

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF APPEALS AND DISPUTE RESOLUTION

In re Easterly Wastewater Treatment Facility)	March 23, 2026
Groundwater Discharge Permit No. 1018-0)	Docket No.

**Notice of Claim for an Adjudicatory Appeal of
The Easterly Wastewater Treatment Facility Groundwater Discharge Permit
And Request for Stay Pending Appeal**

The Association to Preserve Cape Cod (“APCC”) and Coonamesett River Trust (“CRT”) together with a ten citizens group (collectively “Petitioners”) submit this Notice of Claim to appeal the final Groundwater Discharge Permit (“Final Permit”) issued by the Department of Environmental Protection (“MassDEP” or the “Department”) on February 19, 2026. Copies of the Final Permit, as well as the Adjudicatory Hearing Fee Transmittal Form, and check for the filing fee are attached as **Exhibit A**.

In accordance with 310 CMR 1.01, the Petitioners state their Notice of Claim as follows:

1. Adjudicatory Appeal of Groundwater Discharge Permit

Application/Permit No. 1018-0.

2. Name and Address of Applicant

Falmouth Southerly, LLC (“Applicant”)
c/o David Calhoun
25 Recreation Drive, Suite 204
Hingham, MA 02043

Project Address

The Easterly WWTF
375 and 0 Sandwich Road
Falmouth, MA

3. Parties Requesting Adjudicatory Appeal

Association to Preserve Cape Cod
482 Main Street
Dennis, MA 02638

Coonamesett River Trust
39 Marvin Circle
Falmouth, MA 02540

Ten Citizen Group

Thomas Zine
36 Captain Bohnenberger Lane
East Falmouth, MA 02536

Karen Scully
45 Green Acres Road
East Falmouth, MA 02536

Joseph Martino
51 Green Acres Road
East Falmouth, MA 02536

Christopher Scully
45 Green Acres Road
East Falmouth, MA 02536

Marjorie Parmenter
36 Meredith Drive
East Falmouth 02536

Ellen Cooper
102 Meredith Drive
East Falmouth, MA 02536

Christopher Neill
39 Marvin Circle
Falmouth, MA 02540

Peter Cooper
102 Meredith Drive
East Falmouth, MA 02536

Linda A. Deegan
39 Marvin Circle
Falmouth, MA 02540

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East Falmouth, MA 02536

Wendi Buesseler
158 Lakeview Ave
Falmouth, MA 02540

Joseph Lemay
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East Falmouth, MA 02536

William Scully
45 Green Acres Road
East Falmouth, MA 02536

4. Counsel for Petitioners

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5. Aggrieved Person/Prior Participation

In accordance with 310 CMR 1.01(6)(b) and 314 CMR 2.08, Petitioners state they are aggrieved and substantially and specifically affected by the issuance of the Final Permit. If not

remedied, errors and omissions in the Final Permit would cause damage to the environment in the Town of Falmouth and harm Petitioners' properties. Petitioners participated in the administrative process by submitting written comments on the draft permit, copies of which are attached as **Exhibit B**. Those public comments notified MassDEP that the proposed discharge into an impaired watershed would exceed the permissible nutrient limits under the Total Maximum Daily Load ("TMDL") for Great Pond by permitting a new discharge of 346 kg/yr N, in violation of Massachusetts surface water quality standards and groundwater discharge regulations. Those public comments also notified MassDEP and the Applicant that review of the Project under the Massachusetts Environmental Policy Act, G.L. c. 30, §§ 61-62L ("MEPA") – which has not taken place – was required before MassDEP could lawfully proceed to issue any permit on the Project.

6. Summary of Facts

Applicant has stipulated to the following facts:

- The proposed project would be the largest residential development in Falmouth's history;
- The proposed project is located in the lower Coonamessett sub-watershed within the Great Pond embayment, a highly impaired watershed with a defined TMDL for nitrogen;
- The Town of Falmouth has a watershed plan approved by MassDEP for Great Pond called the Great Pond Targeted Watershed Management Plan ("TWMP"), which limits the amount of nitrogen that can be discharged into the Great Pond Watershed;
- The Town and State have invested over \$8 million dollars to improve the Coonamessett River, which flows from Coonamessett Pond into the upper end of the Great Pond estuary;
- The Applicant agreed it shall employ mitigative measures to achieve net-zero nitrogen load from the proposed project to the Great Pond Watershed.

In addition to these stipulated facts, several others are also undisputed, or indisputable, as follows. The wastewater disposal site is within the watershed of Great Pond and the Coonamessett River, a nitrogen impaired estuary. Section 303(d) of the federal Clean Water Act

requires each state to maintain and report to the United States Environmental Protection Agency an “Integrated List of Waters” which identifies “waterbodies that are not expected to meet surface water quality.” *See* 33 U.S.C. § 1313(d) and associated guidance documents. The Great Pond Estuary in Falmouth has been on the § 303(d) list since 2002. The Town of Falmouth alone is spending over \$50 million dollars on sewer expansions to protect Great Pond.

Since 2006, the Great Pond Watershed has had a DEP-issued TMDL for nitrogen, which limits the maximum amount of nitrogen that the Great Pond, as an impaired water body can receive without exceeding water quality standards. In order to attain or maintain the nitrogen limit set by the TMDL, the nitrogen load to Great Pond must be reduced by 12,154 kilograms per year based on the existing discharges.

New projects requiring groundwater discharge permits located in impaired watersheds on the § 303d list cannot increase nutrient pollution loads. Most, if not all of Cape Cod’s nitrogen TMDLs are based on nitrogen reduction targets in the UMass Dartmouth School for Marine Science and Technology (“SMAST”) Technical Reports. The establishment of TMDLs based on the SMAST reports is predicated on the essential premise that new development will not be permitted to increase nitrogen loading. For that reason, new development in highly impaired watersheds like Great Pond must offset existing nutrient pollution to ensure no net increase to the § 303d listed receiving water. By DEP’s own regulations, the Easterly project requires any new nitrogen discharge allowed by a groundwater discharge permit to be fully offset. The Final Permit fails this fundamental test because there are no quantified, enforceable offsets required by Applicant to make the new discharge net-zero nitrogen.

According to the Applicant, with 445 bedrooms in 300 apartments, the design flow of the proposed project would be just below fifty thousand gallons per day (445 bdrm. * 110

GPD/bdrm. = 48,950 GPD). But that calculation omits the 10,000 square foot clubhouse, which would require more than a thousand fifty gallons of additional flow capacity to service the “onsite management/leasing office, lounge areas, work-from-home spaces, fitness center, mail center, package center, pool and other amenity spaces”. Applicant’s own initial flow calculation was 51,605 GPD. (3/27/2024 Proposed Scope of Work submitted by Geohydrocycle to MassDEP, p. 1)

The proposed wastewater system proposes a tertiary treatment using a Membrane BioReactor (“MBR”) to remove nitrogen from effluent, similar to the Town’s municipal wastewater treatment facility. Applicant’s design engineer represented this MBR treatment to be the “best available technology. . . .considered by the industry to be the most stringent limit[] possible to achieve the maximum possible treatment and nitrogen removal”. He also certified the engineering on which the application was granted, representing that “The overall effect of this approach is to reduce the Easterly’s discharge to net-zero for nitrogen. . . thereby improving (reducing) the overall TMDL in the watershed.” (1/16/26 Ltr. Fuss & O’Neill, pp. 1-2) But this assertion is not borne out in the Final Permit, which does not incorporate no net nitrogen into an enforceable condition or required mitigation, as pledged by Applicant and required by law.

The Final Permit relies on a Hydrogeological Evaluation Report, approved with conditions by MassDEP on May 15, 2025, which acknowledges the site lies within the impaired Great Pond Watershed that is subject to a TMDL for nitrogen. The Department issued a technical deficiency letter dated December 13, 2024 before approving the hydrogeologic report because Applicant had not addressed “how the additional nitrogen load generated from the facility would . . . maintain the [TMDL] for total nitrogen”. (5/15/2025 Ltr. A. Osei, p. 2)

The Final Permit does not exempt compliance with other permits, including local approvals required by the Town under local regulations: “The issuance of this permit does not exempt the Permittee from complying with all other applicable laws, regulations, approvals, and permit requirements from various local, state, and federal agencies that may have jurisdiction. (2/19/2026 Final Permit, p. 1) Similarly, the plan approval remains subject to further approvals by other permitting authorities: “This plan approval is subject to the approval of any other local, State, or Federal authority that may have jurisdiction.” (Id. Plan Approval, p. 5)

MassDEP’s approval relied on the signed certification of Applicant’s design engineer, , who certified that the treatment facility will meet the effluent discharge limits specified in the Final Permit. (Id. p. 3) Those discharge limits are:

- Up to 49,950 GPD flow
- 10 mg/L maximum daily nitrogen (NN and TN)
- 5 mg/L annual average nitrogen (NN and TN)
- Maximum 346 kg/yr cumulative annual nitrogen load
- “Best efforts” to meet 207 kg/yr cumulative annual nitrogen load.

(2/19/26 Individual GWDP, Special Conditions A.1. & a., p. 2)

There would be two downgradient monitoring wells tested quarterly for the first five years, after which the frequency could be reduced at the Department’s discretion. (Id. pp. 4-5) The Final Permit is conditioned such that the “discharge of the effluent shall not result in any demonstrable adverse effect on the groundwater or violate any water quality standards”. (Id. p. 3) The sole remedy for such violations specified in the Final Permit would be to “modify, supplement or replace the permitted treatment process”. (Id. p. 10, ¶ 11)

That new nitrogen load, as contemplated by the Final Permit, violates the law, and the Final Permit itself is therefore unlawful. Applicable law forbids the approval of state discharge permits for new projects located in impaired watersheds on the § 303(d) list that will increase already excessive nutrient pollution loads. Because the terms and conditions of the Final Permit clearly violate applicable environmental law and controlling regulatory standards, and purport to authorize the development and operation of a Project that will not reliably avoid worsening the existing nitrogen impairment of the Great Pond, the Final Permit should be annulled.

7. Statutory and Regulatory Background

- A. The Massachusetts Clean Water Act regulates water pollution to ensure clean water throughout the Commonwealth. G.L. c. 21, §§ 26-53 (“CWA”). The CWA grants MassDEP the duty to preserve the quality of water resources in the Commonwealth, and directs MassDEP to take all action necessary to secure to the Commonwealth the benefits of the law to protect public health. G.L. c. 21, § 27.
- B. The Massachusetts Groundwater Discharge Permit (“GDP”) regulations, issued under the authority of the CWA, prohibit MassDEP from issuing a discharge permit that violates the Massachusetts Surface Water Quality Standards (“SWQS”): “shall not issue a permit pursuant to 314 CMR 5.00 when the discharge will cause or contribute to a violation of 314 CMR 4.00: Massachusetts Surface Water Quality Standards”. 314 CMR 5.06(1). Those regulations also require discharge permits to contain limits that “are adequate to protect surface waters for their existing and designated uses and to assure the attainment and maintenance of the [SWQS].” 314 CMR 5.10(3) In addition, MassDEP “shall consider natural background conditions and any [TMDLs] established by [MassDEP], shall protect existing uses of hydrologically connected downgradient ground waters and surface waters,

and shall not interfere with the maintenance and attainment of beneficial uses in hydrologically connected downgradient waters.” Id.

- C. The Massachusetts Surface Water Quality Standards require MassDEP to “limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained.” 314 CMR 4.03(1)(a). The SWQS make clear “[d]ischarges shall be limited or prohibited to protect existing uses and not interfere with the attainment of designated uses in downstream and adjacent segments. [MassDEP] will provide a reasonable margin of safety to account for any lack of knowledge concerning the relationship between the pollutants being discharged and their impact on water quality.” Id. In order to protect existing uses, SWQS state that “[i]n all cases existing uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.” 314 CMR 4.04(1).
- D. SWQS regulations authorize discharges only where the applicant demonstrates that “[t]he discharge will not impair existing water uses and will not result in a level of water quality less than that specified for the Class.” 314 CMR 4.04(5)(a)(4). Those regulations also require that “All surface waters shall be free from pollutants in concentrations or combinations that settle to form objectionable deposits; float as debris, scum or other matter to form nuisances; produce objectionable odor, color, taste or turbidity; or produce undesirable or nuisance species of aquatic life.” 314 CMR 4.05(5)(a) The regulations further prohibit discharges that would cause surface waters to exceed their carrying capacity, by specifying that “...all surface waters shall be free from nutrients in concentrations that would cause or contribute to impairment of existing or designated uses and shall not exceed the site-specific criteria developed in a TMDL....” 314 CMR 4.05 (5)(c).

- E. The GDP and SWQS regulations, as well as the regulations promulgated by MassDEP under the Wetlands Protection Act, G.L. c. 131, § 40 (“WPA”), all define discharges into “Waters of the Commonwealth” and “Surface Waters” to include “wetlands.” 314 CMR 5.02 (GDP); 314 CMR 4.02 (SWQS); 310 CMR 10.04 (WPA). All three overlapping regulations adopted under authority of the CWA regulate the discharge permitted in the Final Permit.
- F. MEPA requires meaningful public review of environmental impacts for proposed projects like this one that involve Agency Action. 301 CMR 1.01(1)(a). Agency Action has been defined to include comprehensive permits issued by the Housing Appeals Committee, like the one issued to the Applicant.¹ MEPA review was required before the Final Permit was issued, which was among Petitioners’ comments. MassDEP misinterpreted MEPA regulations, and by issuing the Final Permit without MEPA review exceeded the legal limits of the Department’s own authority.

8. Summary of Errors and Omissions in MassDEP’s Final Permit

In issuing the Final Permit, MassDEP failed to resolve issues raised by Petitioners’ public comments, violated its own regulations and state law, disregarded precedent in comparable circumstances, and ultimately erred by approving the Final Permit that will further degrade already impaired § 303d listed waters protected by a TMDL. There are a number of deficiencies in the Final Permit, each and all of which suffice to require its annulment.

First, as a threshold matter, MEPA review was required before application was considered and the Final Permit was issued. MassDEP erred in determining otherwise.

¹ *Falmouth Southerly, LLC v. Falmouth ZBA*, No. 2024-07, Decision on Stipulation and Entry of Judgment (HAC Apr. 19, 2025), which is referenced in the Final Permit, p. 5.

Second, the Final Permit fails to respect and account for the legal limits on discharges to a § 303(d) listed water body. It imposes no specifically quantified, environmentally adequate, and functionally enforceable offsets that are the responsibility of the permittee to implement, in order to ensure that the new discharge will entail a net-zero nitrogen contribution to Great Pond. Instead, the Final Permit relies on a vague non-numerical standard of “best efforts” to lower nitrogen without defining what constitutes a best effort, and notwithstanding the foreseeable prospect that best efforts may not suffice to accomplish a non-negotiable, legally mandated result. The Final Permit lacks an adequate enforcement mechanism to ensure the Applicant achieves the no-net-nitrogen mandate it agreed to that the regulations require. Without enforceability, the Final Permit violates MassDEP’s own regulations. It also fails to protect hydrologically connected surface waters, and will cause or contribute to the further impairment of such surface waters.

The Final Permit allows a significant new, additional nitrogen discharge to an impaired estuary that already has too much nitrogen. The addition of 346 kg/yr N authorized by the Final Permit would result in further deterioration of Great Pond, which already exceeds the TMDL by 12,154 kg/yr, in violation the anti-degradation provisions of the SWQS. Because the Final Permit improperly authorizes a discharge of additional nitrogen load to Great Pond without offsets to render it net-zero, it conflicts with the DEP-issued TMDL for Great Pond. Any net increase in nitrogen allowed by the Final Permit would exacerbate an ongoing violation of the state water quality standards. Because the Final Permit does not conform to these mandatory regulations, it is unlawful and must be annulled.

Lastly, the Final Permit fails to incorporate an adequate margin of safety. An appropriate safety margin is of critical importance for this Project, given the foreseeable impacts that

anticipated warming waters due to climate change will have on the water quality of Great Pond. Without an adequate safety margin, MassDEP has failed to ensure that the terms and conditions of the Final Permit, in combination with other factors, will prevent further damage to the environment.

A. The Final Permit was subject to MEPA review and should not have been issued before that mandatory, antecedent environmental review was completed.

MEPA review was required before the Final Permit was issued, which was among Petitioners' comments. But in response to the application query "Does this project require a filing under 301 CMR 11.00, the Massachusetts Environmental Policy Act?", Applicant checked the box "No". (8/27/2025 Application, p. 3) MassDEP's response to public comments claimed the MEPA wastewater threshold was not triggered because, the Department claims, "areas established to protect a nitrogen sensitive embayment" do not include § 303d listed waters subject to a TMDL for nitrogen. (Final Permit, p. 4) The Department misinterpreted MEPA regulations, and by issuing the Final Permit (an Agency Action) without MEPA review, exceeded the legal limits of the Department's own authority.

