA (electronic)



Save The Bay Center 100 Save The Bay Drive Providence RI 02905 P: 401-272-3540 F: 401-273-7153 SAVEBAY.ORG

June 14, 2013

Ken Moraff, Acting Director
Office of Ecosystem Protection
United States Environmental Protection Agency, Region 1
5 Post Office Square
Boston MA 02109-3912

Re: Draft NPDES Permit for Taunton Wastewater Treatment Plant, #MA0100897

Dear Mr. Moraff,

Save The Bay is writing to support the draft discharge permit for the City of Taunton's wastewater treatment plant. This permit will protect the health of the Taunton River and Narragansett Bay by decreasing nitrogen inputs to the estuary. We support the change in water classification to from B to SB, given that the Taunton River is tidal at this point, and is influenced by salt water. We also support the flow limit being maintained at 8.4 mgd. This wastewater treatment plant represents only one of several sources of nutrients to this watershed, and any increase in pollutant discharge would further impair water quality.

Save The Bay strongly supports a total nitrogen limit of 3 mg/l because the case for this limit was well articulated in the draft permit through the discussion of existing data. Low dissolved oxygen and high chlorophyll readings continue to impair the Taunton River estuary. In the absence of a TMDL and numeric criteria for total nitrogen, these other data represent important indicators of estuary health.

The compliance schedule of five years for nitrogen upgrades to the treatment plant seems reasonable. These upgrades should also take into consideration future needs for expansion of the sewer system as described in Taunton's Comprehensive Wastewater Management Plan. Additional flow limits should not be permitted until they can be adequately treated to ensure compliance. We continue to support this approach for the Brockton facility as well, and look forward to seeing a new permit for that plant.

As the largest source of fresh water to Narragansett Bay, the Taunton River is an important regional ecosystem supporting rare habitats and aquatic species. Habitat quality has increased significantly in Mount Hope Bay and Upper Narragansett Bay since the elimination of once-through cooling at Brayton Point Power. We are now seeing shellfish beds reopened in Swansea, the returning of bay scallops, and an increase in fish habitat. If eelgrass and other native species are to be restored in the Upper Bay, algae blooms need to be reduced (as evidenced by high chlorophyll readings), and dissolved oxygen needs to maintain higher levels. Reduction in nitrogen from the Taunton River will allow this to happen.

Sincerely,

Jonathan Stone

Ex. 6 12 of 26

The Nature Conservancy in Massachusetts 99 Bedford St., 5th floor Boston, MA 02111 tel [617] 532.8300 fax [617] 532.8400

nature.org/massachusett

May 23, 2013 Susan Murphy U.S. EPA 5 Post Office Square Boston, Massachusetts 02109-3912

Re: Draft NPDES Permit - City of Taunton Wastewater Treatment Plant

Dear Ms. Murphy:

Thank you for the opportunity to provide comments on the *Draft NPDES Permit for the City of Taunton Wastewater Treatment Plant (Taunton WWTP)* released by Region 1 of the U.S. Environmental Protection Agency in March 2013.

The Nature Conservancy is an international, nonprofit conservation organization. Our mission is to conserve the lands and waters on which all life depends. Our work is carried out in all 50 states and over 30 countries and is supported by over 36,000 members in Massachusetts and Rhode Island and over one million members worldwide. The Conservancy works globally on freshwater and coastal science and management to help government agencies, water management agencies, industry, scientists, and other non-governmental organizations around the world to improve ecosystem health and implement sustainable solutions.

The Nature Conservancy supports the draft NPDES permit, and we agree with EPA that these limits are necessary to achieve water quality standards in the Taunton River and are justified by the best available science. Requiring the City of Taunton and other upstream dischargers to meet these new limits will help to protect and improve water quality in the Taunton River watershed and associated estuary. We view this permit as a key piece of a comprehensive and watershed-wide approach to restoring the environmental conditions of the Taunton River estuary.

The Taunton River is the longest free flowing coastal river in New England, with tidal influence reaching nearly 20 miles inland from Narragansett Bay. This extent of tidal influence maintains large, high quality, and globally rare brackish and freshwater tidal marshes. The river supports populations of environmentally-sensitive species such as river otters and freshwater mussels; three globally rare species of plants and two globally rare fish, bridle shiner and Atlantic sturgeon, inhabit the watershed.

