



Connecticut River Conservancy

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December 16, 2020

VIA ELECTRONIC FILING

Eurika Durr
Clerk of the Board
U.S. EPA Environmental Appeals Board
1200 Pennsylvania Avenue, NW (Mail Code 1103M)
Washington, D.C. 20460-0001

Subject: Springfield Water and Sewer Commission
Permit Number: MA0101613, NPDES Appeal No. 20-07

Dear Ms. Durr,

Please find the Connecticut River Conservancy's Amicus Brief in connection with *In re Springfield Water and Sewer Commission*, NPDES Appeal No. 20-07.

If you have any questions regarding this filing, please contact Andrea Donlon, River Steward, at adonlon@ctriver.org or (413)772-2020 x.205 or her cell at (413)325-4426.

Sincerely,

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BEFORE THE ENVIRONMENTAL APPEALS BOARD
ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

_____)
In the matter of:)
Springfield Water and Sewer Commission) NPDES Appeal No. 20-07
NPDES Permit No. MA0101613)
_____)

**AMICUS CURIAE OF THE
CONNECTICUT RIVER CONSERVANCY
IN SUPPORT OF THE PERMITTING AGENCIES**

On September 30, 2020, the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) co-issued a National Pollutant Discharge Elimination System (NPDES) Permit that allows the Springfield Regional Wastewater Treatment Facility owned by the Springfield Water and Sewer Commission (SWSC) and its associated combined sewer overflows (CSOs) to discharge into the Mill, Chicopee, and Connecticut Rivers. On October 30, 2020, the SWSC filed a Petition for Review (Petition) with the Environmental Appeals Board, citing numerous conditions for review, including conditions related to the total nitrogen limit, nitrogen optimization requirements, co-permittees, CSOs, and bypass of secondary treatment. Many of these issues related to the impact of the SWSC nitrogen discharge on the Connecticut and New York waters of Long Island Sound.

The Connecticut River Conservancy (CRC) hereby submits this Amicus Brief in support of EPA and MassDEP. This brief will not respond to each of the many issues that SWSC listed in their Petition, but will aim to demonstrate that the Petition was in most cases frivolous and review should be denied.

I. Statement of CRC's interest

The Connecticut River Watershed Council, Inc., doing business as the Connecticut River Conservancy (CRC), is a 501(c)(3) non-profit organization, incorporated under the laws of the Commonwealth of Massachusetts, with headquarters offices based in Greenfield, Massachusetts, and additional employees serving our programs in Connecticut, Vermont and New Hampshire. Founded in 1952, the Connecticut River Conservancy is the voice for the Connecticut River watershed, from source to sea. We collaborate with partners across four states to protect and advocate for our rivers and educate and engage

communities. We bring people together to prevent pollution, improve habitat, and promote enjoyment of the river and its tributary streams. Healthy rivers support healthy economies. CRC has approximately 1,000 household members and over 3,000 volunteers who live, work, and recreate in and around the Connecticut River and its tributaries. Our volunteer programs include river cleanups, water quality monitoring and sampling, pulling invasive aquatic plants, conducting community science, and nonprofit assistance. Since its founding, CRC has been active in its efforts to protect its members' interests related to wastewater pollution, including being active voice for the creation of the Springfield Water and Sewer Commission in 1996.

The ecological and cultural importance of the Connecticut River was recognized by the federal government many times including in the 1990's when the river was designated an American Heritage River, the watershed a National Fish and Wildlife Refuge, and most recently in 2012 as the first National Blueway by former Secretary of Interior Ken Salazar. Additionally, the River's estuary was designated a wetland of international importance by the RAMSAR Convention of 1975. The Connecticut River provides water-related recreational opportunities for swimming, boating (including rowing), diving, and fishing, as well as drawing both residents and tourists who enjoy walking, bicycling, hiking, camping, and nature observation along its banks.

CRC submitted comments on the two draft permits in letters dated February 12, 2018 and October 15, 2018. CRC staff attended the April 24, 2018 hearing on the permit held in Springfield, and attended the public outreach meeting held in Springfield at which EPA and MassDEP introduced their approach to setting nitrogen loading limits in NPDES permits for facilities in the Massachusetts part of the watershed.

II. Standard of Review

Pursuant to 40 C.F.R. § 124.19(a)(4)(i), a Petitioner must demonstrate that the permit decision either is based on a clearly erroneous finding of fact or conclusion of law, or involves a matter of policy or exercise of discretion that warrants review.