This proposed project triggers MEPA review in at least two ways, even apart from the wastewater section cited by the Department. First, the Applicant's calculation of flow understated the actual design flow for the proposed project. With 445 bedrooms in 300 apartments (48,950 GPD), plus a 10,000 square foot clubhouse with offices, lounges, fitness center, pool and other amenities, would require more than fifty thousand gallons of flow capacity. Applicant's own initial flow calculation was 51,605 GPD in the SOW for this permit.

Under MEPA, any new discharge of "50,000 or more gpd of sewage within any other area" requires an Environmental Notification Form ("ENF"). 301 CMR 11.03(b)(4)(c)(ii).

Because the design flow exceeds fifty thousand gallons per day, an ENF should have been filed and MEPA review conducted before any Final Permit could be issued.

Second, and more importantly, the site lies within a mile (less than a quarter mile) from a mapped Environmental Justice Population.² As such, the project would be subject to a mandatory Environmental Impact Report (“EIR”) under MEPA, regardless of the wastewater threshold. 301 CMR 11.07(7)(b) (“[T]he Secretary shall require an EIR for any Project that is located within a Designated Geographic Area around an Environmental Justice Population.”). The Department’s Agency Action without the required ENF and/or EIR render the Final Permit invalid. Accordingly, it must be annulled.

Because these additional environmental impact reviews should have been conducted before the Final Permit, that permit must be stayed pending appeal, at least until the MEPA process has been completed, in accordance with 314 CMR 2.08(2) and 301 CMR 1.01(6)(h) (“Upon notice or a motion by any party, the Department or the Presiding Officer shall stay administratively an appeal when an applicant is required to comply with the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H.”).

B. The Final Permit ignores legal limits on discharges to a § 303d listed watershed with a TMDL because the allowed effluent limit was the same as if there were no TMDL.

Applicant disclosed to MassDEP that the proposed discharge would be to a nitrogen sensitive area within a watershed with a TMDL. On the Application, Applicant responded “Yes” to these questions:

- The discharge would be to a “sole source aquifer”;

² See, <https://mass-coeea.maps.arcgis.com/apps/webappviewer/index.html?id=1d6f63e7762a48e5930de84ed4849212>

- The discharge would be to a “nitrogen-sensitive area as designated by the Department in accordance with 310 CMR 15.215”; and
- The discharge would be to an “area the Department has determined based on a [TMDL] . . . that more stringent effluent limits . . . are required to achieve or maintain compliance with [SWQS], 314 CMR 4.00”. (8/27/2025 Application, p. 4)

Despite the discharge to a sole source aquifer, in a nitrogen sensitive area, with a TMDL -- facts conceded by the Applicant -- MassDEP did nothing in the Final Permit to protect the receiving watershed that is already impaired from additional excess nitrogen. Because MassDEP did not limit the discharge, or impose load limits, or require offsets for net-zero nitrogen, as required by law, the Final Permit is invalid and should be annulled.

C. The Final Permit fails to protect hydrologically connected Surface Waters, and the discharge would cause or contribute to the impairment of Surface Waters.

Massachusetts Groundwater Discharge Permit Regulations require permits to limit discharges to protect downgradient Surface Waters. Under those regulations, all groundwater discharge permits are legally required to impose nutrient loading limits to protect surface waters in accordance with the SWQS. 314 CMR 5.10(3). Those permit limitations must protect existing uses of hydrologically connected groundwater and surface water downgradient of the proposed discharge, and cannot lawfully interfere with the attainment and maintenance of beneficial uses in downstream waters. Id.

The hydrologic connection between groundwater and surface waters on Cape Cod generally, and between the Project site and Great Pond in particular, is direct and substantial. The TMDL for Great Pond Estuary determined the watershed to be significantly impaired from excessive nitrogen, which causes harmful algae blooms that degrades Surface Water. Based on this established scientific fact, the TMDL requires a reduction in existing wastewater nitrogen

(12,154 kg/yr) as necessary to prevent further degradation of those Surface Waters. But the Final Permit permits a significant new source of nitrogen (346 kg/yr) to the watershed with no offsets, discharge restrictions, or loading limits to mitigate the new nutrient load. As a result, the Final Permit would cause or contribute to a violation of water quality standards in violation of the SWQS and the CWA. Because the Final Permit authorizes a discharge that would cause or contribute to the impairment of a § 303(d) listed water body, in violation of state regulations, it must be annulled.

D. The Final Permit fails to include an adequate margin of safety.

MassDEP failed to consider contemporary science on how warming waters due to climate change will impact transport of nutrients through Surface Waters. Nitrogen discharged as authorized by the Final Permit would migrate quickly to Great Pond. Moreover, the TMDL was based on data from two decades ago. Since then the pollutant load and impacts of from excessive nutrients has only worsened. Today, it is widely understood that nitrogen causes eutrophication. That lowers dissolved oxygen and increases the growth of phytoplankton and macroalgae and harmful algae blooms such as cyanobacteria, a leading cause of the impairment of Surface Waters throughout the Commonwealth.

Instead of providing an adequate margin of safety as the law requires, the Final Permit suggests some sporadic testing from monitoring wells. But testing for nitrogen would be required just quarterly, and even that could be reduced. As a result, no further testing may be required in the future to monitor excessive nutrient loading under the terms of the Final Permit. Even once excessive nitrogen has been detected, the only remedy available under the Final Permit does too little too late.

Should the permitted effluent authorized by the Final Permit impair groundwater quality, the only possible remedy is that “permittee may be obligated to modify, supplement or replace the permitted treatment process”. (Final Permit, p. 10, ¶ D.11) Nothing in the Final Permit would authorize a reduction in the volume of discharge, impose nutrient limits, or trigger required offsets. Such a tepid condition does not provide any margin of safety to ensure that the discharge does not impair the ability of the groundwater to act as an actual or potential source of potable water.

The Final Permit lacks any enforcement mechanism to hold Applicant to its no net nitrogen pledge and as required by law. As currently conditioned, the Final Permit would not achieve or maintain the nitrogen limits imposed by the TMDL. Instead, there would be a net increase in nitrogen discharged into the impaired river and watershed. That makes the Final Permit unlawful, so it must be annulled.

MassDEP’s own regulations require groundwater discharge permits to include an adequate margin of safety. The intent of the regulations is to protect impaired waters from becoming more polluted. Because the Final Permit allows an additional, excessive discharge to an already impaired, § 303d listed waterbody, it undermines purpose of the CWA and SWQS and GDP regulations enacted to prevent further damage to the environment.

9. The Final Permit Will Cause Damage to the Environment and Harm Petitioners’ Property

If permitted, the proposed discharge into an impaired watershed with a TMDL would violate Massachusetts surface water quality standards and groundwater discharge regulations, and cause or contribute to a violation of those regulatory standards.

10. Request for Stay Pending Appeal

In accordance with 301 CMR 1.01(6)(h) and 314 CMR 2.08(2), Petitioners request a stay of the Final Permit such that it does not become effective while this appeal remains pending. Given that the Final Permit should have been subject to a mandatory EIR under MEPA before it was issued, a stay of the permit pending appeal is mandatory while the Applicant completes the additional environmental review required by law that should have been conducted already.³ In addition to the mandatory stay for MEPA compliance, the appeal should be stayed on the merits due to the multiple, flagrant violations of applicable regulations in the Final Permit. Petitioners further request an opportunity to be heard on this issue and to submit briefing should the Presiding Officer decline to impose a stay on the basis of this Petition alone.

11. Relief Requested

Wherefore, Petitioners request the following relief:

- A. Stay the effective date of the Final Permit pending this appeal (either immediately, upon this Petition, or promptly after the parties' full briefing and a hearing on the same);
- B. Vacate the Final Permit upon adjudication of this appeal;
- C. Remand the matter to MassDEP for further proceedings in accordance with applicable law and regulations; and
- D. Order such other relief as may be necessary and just.

³ 301 CMR 1.01(6)(h) ("Upon notice or a motion by any party, the Department or the Presiding Officer shall stay administratively an appeal when an applicant is required to comply with the Massachusetts Environmental Policy Act, M.G.L. c. 30, §§ 61 through 62H."); 301 CMR 11.07(7)(b) ("[T]he Secretary shall require an EIR for any Project that is located within a Designated Geographic Area around an Environmental Justice Population.>").

PETITIONERS

By their attorneys,

/s/ Dennis A. Murphy

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March 23, 2026

Certificate of Service

I hereby certify that a true copy of the foregoing document was served by certified mail on March 23, 2026 upon the following:

Case Administrator
Office of Appeals and Dispute Resolution
Massachusetts Department of Environmental Protection
One Winter Street, 2nd Floor
Boston, MA 02108

MassDEP - Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

Falmouth Southerly, LLC
c/o David Calhoun
25 Recreation Drive, Suite 204
Hingham, MA 02043

/s/ Daniel C. Hill

Daniel C. Hill

EXHIBIT A
(Final Permit, Adjudicatory Hearing Fee Transmittal Form)



Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone:** 508-946-2700

Maura T. Healey

Governor

Kim Driscoll

Lieutenant Governor

Rebecca Tepper

Secretary

Bonnie Heiple

Commissioner

February 19, 2026

Falmouth Southerly, LLC
Attn: David Calhoun
Managing Director - Acquisitions
25 Recreation Drive, Suite 204
Hingham, MA 02043

RE: **FALMOUTH – BWR**
The Easterly WWTF
375 and 0 Sandwich Road
Ground Water Discharge Permit #1018-0
25-WP79-0137-APP
FINAL PERMIT

Dear David Calhoun:

In response to your application to obtain a permit to discharge into the ground treated effluent from the Wastewater Treatment Facility located at 375 and 0 Sandwich Road, Falmouth and after due public notice, the Massachusetts Department of Environmental Protection (“MassDEP” or “the Department”) hereby issues the attached final permit.

Since comments were received by the Department during the public comment period, in accordance with 314 CMR 2.08, the permit becomes effective in 30 days.

The issuance of this permit does not exempt the Permittee from complying with all other applicable laws, regulations, approvals, and permit requirements from various local, state, and federal agencies that may have jurisdiction.

Parties aggrieved by the issuance of this permit are hereby advised of their right to request an Adjudicatory Hearing under the provision of Chapter 30A of the Massachusetts General Laws and 310 CMR 1.00, Rules for the Conduct of Adjudicatory Proceedings. Unless the person requesting the adjudicatory hearing is granted a stay of the terms and conditions of the permit, the permit shall remain fully effective.

This information is available in alternate format. Please contact MassDEP at 617-292-5500.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

If you should have any questions on any information provided with this letter, please contact Aaron Raposo at Aaron.Raposo@mass.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Harrington", with a long horizontal stroke extending to the right.

Brian D. Harrington
Deputy Regional Director
Bureau of Water Resource-SERO

ECC:

Falmouth Board of Health

Scott McGann - scott.mcgann@falmouthma.gov

Fuss & O'Neill Inc.

Raymond Willis, P.E. - raymond.willis@fando.com

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Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | Phone: 508-946-2700

Maura T. Healey

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Kim Driscoll

Lieutenant Governor

Rebecca Tepper

Secretary

Bonnie Heiple

Commissioner

Groundwater Discharge Permit #1018-0 The Easterly Wastewater Treatment Facility

Response to Comments

MassDEP issued a draft groundwater discharge permit (#1018-0) to Falmouth Southerly, LLC (the “Permittee”) for The Easterly Wastewater Treatment Facility (the “Facility”) on November 7, 2025. A public notice was published in the Environmental Monitor on November 26, 2025. MassDEP received comments on the draft permit from the Town of Falmouth and several additional parties. Many of the comments received were similar, therefore the comments are addressed by topic rather than individually. This document provides background on the permit and addresses the specific comments received.

After evaluating the comments received, MassDEP has determined that some adjustments will be made to the final Groundwater Discharge Permit for clarification purposes and will issue the permit.

INTRODUCTION:

The Easterly development will be served by a wastewater treatment facility regulated under 314 CMR 5.00. The permit is new and has not been renewed.

The Permittee applied for a discharge permit on September 4, 2024.

RESPONSE TO COMMENTS RECEIVED

Comment 1:

Comments requesting a MEPA review occur prior to issuance of the permit were received.

This information is available in alternate format. Please contact MassDEP at 617-292-5500.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

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Response to MEPA review request - Based on the information submitted in the groundwater discharge permit application MassDEP did not identify a MEPA trigger relative to wastewater.

Some comments specifically identified the MEPA wastewater thresholds at 301 CMR 11.03(5)b.4.c.i, which provides for an ENF and Other MEPA Review if the Secretary So Requires for a new discharge or Expansion in discharge to a groundwater in excess of 10,000 gallons per day (gpd) within an area, zone or district established, delineated or identified as necessary or appropriate to protect a public drinking water supply, an area established to protect a nitrogen sensitive embayment, an area within 200 feet of a tributary to a public surface drinking water supply, or an area within 400 feet of a public surface drinking water supply.

MassDEP reviewed this provision with the MEPA office. At the time the MEPA thresholds were established, Title 5 included one type of "Nitrogen Sensitive Area" that focused on Drinking Water Source protection, as nitrogen in drinking water presents a public health concern. The concept of a Natural Resource Nitrogen Sensitive Area was developed in connection with the Mass Estuaries Project and is not drinking water focused. The development of a Natural Resource Nitrogen Sensitive Area occurred in the course of the July 7, 2023 revisions to 310 CMR 15.000 (Title 5), more than 6 months after the last revision of the MEPA regulations (January 21, 2023). Title 5 distinguishes the two types of Nitrogen Sensitive Areas, Public and Private Drinking Water Areas is defined at 310 CMR 15.214(1)(a), while Natural Resource Areas is defined at 310 CMR 15.214(b) - Natural Resource Areas.

As a result of MassDEP's consultation with MEPA, it was determined that this project would not require MEPA review with respect to the wastewater thresholds prior to issuance of a groundwater discharge permit.

Comment 2:

"Please provide any groundwater discharge permit documents that are available."

Response – MassDEP fulfilled the public records request and provided the application documents to the requester.

Comment 3:

Commentors, including various boards in the Town of Falmouth requested revisions to the permit providing additional requirements to reflect the best operational efforts concentration of 3 mg/L agreed to by the Applicant and the Town in the Comprehensive Permit Modification.” Those comments specifically included:

A copy of a Settlement Agreement filed with the Commonwealth of Massachusetts Housing Appeals Committee, by and between the Town of Falmouth Zoning Board of Appeals of the Town of Falmouth and Falmouth Southerly, LLC providing that “[T]he Applicant shall design and construct the WWTF to meet an annual average effluent concentration of 5mg/L of total nitrogen with best operational efforts to achieve an average concentration of 3 mg/L of total nitrogen”.

A letter to the Department reporting that on September 16, 2024, the Falmouth Board of Health voted to notify the Department of Environmental Protection of the Town’s expectation that any groundwater discharge permit issued to SAXON Development for 375 Sandwich Road, Falmouth, MA, will be based on installation of a wastewater system that will reliably and consistently achieve a total nitrogen concentration of 3 mg/l or less.

A comment from the Falmouth Board of Department of Public Works that “The Town requests that the Cumulative Annual Nitrogen Load in the groundwater discharge permit be reduced to 207.3 kg/year, to reflect the best operational efforts concentration of 3 mg/L agreed to by the Applicant and the Town in the Comprehensive Permit Modification.”

Response – MassDEP included a maximum daily effluent limit of 10 mg/L nitrate-nitrogen and total nitrogen, as well as an annual average maximum limit of 5 mg/L nitrate-nitrogen and total nitrogen in the permit. The cumulative annual nitrogen load is 346 kg nitrogen/year, based on 5 mg/L of total nitrogen at the permitted flow. MassDEP also included that the facility shall make a best effort to achieve a cumulative annual load of 207 kg nitrogen/year and effluent nitrate-nitrogen and total nitrogen limit of 3 mg/L.

Comment 4:

“The DEP draft permit WWTF GWDP #1018-0 needs to hold the town responsible for net-zero nitrogen levels reaching the Coonamessett River and Great Pond.”

Response – MassDEP acknowledges the importance of reducing nitrogen load to the Great Pond System. MassDEP will continue to work with the permittee to maintain or improve the performance of its wastewater treatment facility. MassDEP strongly encourages The Easterly to work with area wastewater management and nitrogen mitigation efforts to reduce nitrogen impacts on Great Pond consistent with the findings presented in the Great Pond System Total Maximum Daily Loads for Total Nitrogen.

On December 13, 2023, the Town filed a Notice of Intent pursuant to the provisions of Title 5 (310 CMR 15.215) providing that the Town would submit a Watershed Permit Application for the Great Pond Watershed in accordance with the requirements of the Watershed Regulations at 314 CMR 21.00.