The river provides important habitat for one of the largest spawning populations of river herring in New England and populations of other fish that play a critical role in supporting marine food webs. The River was designated Wild and Scenic in 2009, to protect six outstanding resource values: agriculture, ecology and biodiversity, estuary, fisheries, history and archaeology, and recreation.

Nutrient pollution from wastewater is widely recognized as a major source of impairment for Narragansett Bay and other estuaries throughout the region. The Conservancy is committed to efforts to reduce reactive nitrogen levels in this region because of persistent problems related to excessive nitrogen including widespread algal blooms causing shellfish harvest closures, low dissolved oxygen levels, and loss of eelgrass.

From Nantucket Sound to Block Island Sound to Great South Bay, NY, The Nature Conservancy is investing in estuarine restoration focused on salt marsh, seagrass, oysters, bay scallops, hard clams, and diadromous fish habitat. However, monitoring and research have shown that to be truly effective at scale, restoration success requires improved water quality to support a diversity and abundance of native species and habitats. Limiting nitrogen from wastewater treatment facilities is a high priority for the Conservancy in our efforts to improve water quality and thus ecosystem health in the region's estuaries.

The Conservancy strongly supports the scientifically-derived 3.0 mg/l total nitrogen seasonal limit described in the draft permit. As the draft permit describes, recent monitoring by the University of Massachusetts School for Marine Science and Technology (SMAST) has shown elevated total nitrogen concentrations in the Taunton River Estuary and Mount Hope Bay. SMAST and Narragansett Bay Water Quality Network monitoring data have also shown other indicators of eutrophic condition, including low dissolved oxygen and elevated chlorophyll-a concentrations. Based on these data, EPA has concluded that excess nitrogen in the Taunton River Estuary and Mount Hope Bay has reached the level of a violation of state water quality standards for nutrients and aesthetics, and has subsequently determined a nitrogen limit is necessary to meet water quality requirements. The Taunton WWTP currently constitutes 14% of the total watershed nitrogen load; a 51% reduction in nitrogen from the watershed, allocated among several sources, is needed. We agree that a numerical limit on total nitrogen should be included in the permit, and commend the use of recent local data to determine the limit. The Nature Conservancy is also supportive of other source reductions and limits needed to reach the overall required load reduction, including reductions in nonpoint source pollution.

The Conservancy is supportive of measures to protect and restore the water balance in the Taunton River watershed, consistent with goals of the 2008/2011 Taunton River Watershed Study and the 2004 Massachusetts Water Policy. We encourage careful consideration of flow limits for wastewater treatment plants in the watershed, to restore water balance and promote

Ex. 6 14 of 26

groundwater recharge, as well as to maintain consistency with anti-degradation regulations to prevent increased discharge of pollutants to already impaired waters. Therefore, we support maintaining the current flow limit of 8.4 MGD for the Taunton WWTP. We are also supportive of eliminating the Combined Sewer Overflow at West Water Street through collection system improvements or additional options.

In coalition with associations representing municipalities and water suppliers, The Nature Conservancy has supported public policy and funding for municipal infrastructure related to water quality including leading the legislative advocacy efforts to create a \$20 million loan fund for dam removal and repair and advocating for capital funding legislation to implement the recommendations of the Water Infrastructure Financing Commission. The Conservancy will continue to help ensure public funding and incentives are available to help communities protect clean water to benefit people and the environment.

Thank you for this opportunity to comment. If you have questions, please contact Alison Bowden at abowden@tnc.org/617-532-8360 or John Torgan at jtorgan@tnc.org/401-331-7110,

Sincerely,

Wayne Klockner, Vice President and Massachusetts State Director

Terry Sullivan, Rhode Island State Director

Ex. 6 15 of 26





June 13, 2013

Ken Moraff, Acting Director
Office of Ecosystem Protection
United States Environmental Protection Agency, Region 1
5 Post Office Square
Boston MA 02109-3912

Re: Draft NPDES Permit for Taunton Wastewater Treatment Plant, #MA0100897

Dear Mr. Moraff:

On behalf of the Taunton River Watershed Alliance, Inc. and Mass Audubon we submit the following comments on the Draft National Pollution Discharge Elimination System (NPDES) Permit #MA 0100897 for the Taunton Wastewater Treatment Plant (WWTP). Our organizations are committed to the protection and restoration of the water quality and natural ecosystems of the Taunton River. For the reasons explained below, we support the proposed effluent limits in the draft permit, including the proposed limit for Total Nitrogen (TN) of 3.0 mg/l and 210 lbs/day (monthly average), in effect for the period of May through October.