III. Summary of Argument

CRC believes that EPA did a thorough job explaining its finding of fact and conclusion of law in its Response to Comment document filed with the final permit on September 30, 2020 and its Response to

the Petition, filed on December 11, 2020. In this Amicus Brief, CRC aims to support those filings by indicating how EPA's policies or discretion do not warrant review in the case of this permit. SWSC has not met the bar for review of the final permit.

IV. Argument

A. The permit appropriately addresses long-standing and established water quality issues

i) Nitrogen

On February 9, 2015, the Connecticut Fund for the Environment (CFE)/Save the Sound filed a "Petition to Review and Amend or Reissue the Long Island Sound Nitrogen TMDL to Mandate Further Enforceable Nitrogen Reductions." This Petition, which CRC supported, claimed that 1) available modeling and monitoring predict that water quality standards in Long Island Sound are not being met, 2) the completion of the additional steps contemplated in the Long Island Sound TMDL will not lead to the attainment of water quality standards, and 3) emerging science demonstrates the need for even further reductions. On December 23, 2015, EPA Regions 1 and 2 responded with their "Long Island Sound Nitrogen Reduction Strategy" which was included as Exhibit N in EPA's December 11, 2020 Response in this proceeding. Essentially, EPA agreed that the full implementation of the 2000 TMDL will be insufficient to attain applicable water quality standards in Long Island Sound. CFE/Save the Sound indicated in a response back to EPA that it is holding the 2015 Petition in abeyance, pending progress on implementation of the Nitrogen Strategy.

On May 24, 2016, the CFE/Save the Sound filed another petition with the EPA Region 1 entitled, "Request to Modify, Revoke and Reissue, or Terminate NPDES Permits Nos. MA 010163 and MA 0103331 Issued to the Springfield Water and Sewer Commission." CRC, as the Connecticut River Watershed Council, signed on to the petition in support. This petition cited the 2015 Petition, and argued that SWSC's existing permits had been improperly administratively continued (since 2006 for the wastewater treatment plant permit and 2014 for the CSO permit) without public notice and participation, fail to incorporate a legally enforceable nitrogen limit, and that the combined sewer overflow (CSO) permit allows too many CSOs that cause or contribute to violations of water quality standards for nitrogen in Long Island Sound and bacteria in the Connecticut River.

CRC continues to support the 2015 and 2016 Save the Sound petitions, and feels that NPDES Permit No. MA0101613 issued to SWSC on September 30, 2020 is an initial step in the right direction. Indeed,

Springfield's two permits, merged together as one in the 2020 permit, have been expired since 2006 and 2014, and should have been re-issued years ago. The reasonable and achievable permit requirements put Springfield on a long overdue path to better characterize its nutrient discharges and cap the overall nitrogen load to prevent further backsliding. The 2020 permit establishes an enforceable limit on nitrogen loading that is achievable and based on the design flow of the facility. For the largest municipal discharge on the Connecticut River, this is not a high bar; further delays are not warranted.