Comment 5:

“Specifically, I am hoping you could provide information on the following questions:

- **What is the process and deadline for requesting a hearing?**
- **What forms and supporting information are required to file a hearing request?**
- **Who determines whether a hearing is granted or denied?**
- **When would a hearing typically take place?**
- **Who would be involved in the hearing?**
- **Is the hearing conducted solely by DEP, or is an administrative judge involved?**
- **What are the possible outcomes of a hearing?”**

Response – This information was forwarded to the requester. It is also presented in the Appeal Rights section of the permit.

Comment 6:

“I request that this draft permit be modified to: (1) require a limit of no more than 5 mg N/L of total nitrogen concentration in the effluent released to the groundwater allowed by this permit for a wastewater treatment plant to be consistent with the calculations in the permit and Town agreements; (2) require nitrogen offsets equal to any increased new nitrogen released by this project plus a margin of safety of 20 percent to account for any unintentional overages in the permit concentration limit; (3) The mechanism (or mechanisms) by which required offsets will be achieved — whether by the Town or by the developer — and the timeline for implementation must be concurrent with the timeline for the development of the project and explicitly described in a modified permit; and (4) requires a plan that offsets additional nitrogen inputs via fertilizer and stormwater from this development.”

Response - In the permit, the cumulative annual nitrogen load in the effluent is 346 kg nitrogen/year, based on 5 mg/L of total nitrogen at the permitted flow. MassDEP also included that the facility shall make a best effort to achieve a cumulative annual load of

207 kg nitrogen/year and effluent nitrate-nitrogen and total nitrogen limit of 3 mg/L. In addition, the permit has increased the requirement for the monitoring of Total Nitrogen from monthly to weekly.

MassDEP believes the nitrogen offset was adequately addressed between the applicant and the Town of Falmouth. MassDEP was provided a letter by the Town dated May 1, 2025, indicating that the Town would include nitrogen removal in its Watershed Plan for the Great Pond, including a plan for removing the nitrogen load added to the watershed by the Easterly project. That plan takes into account a 5 mg/L nitrogen limit anticipated in the Easterly Groundwater Discharge Permit and use of the \$750,000 settlement payment for nitrogen mitigation in this watershed. Further, the applicant must comply with the requirements for effluent limits in the permit. It is the opinion of MassDEP that the permit addresses this comment.

Comment 7:

“MassDEP should lower the Draft Permit nitrate-nitrogen and total nitrogen Discharge Limitation to 5 mg per Liter.”

Response – MassDEP believes that effluent limits in the permit are compliant with 314 CMR 5.00. In the permit the cumulative annual nitrogen load in the effluent is 346 kg nitrogen/year, based on 5 mg/L of total nitrogen at the permitted flow. It is the opinion of MassDEP that the permit addresses this comment.

Comment 8:

“The draft permit is internally inconsistent. It states a concentration limit of 10 mg total N/L but also states an annual nitrogen load limit of 346 kg N/yr that is based on an average annual concentration of 5 mg N/L.”

Response – MassDEP believes that effluent limits in the permit are compliant with 314 CMR 5.00. The permit has a “max day” nitrogen limit of 10 mg/L of total nitrogen, as well as a cumulative annual nitrogen load in the effluent is 346 kg nitrogen/year, based on 5 mg/L of total nitrogen at the permitted flow. The 10 mg/L “max day” reflects that the permittee may on a given day exceed the 5 mg/L annual average, but must still meet the 5 mg/L annual average. It is the opinion of MassDEP that the permit addresses this comment.



Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone:** 508-946-2700

Maura T. Healey
Governor

Kim Driscoll
Lieutenant Governor

Rebecca Tepper
Secretary

Bonnie Heiple
Commissioner

INDIVIDUAL GROUNDWATER DISCHARGE PERMIT **FACT SHEET**

I. APPLICANT, FACILITY INFORMATION, and DISCHARGE LOCATION

Name and Address of Applicant:

Falmouth Southerly, LLC
25 Recreation Drive, Suite 204
Hingham, MA 02043

Name and Address of Facility where discharge occurs:

The Easterly Wastewater Treatment Facility
375 and 0 Sandwich Road
Falmouth, Massachusetts

Discharge Information:

Groundwater Discharge Permit Number: 1018-0

The Groundwater Discharge Permit will allow the applicant to discharge 49,950 gallons per day of treated sanitary wastewater originating from 300 residential units with a total of 445 bedrooms and a single story clubhouse and pool to groundwaters of the Commonwealth.

The site is located within the Great Pond Watershed which is nutrient impaired according to the 2006 Total Maximum Daily Load Report for Great, Green and Bournes Pond Embayment Systems. As such, pursuant to 314 CMR 5.06 (1), 314 CMR 5.09 (1) (a), and 314 CMR 5.16 (1), the Department required documentation demonstrating the applicant collaborated with the Town of Falmouth on how the additional nitrogen load generated from the facility would be addressed to maintain the Total Maximum Daily Load for total nitrogen in the Great, Green, and Bournes Pond Embayment Systems. On May 1, 2025, MassDEP received a letter from the Town of Falmouth stating the

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Town will include a plan for removing the nitrogen load added to the Great Pond Watershed by Falmouth Southerly, LLC as part of the Town's Watershed Plan for Great Pond. The letter states the plan will take the 5 mg/L total nitrogen effluent limit required by the anticipated Groundwater Discharge Permit for the Easterly's WWTF into account and will include nitrogen mitigation in the Great Pond Watershed. The Easterly Wastewater Treatment Facility is not located in a Zone A, B or C, a Zone II or Interim Wellhead Protection Area of any Public Water System.

II. LIMITATIONS AND CONDITIONS

Discharge permit limitations are listed in the Groundwater Discharge Permit and are in conformance with 314 CMR 5.00, the Groundwater Discharge Permit Program.

III. PERMIT BASIS AND EXPLANATION OF EFFLUENT LIMITATIONS

An Individual Groundwater Discharge Permit is required for this discharge in accordance with the Massachusetts Clean Water Act, M.G.L. c. 21, s. 26-53 and 314 CMR 5.03.

Effluent limitations are based upon the location of the discharge, the level of treatment, consideration of human health protection criteria and protection of the groundwaters of the Commonwealth.

IV. COMMENT PERIOD, HEARING REQUESTS, AND PROCEDURES FOR FINAL DECISIONS

The public comment period for this permit is thirty (30) days following public notice in *The Environmental Monitor*. The public notice for this Individual Groundwater Discharge Permit occurred on **November 26, 2025**.

Requests for an adjudicatory hearing must be submitted within thirty (30) days of the issuance/denial of the permit, by any person who is aggrieved by such issuance/denial.

A final decision on the issuance/denial of this permit will be made after the public notice and comment period, and review of any comments received during this period.

V. STATE CONTACT INFORMATION

Additional information concerning the draft permit may be obtained between the hours of 9:00 a.m. and 5:00 p.m. Monday through Friday excluding holidays, from:

Aaron Raposo
DEP /SERO
20 Riverside Drive
Lakeville, MA 02347
Aaron.Raposo@mass.gov
(857) 286-0014



Brian D. Harrington
Deputy Regional Director
Bureau of Water Resources - SERO

2/19/26

Date



Commonwealth of Massachusetts | Executive Office of Energy and Environmental Affairs

Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | **Phone:** 508-946-2700

Maura T. Healey

Governor

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Lieutenant Governor

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Bonnie Heiple

Commissioner

February 19, 2026

Falmouth Southerly, LLC
Attn: David Calhoun
Managing Director - Acquisitions
25 Recreation Drive, Suite 204
Hingham, MA 02043

RE: FALMOUTH – BWR
The Easterly WWTF
375 and 0 Sandwich Road
Ground Water Discharge Permit #1018-0
25-WP79-0137-APP
PLAN APPROVAL

Dear David Calhoun:

The Massachusetts Department of Environmental Protection (“MassDEP” or “the Department”) has completed the administrative and technical reviews of the engineering report and plans dated August 28, 2025, submitted via application number 25-WP79-0137-APP to construct a new wastewater treatment facility for the collection, pumping, transmission, treatment, and disposal of wastewater produced at The Easterly residential development in Falmouth, Massachusetts. The facility is to be located at 375 and 0 Sandwich Road, Falmouth, Massachusetts. The Massachusetts Department of Environmental Protection has determined that, based on information presently in the record, the application is administratively and technically complete.

Since comments were received by the Department during the public comment period, in accordance with 314 CMR 2.08, the permit becomes effective in 30 days. Pursuant to 314 CMR 5.03(1) no person shall discharge pollutants to ground waters of the Commonwealth without a currently valid permit from the Department, and no person shall construct any treatment works required to treat such discharge without having first obtained a discharge permit. Therefore, construction of the facility cannot begin for 30 days of this approval.

As part of the application prepared and submitted by Raymond Willis, P.E. of Fuss & O'Neill Inc., of 3 Davol Square, Suite C200, Providence, RI 02903, MassDEP received the following:

1. One (1) completed BRP WP 79 application for an Individual Permit for Groundwater Discharge from a Sewage Treatment Plant, signed by David Calhoun, Managing Director - Acquisitions of Saxon Partners, LLC.

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2. One (1) Engineering Report, signed and stamped by Raymond Willis, P.E. of Fuss & O'Neill Inc. titled:

WRRF Design Report
The Easterly
Falmouth Southerly, LLC
c/o Saxon Partners, LLC
Falmouth, Massachusetts
August 28, 2025

3. One (1) set of plans and specifications, signed and stamped by Raymond Willis, P.E. of Fuss & O'Neill Inc., dated August 28, 2025, consisting of 17 pages titled:

THE EASTERLY FALMOUTH WRRF
SANDWICH ROAD · FALMOUTH · MASSACHUSETTS
AUGUST 28, 2025, REVISED OCTOBER 24, 2025

4. One (1) set of specifications, signed and stamped by Raymond Willis, P.E. of Fuss & O'Neill Inc., dated August 28, 2025, consisting of 244 pages titled:

Specifications
The Easterly
WRRF IMPROVEMENTS
Falmouth Southerly, LLC
c/o Saxon Partners, LLC
Falmouth, Massachusetts
August 28, 2025

5. One (1) Engineer Certification Statement, signed by Raymond Willis P.E. of Fuss & O'Neill Inc., for the engineering report and plans and specifications of for The Easterly, Falmouth, Massachusetts.
6. One (1) Engineer Certification Statement, signed by Phil Cordiero, P.E. of Allen & Major, Inc., for the plans and specifications of for The Easterly, Falmouth, Massachusetts – Sewer Collection System.
7. One (1) Lotus Map of the facility.
8. One (1) monitoring well plan.
9. One (1) Hydrogeologic Evaluation Report Approval letter, signed by Andrew Osei P.E. of MassDEP.

10. One (1) set of plans and specifications for the sewer collection system, dated August 26, 2025, consisting of four (4) pages titled:

THE EASTERLY
SANDWICH ROAD
FALMOUTH, MA

The proposed groundwater discharge facility to serve The Easterly residential development will be constructed on a 28.79-acre plot of land located at 375 and 0 Sandwich Road in the Town of Falmouth. The facility will service a multi-unit apartment complex consisting of 300 residential units with a total of 445 bedrooms within five (5) four-story residential buildings, associated parking areas, residential amenities, and a single-story clubhouse with pool generating 49,950 gallons per day. The proposed effluent disposal system is located entirely within the Great Pond Watershed, which is subject to a Total Maximum Daily Load (TMDL) for total nitrogen and is designated as a Natural Resource Area Nitrogen Sensitive Area. The project proponent collaborated with the Town of Falmouth regarding mitigation of additional nitrogen load to the Great Pond Watershed. The treatment system design is based on achieving a total nitrogen discharge concentration of five (5) mg/l with best operation efforts to achieve an annual average total nitrogen concentration of 3 mg/L. The proposed treatment system will employ membrane bioreactor system (MBR) with advanced aerobic and anoxic biological processes with filtration.

The Department has received and reviewed the certification statement signed and dated by Raymond Willis P.E. of Fuss & O'Neill Inc., that states the wastewater treatment facility will be capable of meeting the required effluent standards as described in the engineering report, plans, and specifications. Therefore, the Department hereby approves the construction of the wastewater treatment facility subject to the following:

1. Construction shall be in strict conformance with the submitted application materials, engineering plans cited above, proposed flow volume and provisions of this approval. No changes shall be made without approval from the Department. All system components shall be marked with magnetic tape or equivalent.
2. 120 days prior to the clear water test, pursuant to 314 CMR 5.15(5), the permittee shall place an amount equal to at least 25% of the estimated construction cost of the facility into an immediate repair and replacement account to ensure that the permittee is capable of operating the facility in accordance with 314 CMR 5.00 and the permit. The permittee shall meet this obligation by completing the appropriate Department-approved form documents to establish the financial assurance mechanisms and shall file with the Department and maintain the current Department-approved form documents constituting or evidencing compliance with this obligation.

3. A clear water test of the proposed treatment system must be performed prior to the system being put online. The clear water test shall be scheduled at least twenty-one (21) days in advance so that Department personnel can be present.
4. Fourteen (14) days prior to the clear water test, a contract for engineering consulting services, for a term of two (2) years, shall be submitted to this office for review.
5. Fourteen (14) days prior to the clear water test, a copy of a contract with a licensed septage hauler shall be submitted to this office. Said contract shall state the approved facility where the septage/sludge and industrial waste is to be transported for final disposal. Said contract will be good for one (1) year.
6. Twenty-one (21) days prior to the clear water test, a written certification that the facility was constructed in accordance with the aforementioned plans shall be submitted to this office by a Professional Engineer registered in the Commonwealth of Massachusetts. Nothing in this provision is intended to interfere with the right of the Department to inspect the facilities at any time during construction in order to assess compliance with the plans.
7. Within sixty (60) days of approval of the clear water test, an operation and maintenance manual stamped and signed by a Massachusetts Registered Engineer and prepared in accordance with 314 CMR 12.04(1) shall be submitted to this office for review and approval. The operation and maintenance manual shall be made available in electronic format.
8. Operation and maintenance of the facility must be in accordance with 314 CMR 12.00: "Operation, Maintenance and Pretreatment Standards for Wastewater Treatment Works an Indirect Dischargers" and 257 CMR 2.00 "Certification of Operators of Wastewater Treatment Facilities".
9. Fourteen (14) days prior to the clear water test, a spare parts inventory list shall be submitted to this office. All spare parts must be onsite at the time of the clear water test.
10. The referenced facility has been rated by this office (in accordance with 257 CMR 2.00) and it has been tentatively determined that the proposed wastewater treatment plant is a Grade 4 facility. For official approval this grading will be forwarded to the Board of Certification of Wastewater Treatment Plant Operators. Therefore, please be advised that as a Grade 4 facility, it is required that the person in charge (Chief Operator) possess a valid Grade 4 Massachusetts Wastewater Treatment Plant Operator's

License. Also, a backup operator (Assistant Chief Operator) must be provided who shall possess at least a valid Grade 3 license.

11. The operation of the referenced facility must comply with all the requirements listed in the Groundwater Discharge Permit #1018-0.
12. This approval pertains to the discharge of sanitary waste only. Non-sanitary waste shall not be discharged into the proposed wastewater treatment facility.
13. The facilities served by the systems and the systems themselves shall be open to inspection by MassDEP and the local Board of Health at all times.
14. The owner/operator of the system shall always properly operate and maintain the system in accordance with this approval, submitted design report, and soil absorption system plans cited above.
15. Within ninety (90) days from the date of the clear water test, the design engineer shall submit As-Built plans to the Department.
16. Copies of the approved plans cited above must be kept on-site and used for construction purposes.
17. The owner/operator shall furnish to the Department, within a reasonable time, any information, which the department may request to determine whether cause exists for modifying, revoking, reissuing, or terminating this approval or determining whether the owner/operator is complying with the terms and conditions of this approval.
18. The Department must approve in writing any modifications or expansion of the facilities resulting in additional sewerage flows to the wastewater treatment facility.

This plan approval is subject to the approval of any other local, State, or Federal authority that may have jurisdiction.

If you have any questions or require additional information, please contact Aaron Raposo at Aaron.Raposo@mass.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'B. Harrington', with a long horizontal stroke extending to the right.

Brian D. Harrington
Deputy Regional Director
Bureau of Water Resources

ECC:

Falmouth Board of Health

Scott McGann - scott.mcgann@falmouthma.gov

Fuss & O'Neill Inc.