The Taunton River is the largest freshwater source to Mount Hope Bay. It supports habitat for 45 species of fish, globally rare freshwater and brackish tidal marshes and, together with its tributary the Nemasket River, the largest alewife run in Massachusetts. It was added to the National Wild and Scenic Rivers System in 2009. The Taunton Wastewater Treatment Plant discharges 8.4 million gallons per day of effluent to a saltwater portion of the Taunton River that is considered part of the Taunton River Estuary. This segment is classified under the Massachusetts Surface Water Quality Standards, 314 CMR 4.00 as SB waters with Restricted Shellfish Areas and impacted by discharge of Combined Sewer Overflows (CSOs). As such, it is designated as "habitat for fish, other aquatic life and wildlife, including for their reproduction, migration, growth and other critical functions, and for primary and secondary contact recreation..." Under Section 303(d) of the Clean Water Act, the reach of the river immediately below the facility discharge is considered "impaired" for pathogens. Downstream reaches are impaired for organic enrichment/low dissolved oxygen as well as for pathogens. Mount Hope Bay is impaired for TN, dissolved oxygen (DO), temperature, fecal coliform and chlorophyll-a.

Information provided in the Fact Sheet that accompanied the draft permit demonstrates the scientific basis for the proposed discharge limits for TN. It describes a three-year water quality

monitoring study conducted by the School for Marine Science and Technology at UMass-Dartmouth (SMAST). The study involved monthly sampling at 22 sites across Mount Hope Bay and the Taunton River Estuary from 2004 to 2006. The results showed pervasive low DO conditions in violation of the state standard throughout the Estuary and Bay, pervasive elevated concentrations of chlorophyll-a and elevated TN concentrations throughout the system. To determine the contribution of the Taunton WWTP and other facilities to the water quality violations, EPA analyzed nitrogen loading to the Taunton River Estuary and major tributaries, using the USGS LOADEST program and focusing on the Estuary because "that area shows the greatest eutrophication impacts and greatest nitrogen concentrations." 40 CFR 122.44 (d)(1)(i) of the federal Clean Water Act states, "Limitations must control all pollutants or pollutant parameters which the Director determines are or may be discharged at a level which will cause, have the reasonable potential to cause or contribute to an excursion above any state water quality standard." Because nitrogen loading is well recognized as a major cause of nutrient enrichment, eutrophication and subsequent oxygen depletion, it is EPA's responsibility to establish TN effluent limits for facilities discharging to the Taunton River Estuary.

For these reasons, we support the EPA's proposed effluent limits, including the proposed discharge limit for TN. We urge you to retain the effluent limits in the draft permit.

Additional issues we would like to address include:

Phosphorus (P) discharge. We commend EPA for including a requirement to report average monthly phosphorus discharge from the WWTP in pounds per day and concentration. On page 35 of the Fact Sheet EPA notes that salinities in the Taunton River in the vicinity of the WWTP discharge are "quite low" even though this segment is classified as marine waters and that P may cause or contribute to water quality violations under low-salinity conditions. We urge you to continue to review all future monitoring data regarding concentrations of P and other indicators of eutrophic conditions in the receiving waters in the vicinity of this discharge to determine whether an effluent limit for P for this facility should be developed.

Flow limit. We urge EPA to maintain the existing flow limit of 8.4 mgd. We understand that the City has requested that the flow limit be increased to 9 mgd. Absent a demonstration that the requested increase in flow would not result in increased discharge of regulated pollutants, increased flow from the WWTP would violate the antidegradation requirement of the Clean Water Act (Section 303(d)(4)(B).

West Water Street Combined Sewer Overflow (CSO).