ii.) Pathogens

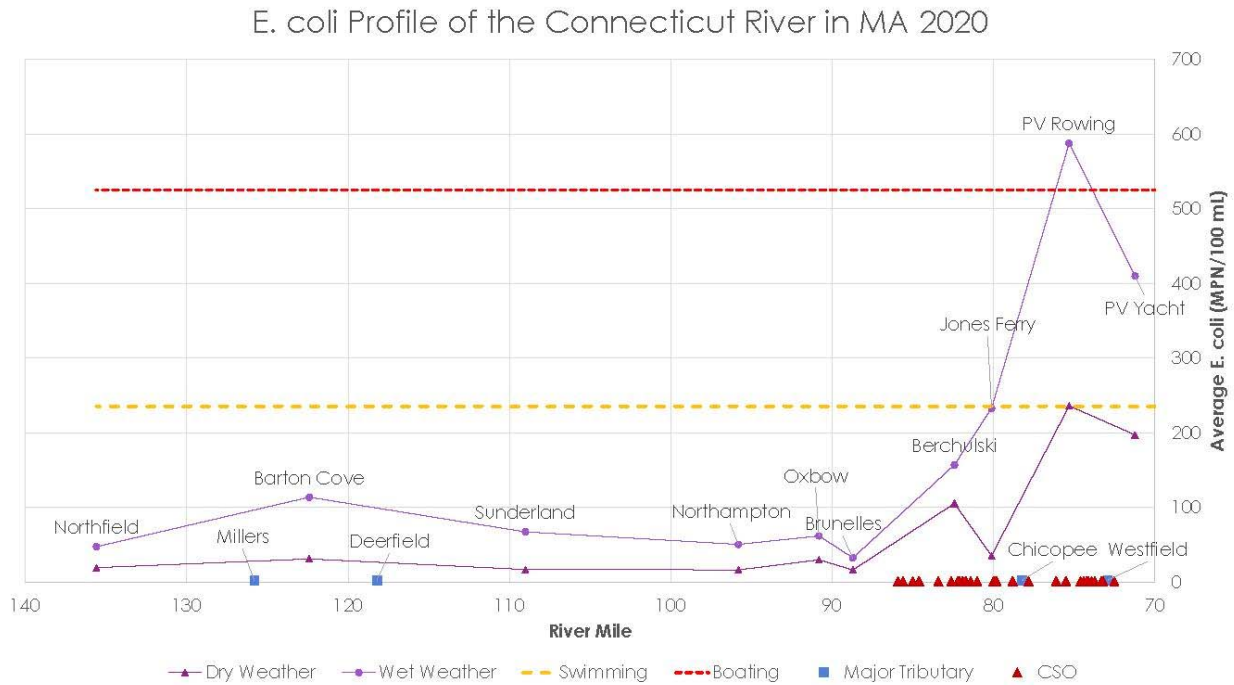
CRC runs a volunteer-based water quality monitoring program at recreation sites along the Connecticut River. Samples are collected every Thursday and analyzed in our water quality testing laboratory in Greenfield, MA. Our program has a Quality Assurance Project Plan (QAPP) that was reviewed and approved by MassDEP.

In 2020, our program was slightly modified due to the pandemic, but we tested at three access locations in areas directly affected by SWSC's wastewater treatment and CSO network: North Riverfront Park (called PV Rowing below) in Springfield, Pynchon Point Park in Agawam, and the Pioneer Valley Yacht Club in Longmeadow. All results for 2020 and earlier years can be found on our website:

<https://connecticutriver.us/site/content/sites-list> and results for 2020 are summarized below in Figure 1. The figure shows that water quality standards are generally met during dry and wet weather at sites upstream of CSOs in Massachusetts, but those lower sites are not clean for recreation within 48 hours of more than 0.5 inches of rainfall.

It is entirely appropriate for the permit to continue to place requirements and require new elements to attempt to reduce SWSC's contribution to a water quality impairment. It is appropriate for the permit to consider outfall 042 a CSO, to prohibit septage from being delivered to the combined system during wet weather, and to require proper notification of the public in cases of untreated sewage being discharged into the Connecticut River.

Figure 1. E. Coli results along the Connecticut River in MA at CRC's monitoring sites in 2020



iii. Phosphorus

SWSC asserts in Section N of its petition that EPA violated the public notice requirements of 40 C.F.R. § 124.10 by failing to provide any opportunity for comment on the new phosphorus requirements. CRC disagrees with the interpretation of this section of the regulations. Public notice is not required for every new element in the permit. If that were the case, no changes between the draft and the final permit would be allowed, and public comment would therefore be irrelevant.

CRC's comment letters submitted in February and October of 2018 for both draft versions of the permit consistently requested that the permit require testing of total phosphorus. Since that time, the Connecticut Agricultural Experiment Station Invasive Aquatic Plant Program (CAES IAPP) surveyed the Connecticut River from Agawam, MA to the Long Island Sound during 2019 and 2020. Results are posted on a website at