Raymond Willis, P.E - raymond.willis@fando.com

Allen & Major Associates, Inc

Phil Cordiero, PE - pcordeiro@allenmajor.com

Saxon Partners

David Calhoun - dcalhoun@saxon-partners.com

MassDEP

Linda Barba, Environmental Analyst - Linda.Barba@mass.gov



Department of Environmental Protection

Southeast Regional Office

Address: 20 Riverside Drive, Lakeville, MA 02347 | Phone: 508-946-2700

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INDIVIDUAL GROUNDWATER DISCHARGE PERMIT

Name and Address of Applicant: **Falmouth Southerly, LLC**
25 Recreation Drive, Suite 204
Hingham, MA 02043

Date of Application: **September 4, 2025**

Application Number: **25-WP79-0137-APP**

Permit Number: **1018-0**

Date of Issuance: **2/19/2026**

Date of Expiration: **2/19/2031**

Effective Date: **3/21/2026**

AUTHORITY FOR ISSUANCE

Pursuant to authority granted by Chapter 21, Sections 26-53 of the Massachusetts General Laws, as amended, 314 CMR 2.00, and 314 CMR 5.00, the Massachusetts Department of Environmental Protection ("MassDEP" or "the Department") hereby issues the following permit to: **Falmouth Southerly, LLC** (hereinafter called "the permittee") authorizing discharges from the on-site wastewater treatment facility to the ground located at **The Easterly WWTF, 375 and 0 Sandwich Road, Falmouth, Massachusetts** (a multi-unit apartment complex consisting of 300 residential units with a total of 445 bedrooms and a single-story clubhouse with pool). Such authorization being expressly conditional on compliance by the permittee with all terms and conditions of the permit hereinafter set forth.

Brian D. Harrington
Deputy Regional Director
Bureau of Water Resources-SERO

2/19/26

Date

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I. SPECIAL CONDITIONS

A. Effluent Limits

1. The permittee is authorized to discharge to the ground from the wastewater treatment facilities for which this permit is issued a treated effluent whose characteristics within one month of startup and continuing thereafter shall not exceed the following values:

Effluent Characteristics	Discharge Limitations
Flow	49,950 gallons per day (gpd)
Biochemical Oxygen Demand/5 day @ 20°C (BOD ₅)	30 milligrams per liter (mg/L)
Total Suspended Solids (TSS)	30 mg/L
Nitrate-Nitrogen	10 mg/L max daily 5 mg/L annual average
Total Nitrogen	10 mg/L max daily 5 mg/L annual average
Cumulative Annual Nitrogen Load	346 kilograms per year (kg/year)
Oil & Grease	15 mg/L

- a. The permittee shall meet an annual average effluent concentration of 5 mg/L of total nitrogen and a cumulative annual load of 346 kg/yr with best operational efforts to achieve an average concentration of 3 mg/L total nitrogen and cumulative annual load of 207 kg/yr.
- b. Annual average flow shall be used to calculate the cumulative nitrogen annual load. Annual average flow shall be determined as the average of the total daily flows for the calendar year measured from January 1 to December 31.
- c. Cumulative annual nitrogen load in kg/year shall be the cumulative amount of nitrogen discharged from the wastewater treatment facility during the calendar year measured from January 1 to December 31, calculated by multiplying the average annual flow by the annual average total nitrogen, multiplied by the number of days in the year.
- d. By January 31 of each year, the Permittee shall submit an annual report describing the cumulative annual nitrogen loading for the previous calendar year. The annual average effluent nitrate and total nitrogen concentrations in mg/L shall be included in the report. The report shall be signed and stamped by a Massachusetts Registered Professional Engineer.

- e. The pH of the effluent shall not be less than 6.5 nor greater than 8.5 at any time or not more than 0.2 standard units outside the naturally occurring range.
- f. The discharge of the effluent shall not result in any demonstrable adverse effect on the groundwater or violate any water quality standards that have been promulgated.
- g. The monthly average concentration of BOD and TSS in the discharge shall not exceed 15 percent of the monthly average concentrations of BOD and TSS in the influent into the permittee's wastewater treatment facility.
- h. When the average annual flow exceeds 80 percent of the permitted flow limitations, the permittee shall submit a report to the Department describing what steps the permittee will take to remain in compliance with the permit limitations and conditions, inclusive of the flow limitations established in this permit.

B. Monitoring and Reporting

1. The permittee shall monitor and record the quality of the **influent** and the quality and quantity of the **effluent** prior to discharge to the leaching facilities according to the following schedule and other provisions:

INFLUENT:

Parameter	Minimum Frequency of Analysis	Sample Type
BOD ₅	Monthly	24-hour composite
Total Suspended Solids	Monthly	24-hour composite
Total Solids	Monthly	24-hour composite
Ammonia-Nitrogen	Monthly	24-hour composite

EFFLUENT:

Parameter	Minimum Frequency of Analysis	Sample Type
Flow	Daily	Meter reading Report: Max-Min-Avg
pH	Daily	Grab

BOD ₅	Monthly	24-Hour Composite
TSS	Monthly	24-Hour Composite
Nitrate Nitrogen	Monthly	24-Hour Composite
Total Nitrogen	Weekly	24-Hour Composite
Oil & Grease	Monthly	Grab
Total Phosphorus	Quarterly	Grab
Orthophosphate	Quarterly	Grab
Volatile Organic Compounds	Annually	Grab

- a. After one full year of monitoring the total phosphorus and orthophosphate results, the Department may determine, upon the request of the permittee, that the frequency of monitoring may be reduced if, in the judgment of the Department, the results of the sampling indicate that existing phosphorus levels will not adversely impact downgradient receptors. If the Department reduces the frequency of monitoring for total phosphorus and orthophosphate, the Department reserves the right to resume more frequent monitoring if the Department determines that phosphorus levels are impacting downgradient receptors.
- b. At the time of permit renewal, the Department may determine, upon the request of the permittee, that the frequency of monitoring for Total Nitrogen may be reduced if, in the judgment of the Department, the results of the sampling indicate that the permittee will not exceed the 10 mg/L maximum daily limit, and consistently meet the 5 mg/L annual average in the permit. If the Department reduces the frequency of monitoring for Total Nitrogen, the Department reserves the right to resume more frequent monitoring if the Department determines that nitrogen levels are impacting downgradient receptors or the permittee is exceeding the 10 mg/L maximum daily limit or failing to consistently meet the 5 mg/L annual average in the permit.
- c. All monthly samples shall be taken on the same day of each month, and weekly samples shall be taken on the same day of each week, according to sampling schedule which must be submitted and approved by MassDEP. The Department must be notified of any deviation from the approved sampling schedule within one (1) week. The schedule will be presumed approved if the Department does not issue written approval, conditional approval, denial, or request for further information within 90 days after submittal.

2. The permittee shall install the three (3) approved monitoring wells at least 90 days prior to treatment facility start-up. The permittee shall install the upgradient well **UCW-1** and downgradient wells **DCW-1** and **DCW-2** as shown in a final report titled: "The Easterly 375 Sandwich Road Falmouth, MA 02356 Figure 13. Proposed Locations of Compliance Wells" prepared by GeoHydroCycle, Inc. and dated September 13, 2024, and revised October 8, 2024.

The permittee shall monitor, record, and report the quality of water in the approved monitoring wells UCW-1, DCW-1, and DCW-2 according to the following schedule and other provisions:

Parameter	Minimum Frequency of Analysis
pH	Monthly
Static Water Level	Monthly
Specific Conductance	Monthly
Nitrate Nitrogen	Quarterly
Total Nitrogen	Quarterly
Total Phosphorus	Quarterly
Orthophosphate	Quarterly
Volatile Organic Compounds	Annually

- a. Labels identifying each monitoring well in accordance with the above-referenced approved plan shall be affixed to the steel protective casing of each monitoring well.
- b. Static Water Level shall be expressed as an elevation and shall be referenced to the surveyed datum established for the site. It shall be calculated by subtracting the depth to the water table from the surveyed elevation of the top of the PVC well casing/riser of the monitoring well.
- c. After one full year of monitoring the total phosphorus and orthophosphate results, the Department may determine, upon the request of the permittee, that the frequency of monitoring may be reduced if, in the judgement of the Department, the results of the sampling indicate that existing phosphorus levels will not adversely impact downgradient receptors. If the Department reduces the frequency of monitoring for total phosphorus and orthophosphate, the Department reserves the right to resume more frequent monitoring of phosphorus if the Department determines that phosphorus levels are impacting downgradient receptors.

Any grab sample or composite sample required to be taken less frequently than daily shall be taken during the period of Monday through Friday inclusive. All composite samples shall be taken over the operating day.

4. The permittee shall submit all monitoring reports within 30 days of the last day of the reporting month to MassDEP and to the Falmouth Board of Health, Falmouth Town Hall, 59 Town Hall Square, Falmouth, MA 02540. All discharge monitoring reports submitted to MassDEP must be submitted through eDEP. To register for electronic submission, go to:
<http://www.mass.gov/eea/agencies/massdep/service/online/edep-online-filing>.

C. Financial Assurance Mechanisms

1. The permittee shall establish and maintain a financial assurance mechanism that provides for the continued availability of an immediate repair and replacement account. The immediate repair and replacement account shall contain adequate funds to correct any unanticipated problem immediately so that any disruption of operation is minimized, and a violation of the terms and conditions contained in the permit does not occur. To create an immediate repair and replacement account, the permittee shall deposit at least 25% of the estimated construction cost of the PWTF into an interest-bearing escrow account in accordance with the financial assurance mechanism and 314 CMR 5.15.
 - a. For purpose of the financial assurance mechanism requirement, the estimated construction cost of the wastewater treatment facility shall include the cost of constructing the wastewater treatment plant, collection system, associated mechanical equipment, but not including the land, ground and disposal area.
2. The permittee shall meet the obligation to establish the required financial assurance mechanism by using Department-approved form documents and shall submit said Department-approved form documents to the Department for its review and approval as follows:
 - a. A permittee that constructs the wastewater treatment facility after the issuance of the Individual permit may submit the financial assurance mechanism(s) to the Department for its review and approval no later than one-hundred and twenty (120) days prior to the start-up (clear water test) of the facility. Such a permittee shall not operate the facility unless and until the Department has approved the required financial assurance mechanism, the financial assurance mechanism is in full force and effect, and the

permittee has made all contributions required thirty (30) days prior to the start-up (clear water test) of the facility; or,

- b. A permittee with a wastewater treatment facility in existence prior to the submission of the individual permit renewal application may submit the financial assurance mechanism to the Department for its review and approval no later than ninety (90) days from the date of submission of the individual permit renewal application. Said permittee shall be in compliance with the provision of the approved financial assurance mechanism requiring contributions to the immediate repair and replacement account no later than thirty (30) days prior to the date on which the renewal is issued.
3. The permittee shall maintain the current form documents evidencing the required financial assurance mechanism approved by the Department. The permittee shall perform all its obligations under the required financial assurance mechanism as approved by the Department.
4. Once established and funded, the permittee shall keep an amount equal to at least 25% of the estimated construction cost of the PWTF in the immediate repair and replacement account and shall replenish the account within 90 days of any disbursement.
5. On or before January 31st of each year, the permittee shall submit an annual financial report identifying the initial and current balance in the immediate repair and replacement account and confirming the continuing availability of the funds in said account for the purposes specified in the permit and 314 CMR 5.15. Said report shall be prepared in accordance with generally accepted accounting principles. Reports pertaining to the required financial assurance mechanism(s) shall be sent to the Wastewater Management Section Chief at the appropriate Regional Office.

D. Supplemental Conditions

1. The permittee shall notify the Department at least thirty (30) days in advance of the proposed transfer of ownership of the facility for which this permit is written. Said notification shall include a written agreement between the existing and new permittees containing a specific date for transfer of permit, responsibility, coverage, and liability between them.
2. A staffing plan for the facility shall be submitted to the Department once every two years and whenever there are staffing changes. The staffing plan shall include the following components:

- a. The operator(s)'s name(s), operator grade(s) and operator license number(s);
 - b. The number of operational days per week;
 - c. The number of operational shifts per week;
 - d. The number of shifts per day;
 - e. The required personnel per shift;
 - f. Saturday, Sunday, and holiday staff coverage; and
 - g. Emergency operating personnel.
3. The permittee is responsible for the operation and maintenance of all sewers, pump stations, and treatment units for the permitted facility, which shall be operated and maintained under the direction of a properly certified wastewater operator.
4. Operation and maintenance of the proposed facility must be in accordance with 314 CMR 12.00, "Operation, Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges", and 257 CMR 2.00, "Certification of Operators of Wastewater Treatment Facilities" and the following:
 - a. The facility has been rated (in accordance with 257 CMR 2.00), to be a Grade **4M** facility. Therefore, the permittee shall provide for oversight by a Massachusetts Certified Wastewater Treatment plant operator (Chief Operator) Grade **4M** or higher. The permittee will also provide for a backup operator who shall possess at least a valid Grade **3M** license.
 - b. The date and time of the operator's inspection along with the operator's name and certification shall be recorded in the logbook on location at the treatment facility. The logbook shall be a numbered and bound notebook. All daily inspection logs consistent with the Operation and Maintenance Manual requirements shall be kept at the facility for a period of three (3) years. The permittee shall maintain a copy of the approved current operation and maintenance manual on site at all times.
 - c. Records of operation of wastewater treatment facilities or disposal systems required by the Department shall be submitted on forms supplied by the Department or on other forms approved by the Department for such use. Monthly reports shall be certified by the wastewater treatment plant operator in charge and shall be included in the discharge monitoring reports submitted each month.
5. If the operation and maintenance of the facility is to be contracted to a private concern, the permittee shall submit a copy of the contract, consistent with what is required by the approved Operation & Maintenance manual and signed only by the contractor, to the appropriate MassDEP Regional Office for review and approval ninety (90) days prior to the startup of the facility. Along with the contract, a detailed listing of all contract operation obligations of the proposed contractor at other facilities shall

also be submitted. The permittee shall not begin operation of the treatment facility until the Department approves the contract.

6. Any additional connections to the sewer system, beyond the facility as described on page one (1) of this permit shall be approved by MassDEP and the local Board of Health prior to the connection.
7. The following sampling and analysis procedures to determine compliance with permit standards and requirements must be followed:
 - a. Effluent samples shall be collected, transported, and stored in accordance with *Standard Methods for the Examination of Water and Wastewater*;
 - b. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other methods are approved by the Department; and
 - c. Samples shall be analyzed by a Massachusetts Certified laboratory unless otherwise approved by the Department.
8. The permittee shall notify the appropriate MassDEP Regional Office, in writing, within thirty (30) days of the following events:
 - a. The date of treatment plant startup.
 - b. Any interruption of the treatment system operation, other than routine maintenance.
 - c. Final shutdown of the treatment system.
9. The permittee shall contract to have any and all solids and sludges generated by the treatment facility for which this permit is issued removed off site by a properly licensed waste hauler for disposal at an EPA/MassDEP approved facility. The name and license number of the hauler and the quantity of waste removed, and the date(s) of removal shall be reported by the permittee in writing to the appropriate MassDEP Regional Office.
10. Simultaneously with the permit renewal application at year fifteen (2039) the permittee shall submit two reports to the Department for its review and approval:
 - a. An engineering report, prepared by a registered professional engineer, that outlines in sufficient detail, what modifications (if any) to the facility or other changes are required to ensure that the facility can remain in compliance with this Groundwater Discharge Permit and other applicable requirements through the next 5-year permit term (year 2044) and beyond; and

- b. A financial plan that contains the cost estimates for implementing the facility modifications or other changes identified in the engineering report, and describes and demonstrates, how and when the permittee will finance the needed facility modifications or other changes.
11. In the event that effluent limits are not met, or the discharge is determined to impair groundwater quality in accordance with 314 CMR 5.16(1), the permittee may be obligated to modify, supplement or replace the permitted treatment process so as to ensure that the discharge does not impair the ability of the groundwater to act as an actual or potential source of potable water.
12. Pursuant to M.G.L. Chapter 21A, section 18(a), and 310 CMR 4.03, holders of this Permit may be subject to annual compliance assurance fees as assessed each year on July 1st and invoiced by MassDEP. Failure of the Permit holder to pay applicable annual compliance assurance fees shall result in the automatic suspension of the permit by operation of law under the statute. If fee non-payment continues for sixty days or more, MassDEP has the statutory option of revoking the Permit, denying any other pending permit applications filed by the Permit holder or taking other enforcement action. Permit holders are required to notify MassDEP in writing if they wish to relinquish or transfer a permit. Failure to do so will result in the continued assessment of fees.

E. Appeal Rights

During the thirty (30) day period following issuance of this permit, a Notice of Claim for an Adjudicatory Appeal may be sent by any person aggrieved (the “Petitioner”) by the issuance to:

Case Administrator
Office of Appeals and Dispute Resolution
Massachusetts Department of Environmental Protection
100 Cambridge Street, Suite 900
Boston, MA 02114

310 CMR 1.01(6)(b) requires the Notice of Claim to: include sufficient facts to demonstrate aggrieved person status; state the facts which are grounds for the appeal specifically, clearly and concisely; and state relief sought. The permit shall become or remain effective at the end of the 30-day appeal period unless the person filing the Notice of Claim requests, and is granted, a stay of its terms and conditions. If a permit is modified under 314 CMR 2.10, only the modified terms and conditions may be subject to an Adjudicatory Appeal. All other aspects of the existing permit shall remain in effect during any such Adjudicatory Appeal.