The West Water Street CSO is located in a section of the city where runoff from a large watershed drains to low-lying areas during heavy rainstorms, resulting in major flooding of streets and other areas. The draft permit allows continued discharge of storm water/wastewater from this CSO subject to several technology-based effluent limitations including implementation of EPA's "Nine Minimum Controls." The permit requires that the CSO discharges "shall not cause or contribute to violations of federal or state water quality standards." It also requires that the permittee record all discharges including estimated duration and volume and National Weather Service precipitation data from the nearest gages.

Ex. 6 17 of 26

We commend the City for making progress in recent years on reduction of inflow and infiltration to the storm/sewer conveyance system. We understand that wet weather overflows from the West Water CSO have occurred in the last three years (2010 – 2012), with the most prolonged discharges occurring during the heavy rains in March and April of 2010 (5-20-13 phone conversation between Priscilla Chapman and Susan Murphy). The draft permit does not establish a limit on number of discharge events, total volume or duration of discharges, or a specific calculation of whether federal or state water quality standards were violated. We urge you to require the City to assess whether violations of water quality standards are occurring as a result of discharges, and the frequency and severity of such violations; also to include benchmarks in the permit to determine whether acceptable progress is being made on reducing discharges from this CSO, and if not, what additional steps must be taken. We would welcome the opportunity to work with the City to identify low-impact development techniques that would increase infiltration of stormwater and reduce flooding impacts city wide, at a reasonable cost.

Thank you for considering these comments.

Sincerely,

Marta J. Nover
President
Taunton River Watershed Alliance, Inc.
1298 Cohannet Street
Taunton MA 02780

E. Heidi Ricci Senior Policy Analyst Mass Audubon 208 South Great Road Lincoln MA 01773

Cc: David Ferris, DEP Susan Murphy, EPA City of Taunton

3

Ex. 6 18 of 26

We are submitting the following comments in regard to Draft NPDES Permit MA0100897.

In regard to phosphorus, phosphorus limits as we pointed out in our comments on the previous draft permit which was scraped are required for this permit. Our concerns in regard to phosphorus are not limited to the immediate vicinity of the plant. Our concerns and the responsibility of EPA are to achieve water quality standards throughout the watershed. Phosphorus is a pollutant being discharged by the Taunton WWTP. It is a pollutant being discharged to an "effluent dominated river", a river which is clearly, both by simple on the water observation and by way of water quality sampling suffering from eutrophication. System wide eutrophication brought about primarily by excessive nutrients discharged into it by wastewater treatment plants up and down the river.

EPA attempts to justify their non action on phosphorus.

1. "However, upstream facilities have implemented permit limits on their phosphorus discharges since 2005."

Is this referenced upstream facility the Brockton WWTP? Please be specific on this question. If EPA is going to reference a site and use it to help justify non action in regard to a discharged pollutant at Taunton WWTP, EPA at the bare minimum has the responsibility of specificity so that commenters can address the issue directly.

What does the above quoted #1 statement mean and what data does EPA have which demonstrates that these limits at "upstream facilities" have been effective in achieving water quality standards in the respective receiving waters?

The following information is from the Ma DEP 2012 list Massachusetts Category 5 Waters "Waters requiring a TMDL"

Salisbury Plain River MA62-06 From the Brockton Advanced Water Reclamation

Facility (AWRF) discharge, Brockton to the confluence with Beaver Brook forming the Matfield River, East Bridgewater.

2.262 MILES (Debris/Floatables/Trash*)
Aquatic Macroinvertebrate Bioassessments

Excess Algal Growth

Fecal Coliform 40308

Ex. 6 19 of 26

Oxygen, Dissolved Phosphorus (Total) Taste and Odor Turbidity

Matfield River MA62-32 Confluence of Beaver Brook and the Salisbury Plain River, East Bridgewater to the confluence with the Town River and the Taunton River, Bridgewater.
6.662 MILES Aquatic Macroinvertebrate Bioassessments
Excess Algal Growth
Fecal Coliform 40308
Oxygen, Dissolved
Phosphorus (Total)

If as EPA implies these "upstream facilities" upgrades have in fact had a positive and significant impact on improved water quality, and if in fact the referenced upgrades are relevant in regard to this permit they are not demonstrated in this the most recent MA DEP assessment of the respective waters! The Matfield River simply is the dominant contributor of effluent/water to the Taunton River, especially during low flow periods. If the Matfield is still in the sorry state that the most recent Ma DEP 2012 list of Category 5 Waters claims then so goes the Taunton. The two are one, inseparable.