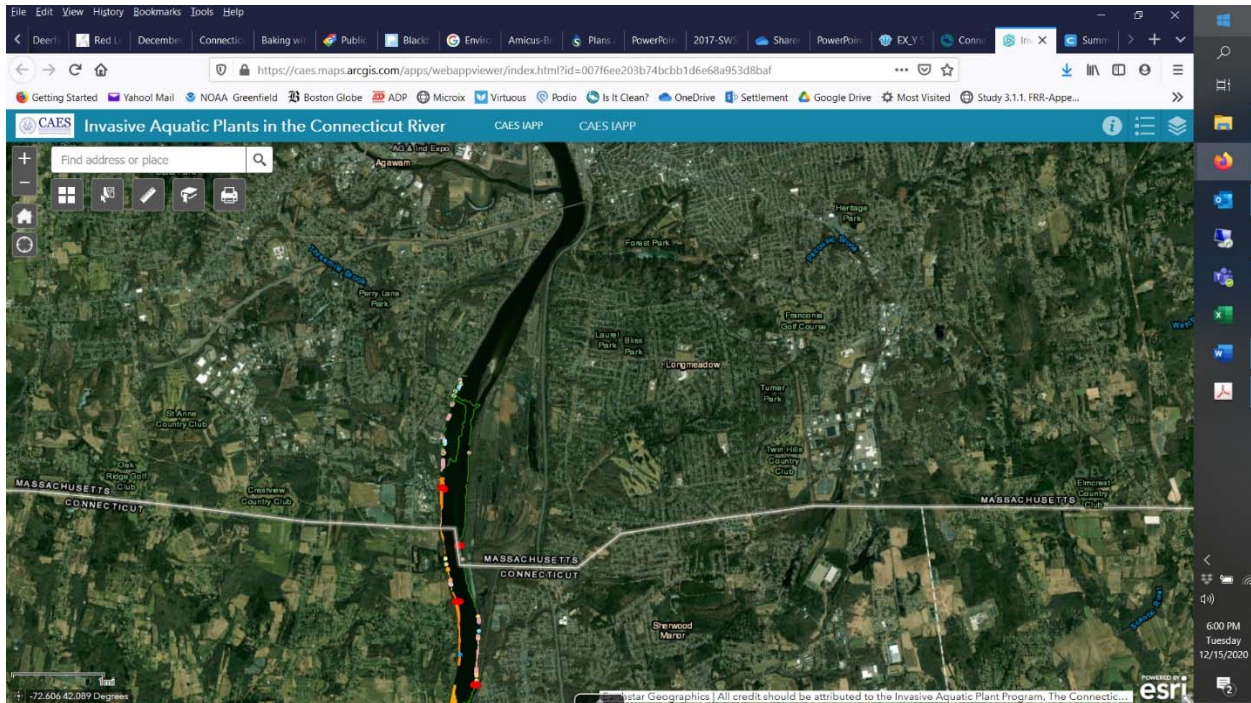
<https://caes.maps.arcgis.com/apps/webappviewer/index.html?id=007f6ee203b74bcbb1d6e68a953d8baf>.

A screen shot shown below in Figure 2 indicates that there are several invasive plant species present downstream of SWSC's facility (the survey only went as far north as a point in Agawam). It's more easily viewed online, but the colored dots and shapes indicate the presence of different invasive plant species.

In Figure 2, the Westfield River is shown entering the Connecticut River at the top of the screen; the SWSC wastewater treatment plant is just upstream of this confluence. The invasive plant species found in the survey that straddled the MA/CT border included hydrilla (*Hydrilla verticillata*), Eurasian watermilfoil (*Myriophyllum spicatum*), and curlyleaf pondweed (*Potamogeton crispus*).

According to CAES's "A Guide to Invasive Aquatic Plants of Connecticut",¹ invasive aquatic plants can block navigation channels and they can reduce aesthetic and recreational value of water bodies, affecting tourism and real estate values. It is important to better understand the potential sources of nutrients that support the growth of aquatic invasive plants. And while it is true that each permit is treated independently by EPA, it does seem relevant that EPA has required other permittees in the Connecticut River watershed to also measure their effluent for total phosphorus. For example, South Hadley's NPDES permit (MA0100455) issued in 2012 requires monthly TP testing, Easthampton's NPDES permit (MA0101478) issued in 2013 requires monthly TP testing, and Westfield's requires NPDES permit (MA0101800) issued in 2009 requires *weekly* TP testing. This requirement is hardly singling Springfield out for something outside of the norm.

Figure 2. Screen shot of CAES IAPP invasive plant survey of the Connecticut River



¹ Online at <https://portal.ct.gov/-/media/CAES/Invasive-Aquatic-Plant-Program/Plant-Information/AquaticsGuidepdf.pdf>

B. The Permit gives more than adequate time frames for compliance

i. Public notification plan

In section E of SWSC's Petition, SWSC objects to being given only one year to update and then another year to implement Springfield's public notification plan. From CRC's standpoint, this is already an overly generous time frame. There are real water quality violations happening every year directly at river access locations such as the North Riverfront Park where the Pioneer Valley Rowing Club operates (see Figure 1), and there is no ongoing notification happening from SWSC about CSO discharges other than signage. Their existing CSO permit from 2009 in section I(A)3(d) already required an update to a public notification plan that was supposed to include in requirement (iv) quarterly postings on SWSC's website regarding estimates for CSO activations and volumes and (v) annual press releases and notification to "interested individuals and groups" on the progress of CSO abatement work. As far as CRC can tell, these requirements have never been implemented. At the public hearing, CRC asked the SWSC Executive Director about the existence of a public notification plan and did not receive an answer.