Per 310 CMR 4.06, the hearing request to the Commonwealth will be dismissed if the filing fee is not paid. Unless the Petitioner is exempt or granted a waiver, a valid check payable to the Commonwealth of Massachusetts in the amount of \$100.00 must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The filing fee is not required if the Petitioner is a city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority effective January 14, 1994, or any municipal housing authority; or, per MGL 161A s. 24, the Massachusetts Bay Transportation Authority. The Department may waive the adjudicatory hearing filing fee for a Petitioner who shows that paying the fee will create an undue financial hardship. A Petitioner seeking a waiver must file, along with the hearing request, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

II. GENERAL PERMIT CONDITIONS

314 CMR 5.16: General Conditions

The following conditions apply to all individual and general permits:

- (1) No discharge authorized in the permit shall cause or contribute to a violation of 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*. Upon promulgation of any amended standard, the permit may be modified to comply with such standard in accordance with the procedures in 314 CMR 2.10: *Modification, Suspension, Revocation and Renewal of Permits and General Permit Coverage*, and 314 CMR 5.12. Except as otherwise provided in 314 CMR 5.10(3)(c), 5.10(4)(a)2. and 5.10(9), no discharge authorized in the permit shall impair the ability of the ground water to serve as an actual or potential source of potable water. Evidence that a discharge impairs the ability of the ground water to serve as an actual or potential source of potable water includes, without limitation, analysis of samples taken in a downgradient well that demonstrates one or more exceedances of the applicable water quality-based effluent limitations set forth in 314 CMR 5.10. In those cases where it is shown that a measured parameter exceeds the applicable water quality based effluent limitations set forth in 314 CMR 5.10 at the upgradient monitoring well, evidence that a discharge impairs the ability of the ground water to serve as an actual or potential source of potable water is deemed to exist if a measured parameter in any downgradient well exceeds the level of that same measured parameter in the upgradient well for the same sampling period. A statistical procedure approved by the Department shall be used to determine when a measured parameter exceeds the allowable level.
- (2) Duty to comply. The permittee shall comply at all times with the terms and conditions of the permit, 314 CMR 5.00, M.G.L. c. 21, §§ 26 through 53 and all applicable state and federal statutes and regulations.
- (3) Standards and prohibitions for toxic pollutants. The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Federal Act, 33 U.S.C § 1317(a), for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (4) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and equipment installed or used to achieve compliance with the terms and conditions of the permit, 314 CMR 12.00: *Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Discharges*, and 257 CMR 2.00: *Certification of Operators of Wastewater Treatment Facilities*. All equipment shall be maintained in an acceptable condition for its intended use.

- (5) Duty to halt or reduce activity. Upon reduction, loss, or failure of the treatment facility, the permittee shall, to the extent necessary to maintain compliance with its permit, control production or discharges or both until the facility is restored, or an alternative method of treatment is provided. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- (6) Power Failure. In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:
 - (a) provide an alternative power source sufficient to operate the wastewater control facilities; or
 - (b) halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.
- (7) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any adverse impact on human health or the environment resulting from non-compliance with the permit. Additionally, the permittee shall take all necessary steps to prevent an operational upset of the PWTF or POTW.
- (8) Duty to provide information. The permittee and any operator of the permitted facility shall furnish to the Department within a reasonable time as specified by the Department any information which the Department may request to determine whether cause exists for modifying, suspending, revoking and reissuing, or terminating the permit, or to determine whether the permittee is complying with the terms and conditions of the permit.
- (9) Inspection and entry. The permittee shall allow the Department or its authorized representatives to:
 - (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by the permit are kept;
 - (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - (c) Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit; and
 - (d) Sample or monitor at reasonable times for the purpose of determining compliance with the terms and conditions of the permit.

- (9A) The permittee shall physically secure the treatment works and monitoring wells and limit access to the treatment works and monitoring wells to those personnel required to operate, inspect and maintain the treatment works and to collect samples.
- (9B) The permittee shall identify each monitoring well by permanently affixing to the steel protective casing of the well a tag with the identification number listed in the permit.
- (10) Monitoring. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. Monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures are specified in the permit.
- (11) Recordkeeping. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by the permit, and all records of all data used to complete the application for the permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time. Records of monitoring information shall include:
- (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurement;
 - (c) The date(s) analyses were performed;
 - (d) The individual(s) who performed the analyses;
 - (e) The analytical techniques or methods used; and
 - (f) The results of such analyses.
- (12) Prohibition of bypassing. Except as provided in 314 CMR 5.16(13), bypassing is prohibited, and the Department may take enforcement action against a permittee for bypassing unless:
- (a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee could have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (c) The permittee submitted notice of the bypass to the Department:

1. In the event of an anticipated bypass, at least ten days in advance, if possible;
or
 2. In the event of an unanticipated bypass, as soon as the permittee has knowledge of the bypass and no later than 24 hours after its first occurrence.
- (13) Bypass not exceeding limitations. The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if necessary for the performance of essential maintenance or to assure efficient operation of treatment facilities.
- (14) Permit actions. The permit may be modified, suspended, or revoked for cause. The filing of a request by the permittee for a permit modification, reissuance, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition.
- (15) Duty to reapply. If the permittee wishes to continue an activity regulated by the permit after the expiration date of the permit, the permittee must apply for and obtain a new permit. The permittee shall submit a new application at least 180 days before the expiration date of the existing permit unless permission for a later date has been granted by the Department in writing.
- (16) Property rights. The permit does not convey any property rights of any sort or any exclusive privilege.
- (17) Other laws. The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, nor does it relieve the permittee of its obligation to comply with any other applicable Federal, State, and local laws and regulations.
- (18) Oil and hazardous substance liability. Nothing in the permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of the Federal Act, 33 U.S.C. § 1321, and M.G.L. c. 21E.
- (19) Removed substances. Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed in a manner consistent with applicable Federal and State laws and regulations including, but not limited to, the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 and the Federal Act, , 33 U.S.C. § 1251 *et seq*, the Massachusetts Hazardous Waste Management Act, M.G.L. c. 21C, and the Federal Resource Conservation and Recovery Act, 42 U.S.C. § 6901, *et seq.*, 310 CMR 19.000 and 30.000, and other applicable regulations.

(20) Reporting requirements.

- (a) Monitoring reports. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) at the intervals specified elsewhere in the permit. If the permittee monitors any pollutant more frequently than required by the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR. As of December 2, 2017, a permittee shall submit all DMRs electronically, using the electronic reporting system designated by the Department. A permittee may seek a waiver of this requirement by submitting a written request for the Department's approval.
- (b) Compliance schedules. Reports of compliance or non-compliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date.
- (c) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility or activity which could significantly change the nature or increase the quantity of pollutants discharged. Unless and until the permit is modified, any new or increased discharge in excess of permit limits or not specifically authorized by the permit constitutes a violation.
- (d) Anticipated non-compliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in non-compliance with permit requirements.
- (e) 24-hour reporting. The permittee shall report any non-compliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance. The following shall be included as information which must be reported within 24 hours:
 - 1. Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - 2. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours.

- (f) Other non-compliance. The permittee shall report all instances of non-compliance not reported under 314 CMR 5.16(20)(a), (b), or (e) at the time monitoring reports are submitted. The reports shall contain the information listed in 314 CMR 5.16(20)(e).
- (g) Toxics. All manufacturing, commercial, mining, or silvicultural dischargers must notify the Department as soon as they know or have reason to believe:
 - 1. That any activity has occurred, or will occur, that would result in the discharge of any toxic pollutant listed in 314 CMR 3.17: *Appendix B - Toxic Pollutants* not limited by the permit, if that discharge will exceed the highest of the following notification levels:
 - a. 100 micrograms per liter (100 ug/l);
 - b. 200 micrograms per liter (200 ug/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
 - c. Five times the maximum concentration value reported for that pollutant in the permit application; or
 - 2. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.
- (h) Indirect dischargers. All Publicly Owned Treatment Works shall provide adequate notice to the Department of the following:
 - 1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to § 301 or 306 of the Federal Act, 33 U.S.C. § 1311 or 1316, if it were directly discharging those pollutants; and
 - 2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- (i) Information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.
- (j) The permittee shall notify the Department in writing within seven days of any change in contract operators.

- (21) Signatory requirement. All applications, reports, or information submitted to the Department shall be signed and certified in accordance with 314 CMR 3.15 and 5.14.
- (22) Severability. The provisions of the permit are severable, and if any provision of the permit, or the application of any provision of the permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of the permit, shall not be affected thereby.
- (23) Reopener clause. The Department reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26 through 53 or the Federal Act, 33 U.S.C. §1251 *et seq.* in order to bring all discharges into compliance with said statutes.
- (24) Approval of treatment works. All discharges and associated treatment works authorized in 314 CMR 5.00 shall be consistent with the terms and conditions of this permit. Any modification to the approved treatment works shall require written approval of the Department prior to the construction of the modification.
- (25) Transfer of Permits.
- (a) RCRA facilities. Any permit which authorizes the operation of a RCRA facility subject to the requirements of 314 CMR 8.07: *Standards for all other RCRA Facilities* shall be valid only for the person to whom it is issued and may not be transferred.
 - (b) Transfers by modification. Except as provided in 314 CMR 5.16(25)(a) and (c), a permit may be transferred by the permittee to a new owner or operator provided that the permit has been modified or revoked and reissued or a minor modification is made to identify the new permittee in accordance with 314 CMR 5.12(3) and (4).
 - (c) Automatic transfers. For facilities other than Privately Owned Wastewater Treatment Facilities (PWTFs) that treat at least some sewage from residential uses, hospitals, nursing or personal care facilities, residential care facilities, or assisted living facilities, PWTFs that have been required to establish, fund and maintain financial assurance mechanism(s) pursuant to 314 CMR 5.15(6), and RCRA facilities subject to the requirements of 314 CMR 8.07: *Standards for all other RCRA Facilities*, a permit may be automatically transferred in accordance with 314 CMR 5.12(5).
- (26) Permit Compliance Fees and Inspection Information. Except as otherwise provided, any permittee required to obtain a ground water discharge permit pursuant to M.G.L.

c. 21, § 43, and 314 CMR 5.00 shall submit the annual compliance assurance fee established in accordance with M.G.L. c. 21A, § 18 and 310 CMR 4.00: *Timely Action Schedule and Fee Provisions*, as provided in 314 CMR 2.12: *Applications, Fees and Inspection Information*. The requirement to submit the annual compliance fee does not apply to any local government unit other than an authority. Any permittee required to obtain a ground water discharge permit pursuant to M.G.L. c. 21, § 43 and 314 CMR 5.00, may be required to submit inspection information annually, as provided in 314 CMR 2.12.



Massachusetts Department of Environmental Protection
One Winter Street, Boston MA 02108 • Phone: 617-292-5751
Communication For Non-English Speaking Parties - 310 CMR 1.03(5)(a)



1 English:

This document is important and should be translated immediately. If you need this document translated, please contact MassDEP's Diversity Director at the telephone numbers listed below.



2 Español (Spanish):

Este documento es importante y debe ser traducido inmediatamente. Si necesita este documento traducido, por favor póngase en contacto con el Director de Diversidad MassDEP a los números de teléfono que aparecen más abajo.



3 Português (Portuguese):

Este documento é importante e deve ser traduzida imediatamente. Se você precisa deste documento traduzido, por favor, entre em contato com Diretor de Diversidade da MassDEP para os números de telefone listados abaixo.



4(a) 中國（傳統） (Chinese (Traditional):

本文件非常重要，應立即翻譯。如果您需要翻譯這份文件，請用下面列出的電話號碼與MassDEP的多樣性總監聯繫。



4(b) 中国（简体中文） (Chinese (Simplified):

本文件非常重要，应立即翻译。如果您需要翻译这份文件，请用下面列出的电话号码与MassDEP的多样性总监联系。

This information is available in alternate format. Please contact MassDEP at 617-292-5500.
TTY# MassRelay Service 1-800-439-2370
MassDEP Website: www.mass.gov/dep
Printed on Recycled Paper



5 Ayisyen (franse kreyòl) (Haitian) (French Creole):

Dokiman sa-a se yon bagay enpòtan epi yo ta dwe tradui imedyatman. Si ou bezwen dokiman sa a tradui, tanpri kontakte Divèsite Direktè MassDEP a nan nimewo telefòn ki nan lis pi ba a.



6 Việt (Vietnamese):

Tài liệu này là rất quan trọng và cần được dịch ngay lập tức. Nếu bạn cần dịch tài liệu này, xin vui lòng liên hệ với Giám đốc MassDEP đa dạng tại các số điện thoại được liệt kê dưới đây.



7 ប្រទេសកម្ពុជា (Kmer (Cambodian):

ឯកសារនេះគឺមានសារៈសំខាន់និងគួរត្រូវបានបកប្រែភ្លាមៗ ប្រសិនបើអ្នកត្រូវបានបកប្រែឯកសារនេះសូមទំនាក់ទំនងឆ្នោតជានាយក MassDEP នៅលេខទូរស័ព្ទដែលបានរាយខាងក្រោម។



8 Kriolu Kabuverdianu (Cape Verdean):

Es documento é importante e deve ser traduzido imediatamente. Se bo precisa des documento traduzido, por favor contacta Director de Diversidade na MassDEP's pa es numero indicode li d'boche.



9 Русский язык (Russian):

Этот документ является важным и должно быть переведено сразу. Если вам нужен этот документ переведенный, пожалуйста, свяжитесь с директором разнообразия MassDEP по адресу телефонных номеров, указанных ниже.



10 العربية (Arabic):

هذه الوثيقة الهامة وينبغي أن تترجم على الفور. إذا كنت بحاجة إلى هذه الوثيقة المترجمة، يرجى الاتصال مدير على أرقام الهواتف المدرجة أدناه PMassDE التنوع في.



11 한국어 (Korean):

이 문서는 중요하고 즉시 번역해야 합니다. 당신이 번역이 문서가 필요하다면 아래의 전화 번호로 MassDEP의 다양성 감독에 문의하시기 바랍니다.



12 հայերեն (Armenian):

Այս փաստաթուղթը շատ կարևոր է եւ պետք է թարգմանել անմիջապես. Եթե Ձեզ անհրաժեշտ է այս փաստաթուղթը թարգմանվել դիմել MassDEP բազմազանությունը տնօրեն է հեռախոսահամարների թվարկված են ստորև.



13 فارسی (Farsi (Persian):

این سند مهم است و باید فوراً ترجمه شده است.

در شماره تلفن های ذکر شده MassDEP اگر شما نیاز به این سند ترجمه شده، لطفاً با ما تماس تنوع مدیر در زیر.



14 Français (French):

Ce document est important et devrait être traduit immédiatement. Si vous avez besoin de ce document traduit, s'il vous plaît communiquer avec le directeur de la diversité MassDEP aux numéros de téléphone indiqués ci-dessous.



15 Deutsch (German):

Dieses Dokument ist wichtig und sollte sofort übersetzt werden. Wenn Sie dieses Dokument übersetzt benötigen, wenden Sie sich bitte Diversity Director MassDEP die in den unten aufgeführten Telefonnummern.



16 Ελληνική (Greek):

Το έγγραφο αυτό είναι σημαντικό και θα πρέπει να μεταφραστούν αμέσως. Αν χρειάζεστε αυτό το έγγραφο μεταφράζεται, παρακαλούμε επικοινωνήστε Diversity Director MassDEP κατά τους αριθμούς τηλεφώνου που αναγράφεται πιο κάτω.



Adjudicatory Hearing Fee Transmittal Form

IMPORTANT! This form is intended for fee transmittal only. The contents of a request for an adjudicatory appeal (Notice of Claim) are established at 310 CMR 1.01(6) and the substantive statutes and regulations governing the Department's action.

A. Person/Party Making Request

1. Name and address of person or party making request:

Association to Preserve Cape Cod, Inc., et al.