The following is also troubling.

"The Taunton River Watershed Association (TRWA) monitors sites upstream (Plain Street, Taunton) and downstream (Center Street/Berkley Bridge). TRWA phosphorus data for April to October 2010 averaged 0.12 mg/l at both the upstream and downstream sites. In 2011, the average concentration was 0.08 mg/l at both sites.13 The 2011 concentration is below the EPA-recommended Gold Book concentration of 0.1 mg/l, which has been used by EPA as the basis for permit limits in numerous permit proceedings as an interpretation of the Massachusetts narrative water quality standard for nutrients."

It seems not 'protective' of the receiving water to average the P data over the sampling season- what is pertinent are the concentrations in the vegetation peak growing months. It seems best not to average in March/April/May/Oct and November data (though these can sometimes be high because there is less uptake of the dissolved fraction in the water outside prime growing times/biomass though the spring months having lots more dilution probably

Ex. 6 20 of 26

compensates). Seems far more important to consider the June- July- August concentrations when plants are maximizing their use of available P. If the water column concentration is high, despite plants maxing out their annual uptake of nutrients, than it seems best to consider P an issue. Furthermore, TRWA is not collecting data under an approved QAPP, the checks and balances needed to make sure the data results meet a minimum of quality control are not in place. Without blank and duplicate samples one cannot be sure of the accuracies of the results- the results may be under reporting the concentrations in the river.

Furthermore the 2012 TRWA sampling data for the referenced sites are as follows TNT 01 TP.....March 0.14/ April 0.09/ May 0.11/ June 0.12/ July 0.22/ Aug 0/ Sept 0.14/ Oct 0.06/ Nov 0.12

TNT 02 March 0/ April 0/ May 0.08/ June 0.09/ July 0.13/ Aug 0.13/ Sept 0.11/ Oct 0.09/ Nov 0.11

TNT01 readings going from .22 mg/l in July to 0 in August. This zero is likely either a typo (did not finish typing in that entry) or a sampling or lab error. I would not believe a concentration of P in the mainstem Taunton falling to zero. This again raises the issue of data quality and assurance. If it is quality data then it appears that the 2011 data was an aberration because 2012 reflects elevated phosphorus which appeared as the norm previous to the 2011 data.

"While the Taunton WWTP does not monitor phosphorus discharges under its current permit, these data do not indicate discernable increases in total phosphorus concentrations attributable to the Taunton WWTP."

The 2012 data demonstrating the higher phosphorus values appears to come from sample site TNT01 which is downstream of the Taunton WWTP outfall.

"Receiving water quality data is limited with respect to other indicators of eutrophic conditions in the immediate vicinity of the discharge."

Why does EPA in the fact sheet insist on using the phrase "immediate vicinity of the discharge?" Since when and where in the CWA do NPDES only apply to the "immediate vicinity" of a discharge?

Once again the whole mainstem river system from the outfall of the Brockton WWTP to Mount Hope Bay is suffering the effects of being "effluent dominated." The river being eutrophic both upstream and downstream of the

Ex. 6 21 of 26

Taunton WWTP is a reliable indicator that the river in between at the Taunton WWTP site is also eutrophic. The most reliable indicator and data being a simple walk or paddle along the river to observe the discolored water and over abundant filamentous algae.

These opening comments in addition to discussing the phosphorus issue also serve to demonstrate that many of our comments on the previous draft permit that was scrapped remain relevant and have yet to be addressed.

It appears that EPA is attempting to sidestep the whole phosphors issue by drawing from one season of questionable sampling at 2 sites and at best using anecdotal, unsupportable assumptions that "upstream facilities" are doing a swell job.

As EPA correctly states and demonstrates in the fact sheet for this permit, "It is clear that this is an effluent dominated watershed". As such the quality of the water in the river can be no better than the quality of effluent which dominates it. Currently and for many years water quality data gathered from the Taunton River has demonstrated that the quality of effluent dominating it is not of sufficient quality to allow attainment of its water quality standard. We offer the simple proposition that there are two solutions to this on going dilemma.