CRC was able to find one annual CSO Report from 2017 on the SWSC website.² Section 9 is titled, "Update of the Public Notification Program." This section states that one of the goals of the CSO notification program is to "inform the public when a CSO has occurred and warn against contact with the receiving waters." However, according to the list of activities in this section, none of them involved informing the public about when a CSO has occurred.

SWSC has had since 2009 to develop and implement a public notification plan. Instead of providing meaningful updates to an existing plan, they have chosen to be out of compliance and are now complaining about a requirement that has been in place for more than a decade.

ii. Collection system mapping

In Section J of their Petition, the SWSC objects to EPA's requirement that they complete mapping within two-and-a-half years from the permit issuance, instead requesting three years. The City of Springfield has been filing annual MS4 compliance reports to the EPA since the year 2003, and report number 15

² See https://waterandsewer.org/wp-content/uploads/2020/02/2017-SWSC-Annual-CSO-and-CMOM-Report_part-1.pdf.

covering the period of May 2017 to March 2018³ indicates in BMP #3-1 that there is an existing sewer and storm system map that is updated. It is unclear how SWSC would need three years to complete a project that has been ongoing for over ten years.

iii. Switching from fecal coliform to E. coli testing

In Section M of their Petition, the SWSC objects to the 12-month time frame to switch from a fecal coliform bacteria limit to an E. coli bacteria limit, saying it needs 18 months to review plant performance and adjust disinfection levels. The Massachusetts Surface Water Quality Standards (314 CMR 4.0) have been based on E. coli rather than fecal coliform since 2006. All NPDES permits renewed since even before that date have had limits for E. coli. For example, Holyoke's permit (MA0101630) was updated in 2009, and they were given 12 months to convert from fecal coliform to E. coli.⁴ Similarly, Northampton's NPDES permit (MA0101818) issued in 2008 gave 12 months to convert to E. coli.⁵ Twelve months compliance period has been par for the course for the last 15 years, with Springfield being the only municipal permit in the MA part of the watershed still left to update. SWSC has essentially known this change was coming for the last 15 years. And, more specifically, with the first draft permit revision at issue in this case posted for public comment November 15, 2017, SWSC known for three years that these requirements were going to be in the new permit. Giving them an extra year is beyond generous. To say that EPA "clearly erred" is one example of how frivolous this appeal is.

V. Conclusion

On December 9, 2020, the National Fish and Wildlife Fund (NFWF) announced that the SWSC had received \$290,385 in Long Island Sound Futures Fund grant funds, which is a partnership between the US EPA, the U.S. Fish and Wildlife Service, and NFWF.⁶ The project is titled, "Reducing Nitrogen into Long Island Sound at the Springfield Regional Wastewater Treatment Facility." SWSC will be matching those funds with \$168,000. CRC submitted a letter of support for SWSC's grant application because it is directed at solutions. SWSC has partnered on other projects, such as supplying matching funds to the U.S. Geological Survey and MassDEP for a new gaging station and nutrient monitoring in Northfield MA. We encourage SWSC to continue to work with the agencies to help supply good science, both regionally

³ See <https://www3.epa.gov/region1/npdes/stormwater/assets/pdfs/ma/reports/2018/Springfield18.pdf>

⁴ See footnote 6 on page 5 of: <https://www3.epa.gov/region1/npdes/permits/2009/finalma0101630permit.pdf>

⁵ See footnote 6 on page 5 of: <https://www3.epa.gov/region1/npdes/permits/2008/finalma0101818permit.pdf>

⁶ See <https://www.nfwf.org/media-center/press-releases/38-million-grants-awarded-improve-health-long-island-sound>

and at their own facility by submitting effluent testing results as required in the 2020 permit. SWSC is at its most effective as a leader in moving forward fixing problems, rather than delaying long overdue initial steps to solving local and regional water quality impairments. SWSC can do better than using limited public funding to hire lawyers to file burdensome appeals. CRC recommends that the EAB dismiss SWSC's Petition.

Dated: December 16, 2020

Respectfully submitted,

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