Name - If appropriate, name group representative

482 Main Street (APCC)

Street Address

Dennis

City

MA

State

02638

Zip Code

2. Project Information:

0 and 375 Sandwich Road

Street Address

Falmouth

City

1018-0

MA

State

\$ 100

02536

Zip Code

DEP File or ID Number

Amount of filing fee attached

Email Address

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



B. Applicant (if applicable)

1. Name and address of applicant:

Falmouth Southerly LLC

Name - If appropriate, name group representative

Recreation Park Drive, Suite 204

Street Address

Hingham

City

dcalhoun@saxon-partners.com

Email Address

MA

State

02043

Zip Code

C. Instructions

1. Send this form and check or money order of \$100.00 payable to the Commonwealth of Massachusetts to the MassDEP Lockbox at:

Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

2. Send a **copy** of this form and a **copy** of the check or money order with the Request for Adjudicatory Appeal (Notice of Claim) to:

MassDEP Office of Appeals and Dispute Resolution
Case Administrator
100 Cambridge Street, Suite 900
Boston, MA 02114

Hill Law
6 Beacon Street, Suite 600
Boston, MA 02108

Eastern Bank
65 Beacon Street
Boston, MA 02108
53-179/113

6778

3/20/2026

PAY TO THE ORDER OF Commonwealth of Massachusetts

\$**100.00

One Hundred and 00/100

DOLLARS

OADR

MEMO Falmouth 40B GWDP appeal filing fees

AUTHORIZED SIGNATURE

⑈006778⑈ ⑆011301798⑆ 1177810501⑈

Hill Law

6778

Commonwealth of Massachusetts
Date 3/20/2026 Type Bill Reference

Original Amt.
100.00

Balance Due
100.00

3/20/2026
Discount

Payment
100.00
100.00

Check Amount

Cambridge Trust Busi Falmouth 40B GWDP appeal filing fees

100.00

Hill Law

6778

Commonwealth of Massachusetts
Date 3/20/2026 Type Bill Reference

Original Amt.
100.00

Balance Due
100.00

3/20/2026
Discount

Check Amount

Payment
100.00
100.00

Cambridge Trust Busi Falmouth 40B GWDP appeal filing fees

100.00

EXHIBIT B
(Public Comments from APCC, CLT, Deegan and Horsley)



Andrew Gottlieb
Executive Director

BOARD OF DIRECTORS

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Kris Ramsay

Dottie Smith

Becca Solomont

Marcie Truesdale

January 29, 2026

Bonnie Heiple, Commissioner
Massachusetts Department of Environmental Protection
100 Cambridge St.
Boston MA, 02108

RE: Easterly Draft Groundwater Discharge Permit

Dear Commissioner Heiple:

The Association to Preserve Cape Cod (APCC) has reviewed the Draft Individual Groundwater Discharge Permit Application No. 25-WP79-0137-APP submitted by Falmouth Southerly, LLC for the Easterly project in Falmouth, MA. We recognize that the period to submit comments closed on December 26, 2025, but we have serious concerns regarding the draft permit and wish to go on record with those concerns. We ask that the Department use its discretion to include our comments in the process of making a final determination on the permit.

Founded in 1968, APCC is the Cape region's leading nonprofit environmental advocacy and education organization, working for the adoption of laws, policies and programs that protect, preserve and restore Cape Cod's natural resources. APCC focuses our efforts on the protection of groundwater, surface water, and wetland resources, preservation of open space, the promotion of responsible, planned growth and the achievement of an environmental ethic.

"The Easterly" is a Chapter 40B multi-family housing project comprised of 300-units of rental apartments totaling 463 bedrooms located on a 29-acre lot with frontage on Sandwich Street in Falmouth. The project will include leaching fields and an on-site wastewater treatment plant which will release 49,950 gallons per day of treated wastewater. The wastewater disposal site is within the watershed of Great Pond, a nitrogen impaired estuary.

Section 303(d) of the federal Clean Water Act requires each state to maintain an "Integrated List of Waters" which identifies "waterbodies that are not expected to meet surface water quality." The Great Pond Estuary in Falmouth has been on the 303(d) list since 2002. It has had a DEP-issued TMDL (total maximum daily load, the maximum amount of a pollutant a water can receive and still maintain a water quality

482 Main Street | Dennis, MA 02638
Tel: 508-619-3185 | info@apcc.org | www.apcc.org

standard) for nitrogen since 2006. Meeting the TMDL will require Falmouth to reduce the nitrogen load to Great Pond by 12,154 kilograms per year.

New projects located in the watersheds of waters on this list must not increase pollution loads. The nitrogen reduction targets in the UMass Dartmouth School for Marine Science and Technology (SMAST) Technical Reports, on which all the Cape's nitrogen TMDLs are based, are predicated on new development not increasing nitrogen loading. New development in highly impaired watersheds like Great Pond must offset existing pollution to ensure no net increase in pollution to the listed water. By DEP's own regulations, the Easterly project requires a groundwater discharge permit and any new nitrogen discharge allowed by the permit must be fully offset. The draft permit fails this fundamental test and cannot be finalized without an enforceable offset in place. The draft permit will result in further deterioration of Great Pond and, as such, would constitute a violation of the state's Surface Water Quality Standards (SWQS) and would effectively violate the concept behind the anti-degradation provisions of the SWQS. While the Department has historically not applied this test to groundwater discharge permits, APCC believes that the hydrologic connection between groundwater and surface waters is so intertwined that there is little practical distinction between limits for groundwater and surface water discharges.

In June 2023, Falmouth Wastewater Superintendent Amy Lowell submitted a memorandum to the town manager and other town departments responding to the project proponent's original project application to the Zoning Board of Appeals. The memo described a number of challenges for offsetting the new nitrogen discharges generated by the Easterly project, including that the nearest municipal sewer line is 1.4 miles away at Route 28 and Sandwich Road; the town's discharge capacity at its wastewater treatment plant is severely limited; and the Sandwich Road property is not within a sewer service area described in the town's wastewater plan.

Noting that the developer said the Easterly treatment system would be able to consistently produce an effluent containing 6 mg/L or even 3 mg/L of total nitrogen, the June 2023 memo also stated that those levels should be made a project and permit requirement. However, in May 2025, Wastewater Superintendent Lowell submitted a brief memo to the DEP stating, "The town will, in its Watershed Plan for Great Pond, include a plan for removing the nitrogen load added to the watershed by the Easterly project." Apparently in the interim the town had accepted a \$750,000 "project settlement" to cover the cost of offsetting the new discharge. There is no public accounting of which we are aware that defines what this supposed offset will entail, nor does the permit provide for any discrete and enforceable offset requirement. The result of this failure, regardless of the Town's intention to offset, means that the draft permit fails to comply with DEP's own regulations and that failure is a fatal flaw in the draft.

Even if one were to set aside the vagueness of the offset, the draft groundwater discharge permit allows a discharge of 10 milligrams of nitrogen per liter and a load limit of 346 kilograms of new nitrogen to Great Pond, orders of magnitude higher than the theoretical offset proposed by Falmouth was scaled to address. This permit clearly conflicts with the DEP-issued TMDL for the Great Pond Estuary, which Falmouth is already exceeding by 12,154 kilograms per year. Given the context described above—



significant existing need to reduce discharge, distance to municipal sewer, limited town discharge capacity, etc.—it seems unlikely that the \$750,000 project settlement will come close to offsetting the 346 kilograms of nitrogen allowed by the permit. This rubric, in addition to failing to comply with DEP's own standards, effectively shifts the costs of mitigation of this private for profit project to the taxpayers of Falmouth. Not only will the Falmouth taxpayers subsidize the profits of Easterly's developers, the practical outcome of forcing increased costs on the remediation of Great Pond will be to further delay already unacceptably lengthy remediation timelines for other East Falmouth estuaries like Waquoit Bay. This is poor public policy that conflicts with other DEP efforts to speed remediation of the estuarine environment.

Based on the circumstances present at the Easterly and in the Great Pond Estuary, APCC believes that the Discharge Permit granted by DEP to Falmouth Southerly for the Easterly project directly contradicts DEP's own rules. Not only should this draft not be finalized, but it should also be withdrawn and reissued for public comment only when it can be demonstrated to comply with DEP's own rules and any nitrogen offsets and their associated financial implications are public, well understood and enforceable.

Sincerely,



Andrew Gottlieb
Executive Director

Cc: Gary Moran, Deputy Commissioner
Gerard Martin, SERO Regional Director
Brian Harrington, SERO
Drew Osei, SERO
Lealdon Langley, Director of the Division of Watershed Management
Kathy Baskin, Assistant Commissioner
Amy Lowell, Falmouth



The Coonamessett River Trust

Dedicated to Protecting and Restoring the Coonamessett River



December 26, 2025

Andrew Osei P.E., Chief
Wastewater Management Program
Bureau of Water Resources
Department of Environmental Protection
20 Riverside Drive, Lakeville, MA 02347

RE: Draft GWDP #1018-0

Dear Mr. Osei:

The Coonamessett River Trust (CRT) has reviewed draft groundwater discharge permit to Falmouth Southerly LLC for a project at 375 Sandwich Road, Falmouth, MA. The project is located adjacent to the Coonamessett River, within the watershed of the Great Pond Estuary.

Great Pond has been officially designated as an “impaired water” by the MADEP under Section 303(d) of the federal Clean Water Act. Reductions in nitrogen loading to Great Pond are required to comply with the Clean Water Act. **Massachusetts DEP regulations require that projects in a watershed with impaired waters and TMDLs cause no net increase in nitrogen delivery to those waters. There are no specific actions stated in this permit that will offset the nitrogen released to the groundwater as result of this permit.** This permit will result in a net increase in nitrogen loading to the Great Pond Watershed. Therefore, it will result in violation of Massachusetts Surface Water Standards. It is clearly inconsistent with local needs to act in accordance with the federal Clean Water Act and the Massachusetts Department of Environmental Protection’s Watershed Permit Regulations that also require nitrogen loading reductions.

We request that this draft permit be modified to: **(1) require a limit of no more than 5 mg N/L of total nitrogen concentration in the effluent released to the groundwater allowed by this permit; and (2) require nitrogen offsets equal to any new nitrogen released by this project plus a margin of safety (suggested to be 20 percent) to account for any unintentional overages in the permit concentration limit. The mechanism (or mechanisms) by which these offsets will be achieved (e.g., by hooking up additional homes to the Falmouth municipal wastewater treatment facility) — whether by the Town or by the developer — and the timeline for implementation should be explicitly described in a modified permit.**

Qualifications of the Coonamessett River Trust: The Coonamessett River Trust (CRT) is a local Falmouth-based group was formed in May of 2006 to promote and preserve the natural heritage and ecological integrity of the Coonamessett River Watershed. The Trust engages in scientific, educational and recreational activities focused on the Coonamessett River and its

watershed. The CRT has an eight-person board consisting of Falmouth residents who are concerned citizens with considerable expertise in wetland and environmental science, environmental policy, and environmental education.

The CRT engages citizens in the protection and enjoyment of the Coonamessett River and its watershed in multiple ways. These CRT spearheaded and advocated for restoration of town-owned former cranberry bogs along the Coonamessett River. CRT members argued for multiple phases of bog restoration at Falmouth Town Meeting. The CRT has led efforts to monitor the water quality of the Coonamessett River, including where it discharges to Great Pond. The CRT has monitored the changes in the Coonamessett River's environment both before and after major restoration projects that took place in 2017-2018, 2019-2020, and 2024-2025. These include monitoring plant communities, the structure of the river channel, and the chemistry of the water in the river and incoming groundwater. Special projects supported by the CRT include studies of river habitats, the measurement of nitrogen uptake within the river channel, and deployment of game cameras at selected locations.

The CRT oversees a group of 40+ local volunteers who count river herring daily from mid-April to early June. The CRT organized a project to tag incoming river herring each spring for 10 years. That project included two years of video monitoring of the spring herring migration.

The CRT and its affiliated volunteers sponsor field trips for fourth and fifth graders in Falmouth public schools. Every Falmouth public school student now visits the Coonamessett River once in fourth and once in fifth grade to learn about local aquatic environments and the potential of ecological restoration to improve the quality of Falmouth's waters and environment.

Falmouth's Investments in the Coonamessett River Watershed: Issuance of this permit would cause serious environmental degradation to the Coonamessett River and its downstream estuary, Great Pond. Significant amounts of time and money have been spent to make this restored open space a "jewel of the town." Nearly \$8.5 million in grants from federal, state and local agencies have funded the restoration of the Coonamessett River. This tally does not include the "in-kind" contributions by Falmouth town departments, nor the many, many volunteer hours from individuals, including many volunteers organized by CRT. More than 50 partners of government agencies, non-profits, science institutions and schools have contributed to the success of the river's restoration. The Coonamessett River restoration is contributing to the return of alewives, blueback herring, American eels, white perch and brook trout to the Coonamessett River. More than 180 species of native plants have returned to the area providing food and shelter for birds and animals. The Coonamessett Greenway Heritage Trail is a hugely popular walking path. **This permit will put this stunning project at risk by allowing non-conforming additional wastewater discharges to the Coonamessett River and Great Pond.**

The Town of Falmouth recently spent almost \$30 million for the Little Pond sewer project, which also removed 1,000 kg/year of nitrogen from the Great Pond watershed. If no offsets are required, this project could potentially negate most of that improvement. Falmouth's November 13, 2024 Fall Town Meeting also voted to appropriate \$3.8 million for the engineering, design and permitting of the wastewater collection system for the northeastern part of the Maravista peninsula and the Teaticket Path peninsula in the Great Pond watershed. To protect the Town's

recent large investment to increase water quality, the DEP should require a wastewater plan, with details, that offsets all of the nitrogen that will be added by this project.

The new nitrogen that will be added to the Coonamessett River and to Great Pond directly contradicts two vital and expensive wastewater improvement projects being undertaken by the Town of Falmouth.

Setting and Groundwater Flow: The location of this project adjacent to the Coonamessett River will result in rapid movement of nitrate-containing effluent to the river. The direction of groundwater movement and the sandy, highly transmissive nature of the soils in the project area and between the project and the Coonamessett River are not in dispute. Studies show that once nitrate in incoming groundwater reaches the Coonamessett River, it will travel with little uptake or attenuation.¹ The short distance of the project from the Coonamessett River (about 1300 feet) means that, at rates of groundwater movement of 0.8 to 2.3 feet per day², that discharged nitrate allowed by this permit will travel to the Coonamessett River within 1.5 to 4.5 years and then once in the river travels immediately to Great Pond little river uptake or attenuation.

Mass DEP's Responsibility to Protect Impaired Waters: Massachusetts DEP regulations require that projects in a watershed with impaired waters and TMDLs cause no net increase in nitrogen delivery to those waters.

MGL c.21 §§26 through 53, states that Mass DEP has a duty and responsibility to protect the public health and enhance the quality and value of the water resources of the Commonwealth. It directs MassDEP to take all action necessary or appropriate to secure to the Commonwealth the benefits of the Clean Water Act.

Massachusetts Groundwater Discharge regulations say that MassDEP “shall not issue a permit pursuant to 314 CMR 5.00 when the discharge will cause or contribute to a violation of 314 CMR 4.00: “*Massachusetts Surface Water Quality Standards*” (MSWQS). 314 CMR 5.06(1). These regulations provide that all permits shall contain limits that “are adequate to protect surface waters for their existing and designated uses and to assure the attainment and maintenance of the [water quality standards]. The regulations require that MassDEP consider natural background conditions and any TMDLs established by Mass DEP. They require DEP to protect existing uses of hydrologically connected downgradient ground waters and surface waters, and not interfere with the maintenance and attainment of beneficial uses in hydrologically connected downgradient waters [314 CMR 5.10(3)].

The water quality standards state that MassDEP “will limit or prohibit discharges of pollutants to surface waters to assure that surface water quality standards of the receiving waters are protected and maintained or attained.” [314 CMR 4.03(1)(a)]. The Massachusetts Surface Water Quality regulations make clear that “discharges shall be limited or prohibited to protect existing uses and

¹ Qian, A., C. Neill, M. Welsh, C. Kennedy. Impact of cranberry bog restoration in nutrient uptake and channel habitat in the Coonamessett River. 2023 Semester in Environmental Science, Final Project. Marine Biological Laboratory, Woods Hole, MA.

² LeBlanc, D. R. 1984. Digital modeling of solute transport in a plume of sewage-contaminated ground water. U.S. Geological Survey Open-File Report 84-475, p. 11-46.

not interfere with the attainment of designated uses in downstream and adjacent segments. Further, Mass DEP will provide a reasonable margin of safety to account for any lack of knowledge concerning the relationship between the pollutants being discharged and their impact on water quality.

The Massachusetts water quality standards require Mass DEP to apply additional minimum nutrient criteria requiring that all surface waters “shall not exceed the site-specific criteria developed in a TMDL [314 CMR 4.05(c)].

Because Great Pond is an officially-listed 303(d) impaired water with a TMDL, any increase in nitrogen will exceed the TMDL criteria. No additional nitrogen releases should be allowed under this permit.

By the issuance of new regulations on August 4, 2023 (314 CMR 21.00), the Mass DEP now requires towns to develop watershed management plans that describe how the watershed will meet Massachusetts Surface Water Standards within 20 years. The Falmouth Water Quality Management Committee voted to move ahead with preparation of watershed plans. These will involve combinations of: (1) expanded areas served by municipal sewerage, (2) conversion of current Title V septic systems to denitrifying systems, and (3) potentially some other technologies such as urine diversion.

The Town of Falmouth’s letter signed by Wastewater Superintendent Amy Lowell of May 1, 2025 states that the Town of Falmouth shall, in its watershed plan for Great Pond, “include a plan for removing the watershed load added to the watershed by the Easterly project.”

This statement is totally inadequate for describing the removal of the nitrogen added by the proposed project and should not be used as the basis for issuing a permit.