- 1.) Reduce volume of effluent discharged.
- 2.) Improve quality of effluent discharged.

Unfortunately this draft permit addresses neither option #1, nor, option #2 in regard to phosphorus. In fact it does little more than require the permittee to monitor an illegal discharge of pollutants into an already polluted waterbody. Therefore, this draft permit as written violates the United States Clean Water Act, 33 U.S.C. § 1251, Section 301(b)(1)(C), Massachusetts Clean Water Act, M.G.L.c.21, § 26, 314 CMR 4.05(5)(c), 314 CMR 4.04. This is not good.

Although the segment discharged too is tidal, it is primarily freshwater tidal at and above the point of discharge. Therefore EPA must establish phosphorus limits in this permit.

In the decision of MWRC dated 8/4/2003 regarding the Aquaria de salinazation plant on the Taunton River in Dighton the commission states that under 7Q10 conditions modeled salinity at the plant site ranges from 0ppt to 23ppt depending on tidal cycle. In fact because of a lack of salinity at the de sal plant

Ex. 6 22 of 26

site the reverse osmosis process will only be needed to remove saltwater for drinking water between the months of July and November. The de sal plant is approximately one mile downstream from the discharge of the Taunton WWTP therefore there is likely to be less saltwater intrusion one mile upstream of the de sal plant. Furthermore, in the fact sheet for the Taunton Municipal Light Plant NPDES permit # MA0002241 EPA states the following regarding salinity at that discharge site, "The salinity of the Taunton River as measured at the cooling water intake is dominated by freshwater. The highest salinity is found in the salt wedge at the river bottom. The salinity as measured on July 30, 1991 was 1 part per thousand (based on conductivity equivalence)". The site of the TMLP is approximately one half mile downstream of the Taunton WWTP therefore there is likely to be less if any saline water there.

Plume studies undertaken regarding the discharge of TMLP demonstrate that because of tidal influence the discharge of TMLP does what one expects in a tidal zone, it migrates upstream during the incoming tide cycle. We expect the same to be true of the Taunton WWTP discharge. That during incoming tides the discharge of Taunton WWTP will migrate upstream impacting an even greater segment of the freshwater tidal system.

We believe the available data clearly indicates that despite the sb classification the Taunton WWTP discharges to freshwater. Therefore phosphorus limits are not only appropriate but required to attain/maintain/protect water quality standards in the receiving waters.

EPA clearly establishes in other NPDES permits which discharge into the Taunton River and its tributaries that excessive phosphorus is a limiting factor in regard to attaining, maintaining and protecting water quality standards in the Taunton and its tributaries. For example, draft Brockton WWTP, 0.2 mg/l average monthly P, Bridgewater WWTP, average monthly summer 1.0 mg/l P, Middleboro WWTP, average monthly summer 0.2 mg/l P.

The 2004 NPDES permit for Oak Point development which discharges to the Taunton River segment upstream of Taunton WWTP segment is instructive; here average monthly phosphorus has been limited to a 1mg/l and 0.7 kgs/day summer limit. In the fact sheet for this permit EPA states the following regarding phosphorus.

Instream water quality information for this segment of the Taunton River is scarce. In 2001 and 2002, the Taunton River Watershed Alliance (TRWA) collected water quality samples throughout the Taunton River Watershed. The

Ex. 6 23 of 26

nearest downstream site was at the Sturtevant Bridge, Green Street, Middleborough/Bridgewater. Results of the sampling can be found in the documents: AnnualWater Quality Report for the City of Taunton, Taunton River and Tributaries, 2001 (Domingos,

January 2002) and Annual Water Quality Report for the City of Taunton, Taunton River and Tributaries, 2002 (Domingos, January 2003). Instream total phosphorus concentrations ranged from 0.09 mg/l to 0.39 mg/l. All of the samples exceeded the ecoregion criteria of 0.024 mg/l and all but one sample exceeded the less stringent "Gold Book" criteria of 0.1 mg/l.

The draft permit includes a monthly average limit of 1 mg/l. At this concentration the discharge would be expected to contribute about 10 ug/l to the instream concentration of phosphorus (1mg/l/DF=1/95+0.01 mg/l). If, in the future, the state should adopt numeric criteria, or water quality monitoring should show the need for a more stringent limit, this permit may be re-opened and modified.