First, the Town’s promised offsets in the May 1 letter are based on a permit discharge limit of 5 mg N/L, not the 10 mg N/L allowed by this draft permit.

Second, **absolutely no details are provided in the Town’s letter about how or when these offsets will be achieved.** This lack of detail is completely inappropriate for the issuance of an actual groundwater discharge permit. The proposed one-time settlement payment of \$750,000 to the Town of Falmouth comes nowhere close to covering the cost of the appropriate level of nitrogen offsets required to reach net-zero nitrogen discharge for this project. It directly contradicts the Town’s claim, in a memo of June 30, 2023 written by Amy Lowell that, “there is no existing sewer line in the vicinity,” and that, “[M]ore importantly, the Town’s wastewater treatment and discharge facilities do not have the capacity to accommodate the wastewater flow from this development” unless the Town reduces the extent of planned sewerage elsewhere. This would require re-writing the state accepted Targeted Watershed Management Plans (TWMP) already in place for Great Pond and other estuaries, which is a multiyear process and a very expensive proposition.

The Town’s acceptance of \$750,000 for nitrogen offsets, an amount that is totally inadequate for the required level of nitrogen mitigation from this development in the Great Pond watershed, will be asking Falmouth residents to bear the burden of removing the nitrogen from this development. It is unfair to ask homeowners to shoulder a greater burden to remove nitrogen than will be

required of this project. It is unsound policy to allow an increase of nitrogen releases that will require the Town to request more taxpayer monies — which the Town may not vote to do — for the additional nitrogen clean-up this draft permit will undoubtedly require. Additionally, the money would not be transferred to the town until occupancy, which means a multi-year delay *after* the development is already polluting the river and estuary for any mitigation to begin.

Specific Comments:

1. The Project is located within the watershed to the Coonamessett River and the Great Pond Estuary. It lies within the Great Pond Coastal Pond Overlay District. These areas have formal designations and minimum performance standards for water quality are required by federal, state, and local laws.
2. Great Pond has been officially designated as an “impaired water” by the MADEP under Section 303(d) of the federal Clean Water Act. Reductions in nitrogen loading from the Great Pond watershed are required to comply with the Clean Water Act.
3. The Massachusetts Estuaries Project (MEP) prepared a report that documented water quality degradation and required nitrogen loading reductions. The MEP report requires a reduction of 2,752 kg N/year for the Coonamessett River-Great Pond watershed³.
4. Based on the MEP report, the MADEP published a Total Maximum Daily Load (TMDL) report that official documents the water quality impairment in the Great Pond estuary and the required nitrogen loading reductions. The TMDL report requires a reduction of 2,752 kg/year Coonamessett River-Great Pond watershed⁴.
5. The town of Falmouth developed a Comprehensive Wastewater Management Plan (CWMP), a Targeted Watershed Management Plan (TWMP), land use regulations (Zoning Bylaw) to restrict future increases in nitrogen loading, and new regulations requiring denitrifying septic systems for new construction, thus demonstrating a commitment to federally and state-required nitrogen loading reductions⁵.
6. Falmouth’s CWMP and TWMP plans that address “local needs” have been formally approved by the Commonwealth of Massachusetts DEP. Falmouth has invested significant Town funds to develop these plans to reduce the required nitrogen loading in this watershed in conformance with state and federal laws.
7. According to the Hydrogeologic Report prepared by the Applicant’s consultant, Geohydrocycle, the Project will discharge 49,950 gallons/day of wastewater within the watershed⁶.

³ Massachusetts Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond and Bournes Pond, Falmouth, Massachusetts, 2005.

⁴ Systems Total Maximum Daily Loads For Total Nitrogen (Report # 96-TMDL-6 Control #181.0), 2006.

⁵ Falmouth Zoning Bylaw, ARTICLE 7 OVERLAY DISTRICTS, 240 – 7.2 Coastal Pond Overlay District and ARTICLE 13 PERFORMANCE REQUIREMENTS, 240 – 13.1 Specified Performance Standards.

⁶ Geohydrocycle, Hydrogeologic Report (submitted to MADEP), October 9, 2024.

At the allowed treatment level and effluent concentration of 10 mg N/L, this represents an additional nitrogen load of 690 kg N/yr within the Coonamessett River-Great Pond watershed that will need to be offset.

At a potential treatment level and effluent concentration of 5 mg N/L, this would represent an additional nitrogen load of 345 kg N/yr within the Coonamessett River-Great Pond watershed that will need to be offset.

The project will also generate nitrogen loading from lawn runoff and stormwater. The proponent's Hydrologic Report states the nitrogen loading to be 8 kg N/yr from fertilizer and 33 kg N/yr from stormwater. Nitrogen from these sources are not proposed for N removal treatment, thus they add to the project's N load to the watershed.

Table 1. Calculation of appropriate offsets based on 10 mg N/L or 5 mg N/L treatment levels and a project flow of 49,950 gallons per day.

Treatment level	N loading from wastewater (kg)	N loading from lawns and stormwater (kg)	Total N loading	Margin of safety (20%)	Appropriate total N offset
10 mg/L	690	41	731	146	877
5 mg/L	345	41	386	77	463

8. The draft permit is internally inconsistent. It states a concentration limit of 10 mg total N/L but also states an annual nitrogen load limit of 346 kg N/yr that is based on an average annual concentration of 5 mg N/L.

9. The draft permit does not require the elimination of fertilizer, fertilizer reduction, or even any fertilizer management. Fertilizer is a known source of nitrogen to Falmouth's estuaries⁷. Fertilizer management was expected to be incorporated into the groundwater discharge permit but is not in this draft permit.

10. The original plan for the Easterly development called for a permeable reactive barrier (PRB) to be installed between the groundwater discharge site and the Coonamessett River. PRBs have been shown in Falmouth to be effective in removing nitrate from the groundwater that flows through them and have the potential to treat not only water released on the Saxon Partners property but in ambient groundwater. Not requiring the PRB as part of the permit requirement significantly increased the total nitrogen that will reach the Coonamessett River and Great Pond from this project.

Comment on Transparency Within the Town of Falmouth:

The Town of Falmouth's decision to accept \$750,000 to bring this project to net zero nitrogen released by this project was made behind closed doors and without public discussion. No plan—not a single detail or even a generic approach planned—is provided as to how the \$750,000 will achieve the offset. Bringing this project to net zero nitrogen—as required by law—will undoubtedly require approval of more public funds by Falmouth Town Meeting. Approval of

⁷ Valiela, I., G. Collins, J. Kremer, K. Lajtha, M. Geist, B. Seeley, J. Brawley, C. H. Sham. 1997. Nitrogen loading from coastal watersheds to receiving estuaries: a new method and application. *Ecol. Appl.* 7(2): 358-380.

such funds is not guaranteed; therefore this permit cannot ensure that the nitrogen reductions stated in Amy Lowell's May 1, 2025 letter can be achieved by the Town.

Sincerely,

A handwritten signature in blue ink that reads "Wendi Buessler". The signature is written in a cursive, flowing style.

Wendi Buessler, President

158 Lakeview Ave.
Falmouth, MA 02540



TOWN of FALMOUTH

DEPARTMENT OF PUBLIC WORKS, WASTEWATER DIVISION

416 GIFFORD STREET, FALMOUTH, MASSACHUSETTS 02540
TELEPHONE (508) 457-2543 x 3018

AMY LOWELL
WASTEWATER SUPERINTENDENT

MEMORANDUM

To: Town Manager

Cc: Town Planner, Zoning Administrator

Date: June 30, 2023

Re: Wastewater Division Comments on Saxon Partners' Comprehensive Permit Application for Proposed Development at 375 Sandwich Road

Saxon Partners has submitted a Comprehensive Permit application for a plan to construct a 300 unit residential development at 375 Sandwich Road. The way the proposed development is concentrated on one third of the available lot area (with no conservation or other restriction proposed on the rest of the area) indicates that additional development of up to 600 additional units may be envisioned for the property. Saxon Partners has estimated that the average wastewater flow would be 30,550 gallons per day for the development at 300 units (91,670 gallons per day at 900 units). However, at a standard design flow of 110 gallons per day per bedroom and the planned 470 bedrooms, the wastewater flow from the 300 unit development would be 51,700 gallons per day.

The utilities plan in the developer's permit application shows a "proposed connection to existing sewer main" on Sandwich Road. However, there is no existing sewer main in the vicinity. The closest municipal sewer collection main is about 1.4 miles away on Route 28 at Sandwich Road. More importantly, the Town's wastewater treatment and discharge facilities do not have capacity to accommodate the wastewater flow from this development, unless the Town either reduces the scale of the Town's planned Teaticket-Acepesket sewer project or reduces the flow allocation for redevelopment within the existing sewer area (including Main Street and Davis Straits). There are additional constraints as well, as explained below.

The parcel at 375 Sandwich Road is currently undeveloped and is within the watershed to Great Pond. The water quality and habitat of Great Pond is significantly impaired by nitrogen, primarily from septic systems (Massachusetts Estuaries Project report, 2005). The state issued a Total Maximum Daily Load (TMDL) for nitrogen for Great Pond in 2006 in order to restore its water quality.

On June 21, 2023, the state issued new regulations, including changes to septic system regulations (310 CMR 15.000) and new watershed permit regulations (314 CMR 21.00). These new regulations designate all water bodies on Cape Cod with TMDLs as Nitrogen Sensitive Areas (NSAs). The regulations then require that towns obtain watershed permits for all NSAs and implement plans to meet their TMDLs within 20 years, *or* that all property owners within each NSA replace their septic system with a denitrifying septic system.

According to the Massachusetts Estuaries Project, meeting the TMDL for Great Pond will require reducing the nitrogen load to Great Pond by 12,154 kilograms per year (kg/yr). Any additional nitrogen discharged to the Great Pond watershed will then *also* need to be removed in order to meet the TMDL. Saxon Partners has indicated that they could construct a wastewater treatment facility onsite that would discharge 6 milligrams per liter (mg/L), (or even 3 mg/L) of total nitrogen. However, we must assume unless/until that limit is made a requirement for the project, the state that the Department of Environmental Protection would issue a standard groundwater discharge permit for this private treatment plant of 10 mg/L. At 10 mg/L and 30,550 gallons per day, Saxon Partners' proposed 300 unit development would add 422 kilograms of nitrogen per year to the Great Pond watershed, if the wastewater treatment facility consistently achieves a permit limit of 10 mg/L. At 10 mg/L and 51,700 gallons per day, the 300 unit development would add 714 kg of nitrogen per year to the Great Pond watershed.

In 2017, the Town completed the Little Pond sewer project which, for a cost of more than \$20 million dollars, removed 1000 kg/yr of nitrogen from the Great Pond watershed (as well as more than 4,000 kg/yr of nitrogen from the Little Pond watershed).

After years of data collection and evaluation, the Town sent a final plan for reducing nitrogen load to Great Pond to the state in late 2022, the Great Pond Targeted Watershed Management Plan (TWMP). The state approved the TWMP for Great Pond in January 2023. The TWMP involves:

- Expansion of the Town's existing wastewater collection and transmission system to include approximately 2,000 properties in the lower watershed to Great Pond (the Teaticket and Acapesket sewer areas or TASA, both south of route 28), in two phases over approximately 8-10 years,
- Constructing significant improvements at the town's wastewater treatment facility,
- Expanding the town's existing recharge beds north of the treatment plant to accommodate additional wastewater flow, and
- Several alternative nitrogen removal technologies including aquaculture, a permeable reactive barrier, fertilizer reduction and stormwater management.

That plan will remove sufficient nitrogen load from the watershed to meet the TMDL for Great Pond. Saxon Partners' proposed development at 375 Sandwich Road was not envisioned in the TWMP; the plan does not account for the additional 422 kg/yr (or 714 kg/yr) nitrogen load from this development. Any additional load from this development will need to be removed from the watershed (or offset by removing a nitrogen load from a different source), in order to meet the TMDL.

Saxon partners has proposed that the wastewater from their proposed development be conveyed to the Town's WWTF for treatment. The property at 375 Sandwich Road is not located within a planned sewer service area in the approved TWMP. The Massachusetts Environmental Policy

Act requires that if the Town did wish or need to modify its TWMP to change the sewer service area, (or to increase the treatment plant capacity or increase its wastewater discharge or change wastewater discharge location), the Town would need to prepare a Notice of Project Change to the TWMP, go through the Massachusetts Environmental Policy Act review process again and receive state approval for the change.

The Town has just gone out to bid for construction of the estimated \$34.5 million dollar WWTF TASA Improvements Project planned in the approved TWMP. The total capacity of the WWTF will be 1.21 million gallons per day. That capacity is allocated for: existing sewer areas, the Teaticket and Acapesket sewer areas, and for redevelopment within the existing sewer areas. The Town's WWTF does not have treatment capacity for the >30,000 gallons per day of flow from the proposed Saxon partners development (or the > 50,000 gallons per day assuming standard design flow per bedroom).

Saxon Partners has suggested that flow from their development (and/or potentially from adjacent properties) be discharged at the Town's existing discharge sites. The Town's wastewater discharge capacity at existing discharge areas is severely limited. It would not be possible to increase treated wastewater discharge to the Town's existing discharge beds 1-15 beyond what is planned in the Town's approved TWMP. Discharge to beds 1-13 is strictly limited to 450,000 gallons per day by the TMDL for West Falmouth Harbor (and by the treatment plant's groundwater discharge permit). Discharge to the remaining beds, 14 and 15, is limited by the available area and by the downgradient receptors; the town's approved TWMP maximizes the discharge potential at beds 14 and 15. The Town's WWTF does not have discharge capacity for the additional flow from the proposed Saxon partners development.

Saxon partners has also suggested that treated wastewater flow could be discharged to new discharge beds on the abandoned sand pit north of 375 Sandwich Road. This site is within the watershed to Great Pond, so any nitrogen load returned to this site would add nitrogen to Great Pond. However, if the property is developed, this is the appropriate location for its treated wastewater discharge.

Saxon Partners has suggested that perhaps an arrangement could be made whereby the Town could own and operate the discharge site at the sand pits north of 375 Sandwich Road, and could therefore use the site for discharge of treated wastewater from other properties (beyond that from their development). It is true that the Town has very limited discharge capacity. However, the issue is not so much the availability of land (the nearby town-owned Augusta site is still being considered a "back-up" future discharge site). The issue is that 375 Sandwich Road (like the Augusta site) is located within the watershed to already nitrogen-impaired Great Pond, so any additional nitrogen discharged there will impact Great Pond water quality and must be offset, in order to meet the TMDL for Great Pond.

Under these circumstances, the only viable option for wastewater management from this site is onsite treatment and discharge. If this site is to be developed as proposed, the developer must: (a) construct and maintain a high quality wastewater treatment system onsite (developer has indicated that they could consistently produce an effluent containing 6 mg/L or even 3 mg/L of total nitrogen; this should be made a project and permit requirement), (b) discharge the treated wastewater onsite and, (c) to the degree possible, offset the additional nitrogen load that this discharge would contribute to the watershed.



TOWN of FALMOUTH

DEPARTMENT OF PUBLIC WORKS, WASTEWATER DIVISION

416 GIFFORD STREET, FALMOUTH, MASSACHUSETTS 02540
TELEPHONE (508) 457-2543 x 3018

AMY LOWELL
WASTEWATER SUPERINTENDENT

May 1, 2025

Drew Osei
MassDEP-SERO
20 Riverside Drive
Lakeville, MA 02347

Re: 375 Sandwich Road Nitrogen Load in Great Pond Watershed

Dear Mr. Osei,

You requested a letter stating how nitrogen load from the development at 375 Sandwich Road (the Easterly) would be handled in the Town's watershed plan for Great Pond.

The Town will, in its Watershed Plan for Great Pond, include a plan for removing the nitrogen load added to the watershed by the Easterly project. This plan will take into account the 5 mg/L total nitrogen effluent limit expected in the DEP's groundwater discharge permit for the Easterly's WWTF and will involve use of the \$750,000 project settlement for nitrogen mitigation in this watershed.

Sincerely,

Amy Lowell

cc via email:

Brian Harrington, MassDEP
Mike Renshaw, Falmouth Town Manager
Peter Johnson-Staub, Falmouth Assistant Town Manager
Maura O'Keefe, Town Counsel
Peter McConarty, Falmouth DPW Director
Noreen Stockman, Zoning Board Administrator
David Calhoun, Saxon Partners

Scott Horsley
Water Resources Consultant
65 Little River Road • Cotuit, MA 02108 • 508-364-7818

March 10, 2025

Mr. Jeff Gould
MassDEP Southeast Regional Office
20 Riverside Drive
Lakeview, MA 02347

Ms. Susan Murphy, Chair
Falmouth Zoning Board of Appeals
59 Town Hall Square
Falmouth, MA 02540

Ms. Amy Lowell, Wastewater Superintendent
Town of Falmouth
416 Gifford Street
Falmouth, MA 02540

Mr. George Pucci, Special Counsel to the town of Falmouth
KP Law
101 Arch Street, 12 Floor
Boston, MA 02110

RE: The Easterly - 375 Sandwich Road in Falmouth, Massachusetts

Dear Mr. Gould, Ms. Murphy, Ms. Lowell, and Mr. Pucci:

I have been retained by concerned abutters to the above-referenced project including Fran Chevarley at 40 Meredith Drive to review the water quality impacts of the above-referenced project.