If EPA is establishing phosphorus limits for a discharge of less than 1 mgd and putting language such as this in that same permit "If, in the future, the state should adopt numeric criteria, or water quality monitoring should show the need for a more stringent limit, this permit may be re-opened and modified." Why does EPA refuse to establish phosphorus limits for the Taunton WWTP which discharges 8.4 mgd?

Furthermore, The Commonwealth's water quality standards include a narrative criterion which provides that nutrients "shall not exceed the site specific limits necessary to control accelerated or cultural eutrophication." 314 CMR 4.05(5)(c). Massachusetts' standards also require that "any existing point source discharges containing nutrients in concentrations which encourage eutrophication or growth of weeds or algae shall be provided with the highest and best practicable treatment to remove such nutrients." 314 CMR 4.04.

The Taunton WWTP discharge without limits on phosphorus will clearly encourage further eutrophication of this river segment therefore we recommend monthly average total phosphorus limit of 0.2 mg/L which is based on the "highest and best" practical treatment as defined by the MA WQS.

In addition to the above it should be noted that in NPDES permit #MA0101893 for the Wareham WWTP EPA establishes a summer phosphorus limit of 0.2 mg/l. The Wareham WWTP discharges to the Agawam River which is

Ex. 6 24 of 26

classified as sb at the point of discharge. In fact the discharge point of Wareham WWTP displays higher salinity levels than at the site of the TMLP on the Taunton River, which is one half mile downstream of the Taunton WWTP discharge. Therefore it appears that phosphorus limits have and can be established for waterbodies classified sb. Does EPA agree that P limits can be established in waters which are class sb?

Nitrogen discussion:

The Fact Sheet does not mention this watershed importance as an anadromous fishery- one of the strongest remaining in the Commonwealth. The needs of the spawning adults and juveniles must be considered- the resource can't afford any further decreases in numbers.

In the SMAST Data there does seem to be a strong correlation between high N levels (of almost all the species of N, too) and lower salinity samples. Just look at the dissolved to particulate N ratio versus salinity. The lower salinity samples also have depressed DO but interestingly some of the lower Clhro A concentrations. All this seems to indicate it is the fresh water inputs coming down the river contributing the nutrients and the incoming tide offering some modest dilution. This all strengthens the argument for lower nutrient levels in the permit.

A N limit of 2 mg/l is a good start but it needs to be recognized (and stated) that the allowable load may need to be revisited as more information and more progress toward meeting WQS to see if the crude calculations are proving to be good enough estimates to make a difference in receiving water conditions. Also will there be some potential legal posturing associated with the EPA's approach to give the smallest treatment plants (less than 1 mdg) a complete bye on limits and the smaller ones a less stringent 5.5 mg/l limit? Would not want to see these limits abandoned on appeal because of perceived inequities.

EPA imposing a mass daily limit of 210 pounds. We like that there is an actual daily max (THOUGH THEY ARE ONLY TESTING 3X PER WEEK) so the rolling average EPA is imposing will not be abused. It is not that much higher than the max loading if they maintained the 3 mg/l and had a max flow rate. If they increased flow this number (daily max) should not be allowed to go up under anti-deg so getting it as low as possible is important.

The claim that Nitrogen Nov- March is not especially critical given there is often a fairly large phytoplankton bloom in early spring or late winter. This

Ex. 6 25 of 26

timing should be justified – are there papers on Narragansett Bay that address the plankton cycle?

In looking at the N numbers, Taunton WWTP is going to have a tough time meeting the permit limit. EPA must not build in some contingency should Taunton need to ratchet the concentrations down even more. There needs to be a stronger statement that the 3 mg/l is the target but the target is a moving one based on the true goal of reaching acceptable water quality in the receiving waters.

Why, in 2006, did the city go and drill holes in all its manhole covers? Was there any action taken by regulators for this step backward to a mini-combined sewer state? It is interesting that the max flow was in 2005 which was before the manhole drilling.

Sincerely,

Tim Watts Underpaid Executive Director Glooskap and the Frog 28 Linden St, #2 No Easton Ma 02356

Watte

Ex. 6 26 of 26