Experience and Qualifications: I am a hydrologist with over thirty years of experience in evaluating water resources projects designed to protect and/or restore water quality. I have worked as a consultant to federal, state, and local government agencies, non-governmental organizations, and private industry throughout the United States, Central America, the Caribbean, the Pacific Islands, Bulgaria, and China. I have served as an instructor for a nationwide series of United States Environmental Protection Agency (USEPA) workshops on drinking water protection and watershed management and am currently working for the USEPA, Office of Research and Development. I have also served on numerous advisory boards to the USEPA, the National Academy of Public

Administration, Massachusetts Department of Environmental Protection (MADEP), Massachusetts Executive Office of Energy and Environmental Affairs, and the National Groundwater Association. I have received national (USEPA) and local awards for my work in the water resources management fields. I currently serve as Adjunct Faculty at Harvard University and Tufts University, where I teach graduate level courses in water resources policy, wetlands management, green infrastructure, and low impact development. These courses focus on the critical role of local governments who have the primary responsibility and authority of regulating land uses in critical water resource protection areas. I have served as an expert witness in several prior litigation matters in federal court on behalf of the USEPA and the U.S. Department of Justice (DOJ) as well as state court and administrative appeals before the MADEP.

I am currently serving as a consultant to the towns of Wellfleet and Truro, MA where I am providing wastewater management design advice on three MGL Chapter 40B projects which will add over 600 affordable housing units. All three of these projects will be served with on-site wastewater treatment plants and will achieve a “net zero” nitrogen load, as required by state and federal laws.

General Comments: The proposed Project is located within a critical watershed to the Coonamessett River and Great Pond, both of which have been documented to be nitrogen-sensitive areas (under state law) and where water quality restoration efforts are required by the Clean Water Act (federal law). I understand that Chapter 40B projects are not exempt from and must comply with state and federal laws. Furthermore, and additionally, they must consider valid “local needs”.

The proposed Project will add significant wastewater disposal and associated nitrogen loading within these watersheds where reductions are required by federal and state laws. The Project will contribute to violations of the Massachusetts Surface Water Quality Standards, is inconsistent with “local needs” to comply with the federal Clean Water Act and the Massachusetts Watershed Permit Regulations and does not comply with the Massachusetts Groundwater Discharge Permit Regulations. My specific comments are as follows.

Specific Comments:

1. The Project is located within the watershed to the Coonamessett River, the watershed to Great Pond, and within the Great Pond Coastal Pond Overlay District. These critical areas are formally identified in and along with minimum performance standards in federal, state, and local laws.

2. Great Pond has been officially designated as an “impaired water” by the MADEP under Section 303(d) of the federal Clean Water Act. Reductions in nitrogen loading are required to comply with the Clean Water Act and the Massachusetts Watershed Permit Regulations (314 CMR 21.00)¹.
3. The Massachusetts Estuaries Project (MEP) was commissioned by MADEP and documented water quality impairments and required nitrogen loading reductions. The MEP report requires a reduction of 33% of the existing nitrogen load and 50% of the existing nitrogen load from septic systems for the Coonamessett River/Great Pond watershed².
4. Incorporating the MEP report, the MADEP published a Total Maximum Daily Load (TMDL) report officially documenting the water quality impairment and the required nitrogen loading reductions. The TMDL report requires a reduction of 33% of the existing nitrogen load and 50% of the existing nitrogen load from septic systems for the Coonamessett River/Great Pond watershed³.
5. The town of Falmouth has committed to these federally and state-required nitrogen loading reductions by developing a Comprehensive Wastewater Management Plan (CWMP), a Targeted Watershed Management Plan (TWMP) and implementing land use regulations (Zoning Bylaw) to restrict future increases in nitrogen loading⁴.

¹ Necessary Nitrogen Load Reductions – The proportion of the total Controllable Attenuated Nitrogen Load that must be reduced in order to restore the waterbody to applicable water quality and habitat quality restoration goals that have been identified in a TMDL, Alternative Restoration Plan, MEP Report, or Scientific Evaluation as being necessary to meet the designated uses of the waterbody established by the Department under 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

² Massachusetts Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond and Bournes Pond, Falmouth, Massachusetts, 2005. Tables VIII-3 and VIII-4.

³ Massachusetts Department of Environmental Protection, FINAL Great, Green and Bournes Pond Embayment Systems Total Maximum Daily Loads For Total Nitrogen (Report # 96-TMDL-6 Control #181.0), 2006.

⁴ Falmouth Zoning Bylaw, ARTICLE 7 OVERLAY DISTRICTS, 240 – 7.2 Coastal Pond Overlay District and ARTICLE 13 PERFORMANCE REQUIREMENTS, 240 – 13.1 Specified Performance Standards.

6. All three local initiatives and commitments address “local needs” and have been formally approved by the Commonwealth of Massachusetts. MADEP has approved the CWMP and TWMP plans and the Massachusetts Attorney General has approved the Zoning Bylaw. The town of Falmouth has invested significant funding to develop these plans in conformance with state and federal laws and has appropriated public funds to reduce the required nitrogen loading in this watershed.
7. According to the Hydrogeologic Report prepared by the Applicant’s consultant, Geohydrocycle, the Project proposes to discharge 49,950 gallons/day of wastewater within the watershed⁵. At a presumed treatment level and effluent concentration of 3 mg/liter this represents an additional, increased nitrogen load of 207 kg/yr within the Coonamessett/Great Pond watershed. Including stormwater infiltration and lawn fertilizers, the total project nitrogen load is estimated at 247 kg/yr (see Table 1).
8. To offset this nitrogen load the Project will have to connect 57 existing homes in the neighborhood to the proposed wastewater treatment plant. According to the MEP report each home generates approximately 4.93 kg/year⁶. Connecting these homes to the wastewater treatment plant would lower their effluent nitrogen concentration from 26.25 mg/liter to 3 mg/liter resulting in a net reduction of 4.37 kg/year per home. To achieve the offset of 247 kg/year the Project would have to connect 57 homes to the wastewater treatment plant (see Table 2).

Table 1 – Nitrogen Load Impact (Proposed Project)

wastewater (kg/yr)	207
fertilizer (kg/yr)	8
stormwater (kg/yr)	33
Total Load Addition (kg/yr)	247

⁵ Geohydrocycle, Hydrogeologic Report (submitted to MADEP), October 9, 2024.

⁶ Massachusetts Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond and Bournes Pond, Falmouth, Massachusetts, 2005, Table IV-3.

Table 2 – Potential Nitrogen Offsets with Sewer Connections

existing load/home (on septic)	4.93
load/home with wastewater treatment	0.56
load reduced/home (kg/yr)	4.37
number homes required to be sewerred	57
Total Load Reduced (kg/yr)	247

9. As currently designed, the Project does not comply with the Falmouth Zoning Bylaw performance standards for nitrogen loading, is inconsistent with the TWMP and will contribute to violations of Surface Water Quality Standards (314 CMR 5.00)⁷.
10. The town of Falmouth was formally designated as a “waste management agency” under the federal Clean Water Act, making the town legally responsible to restore water quality by reducing nitrogen loads to Coonamessett River and Great Pond⁸.
11. The Falmouth Zoning Board of Appeals conditionally-approved the Comprehensive Permit with the understanding (and presumption) that the Project would connect neighboring properties currently on septic systems to the Project’s wastewater treatment plant as an offset to achieve a “net zero” nitrogen loading. However, there is no requirement or funding provided to either construct the treatment plant with this capacity or for the collection system to connect the neighboring homes. Apparently, the developer is assuming or expecting (incorrectly) that the neighbors will pay for the collection system to achieve the required “net zero” performance standards for the benefit of the developer of the Project.

⁷ The Zoning Board of Appeals Decision (Waiver #4), filed with Falmouth Town Clerk July 29, 2024, specifically states that the waiver to comply with the Coastal Protection District was not approved and must be complied with. This retains the performance standard of net zero nitrogen loading.

⁸ Cape Cod Commission, Cape Cod 208 Plan Update (2015)

Summary and Conclusions:

In summary, this Project does not comply with the town of Falmouth Zoning Bylaw and performance standards and is inconsistent with and in conflict with the MADEP-approved Comprehensive Wastewater Management Plan (CWMP), the MADEP-approved Targeted Watershed Management Plan (TWMP), the MADEP Total Maximum Daily Load (TMDL) report, the federal Clean Water Act, the Massachusetts Groundwater Discharge Permit Regulations, and the Massachusetts Surface Water Quality Standards Regulations.

The proposed Project will add nitrogen loading in a watershed where reductions are required by federal and state laws and it will contribute to violations of the Massachusetts Surface Water Quality Standards. The Project does not comply with the required offsets and net-zero nitrogen loading performance standards. I recommend that MADEP require that the Project comply with a net-zero nitrogen loading performance standard.

Please contact me directly with any questions that you might have.

Sincerely,

A handwritten signature in black ink, appearing to be 'Scott W. Horsley', written in a cursive, stylized manner.

Scott W. Horsley

Water Resources Consultant

Areas of Expertise

- Targeted Watershed Planning
- Wastewater & Stormwater Management
- Water Quality Impacts & Restoration
- Green Infrastructure & Nature-Based Solutions
- Hydrologic Modeling & Assessment
- Integrated Water Management
- Smart Growth/ Low Impact Development
- Education & Training

Professional Affiliation

- Tufts University, Graduate Department of Urban and Environmental Planning and Policy
- Harvard University, Extension, Graduate Department of Sustainability
- Massachusetts Stormwater Advisory Committee
- Massachusetts Sustainable Water Management Initiative Advisory Committee
- Massachusetts Climate Change Adaptation Advisory Committee
- MADEP Title 5 Advisory Committee
- Charles River Watershed Association Advisory Board

Scott W. Horsley

Water Resources Consultant and University Lecturer
Curriculum Vitae

Scott Horsley has over 30 years of professional experience as a consultant to federal, state, and local government agencies, non-profit organizations, and private industry throughout the United States, Bulgaria, Nicaragua, the Caribbean, the Pacific Islands, and China. Scott has been an innovator in the environmental profession and thrives on bringing innovative and interdisciplinary approaches to challenging projects. Scott has a strong understanding of the full range of technical, planning, and policy issues associated with water resources and land use management projects. Scott has served as an expert witness in the field of hydrology in numerous state and federal court cases. He has served as an instructor for a nationwide series of U.S. Environmental Protection Agency (EPA) workshops on water resource management. He has also served on numerous advisory boards and committees to the EPA, the National Academy of Public Administration, Massachusetts Department of Environmental Protection (MADEP), Massachusetts Executive Office of Energy and Environmental Affairs (EEA), National Groundwater Association, and Massachusetts Audubon Society. Scott has received national (EPA) and local awards (Mashpee Conservation Commission) for his work in the wetlands and stormwater management fields. Scott Horsley serves as Adjunct Faculty at Tufts University in the Graduate Department of Urban & Environmental Policy & Planning and at the Harvard Extension School in the Graduate Department of Sustainability.

REPRESENTATIVE PROJECTS

Lake Tashmoo Targeted Watershed Plan – Town of Tisbury (Martha’s Vineyard), MA: Working with the Tisbury Water Resources Committee to develop a restoration plan for Lake Tashmoo. According to the Massachusetts Estuaries Project (MEP) Lake Tashmoo is receiving nitrogen loading from wastewater, stormwater and fertilizers and requires a 32% reduction to achieve compliance with the Clean Water Act. The plan will include a sewer collection system, advanced septic systems that use a woodchip bioreactor system, fertigation wells, and stormwater retrofits. A responsible management entity (RME) is being developed to manage the operation, maintenance, and monitoring of the plan.

Wellfleet Targeted Watershed Management Plan – Town of Wellfleet, MA: As a consultant to the Town of Wellfleet prepared a Targeted Watershed Plan including an adaptive management plan integrating non-traditional (nature-based) and traditional (wastewater treatment facilities) nutrient reduction technologies. The plan includes a permeable reactive barrier (PRB), shellfish and aquaculture, ecosystem restoration, stormwater remediation, fertilizer management, and the use of decentralized, on-site septic systems that utilize innovative and alternative technologies. The overall goal of the project is to provide the town guidance in obtaining a MADEP Watershed Permit and compliance with the Clean Water Act. The Targeted Watershed Plan was unanimously approved by the Wellfleet Select Board, was confirmed to be

Awards • Harvard University, Petra Shattuck Excellence in Teaching Award (2023) • Mashpee (MA) Conservation Commission Annual Environmental Achievement Award (2002) • EPA Environmental Technology Innovator Award for Stormwater Treatment Design (1999) Patent United States Patent Number 5,549,817 for Stormwater Treatment System/Apparatus Academic Background Master of Arts, Marine Affairs - Environmental Protection, University of Rhode Island (1981) Marine Ecosystems Research Laboratory, University of Rhode Island (1980) Princeton Groundwater Pollution & Hydrology Course with David Miller, John Cherry, and Robert Cleary (1985) Bachelor of Science, Biology, Southeastern Massachusetts University (1976)	consistent with the Cape Cod 208 Plan by the Cape Cod Commission. The advanced septic system program was approved by the Massachusetts Clean Water Trust for SRF funding and placed on the Intended Use Plan (IUP). Water Resources Management - Manchester-by-the Sea, MA: Scott is serving as a consultant to the town of Manchester-by-the-Sea and their Water Resources Protection Task Force. He is advising on drinking water supply management issues including sustainable yield, source water protection, future water sources, and water rates. Scott has supervised a thermal survey to determine groundwater discharge areas to Gravelly Pond, the town's surface water reservoir and has prepared a hydrologic budget. Watershed Restoration Research Project: Scott is currently working as a member of a research team that includes USEPA Office of Research & Development, United States Geological Survey (USGS), The Nature Conservancy, the Town of Barnstable and the Barnstable Clean Water Coalition. The project is designed to research, develop, and pilot-test multiple nature-based technologies to reduce nutrient loads to the coastal embayment known as Three Bays. Scott assisted in the design of a woodchip-based bioreactor/ permeable reactive barrier (PRB) and is now working with the research team to construct and monitor it as part of a wetland restoration project in a cranberry bog at the headwaters of the watershed. He is also advising on a project to evaluate the use of a new class of innovative and alternative septic systems that utilize a woodchip-based bioreactor. Preliminary data from these systems indicate nutrient reductions of 90%. The project includes the development of a Responsible Management Entity (RME) to oversee the operation, maintenance, and monitoring of the systems. Expert Witness, Hydrologist - United States Environmental Protection Agency and United States Department of Justice – United States v. Charles Johnson (437 F.3d 157, First Circuit Court, 2006): Expert Witness for U.S. Environmental Protection Agency (EPA) and U.S. Department of Justice (DOJ) in a federal Clean Waters Act enforcement case involving the filling of wetlands in Carver, MA by the construction and operation of cranberry bogs. Scott served as the Hydrology Expert Witness and provided testimony regarding the hydrologic interactions (or “nexus”) between the subject wetlands, groundwater, and the adjacent stream. He provided advice on the application of the guidance from the Rapanos U.S. Supreme Court decision relative to the jurisdiction of wetlands in the Weweantic River watershed. He also developed a nutrient-loading and attenuation model and has provided expert witness testimony regarding the nutrient attenuation capabilities of wetlands and their nexus to the Weweantic River. Scott has also prepared a wetland restoration plan for the cranberry bogs to enhance the nutrient attenuation capabilities of wetlands (abandoned cranberry bogs) in the watershed. The case resulted in two favorable decisions for the United States enforcing the Clean Water Act. Cape Cod 208 Water Quality Management Plan: Consultant to the Cape Cod Commission for the preparation and implementation of the Cape Cod 208 Water Quality Plan. Fifty-three estuaries are impacted by excessive nutrient loading derived from wastewater, stormwater, fertilizers and natural sources. The Cape Cod 208 Plan presents an innovative alternative approach that
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includes a broad range of traditional (sewage collection and treatment plants) and non-traditional (or nature-based) technologies including fertigation wells, shellfish restoration, permeable reactive barriers, fertilizer management, innovative & alternative septic system technologies, ecotoilets and other decentralized solutions. An adaptive management plan provides a practical framework to implement and optimize an integrated array of strategies to attain compliance with the Clean Water Act. Mr. Horsley led a team of scientists and engineers in the development of a non-traditional/nature-based approach and conducted dozens of public stakeholder workshops.

Expert Witness, Hydrologist - Massachusetts Supreme Judicial Court - Reynolds v. Stow Zoning Board of Appeals: Mr. Horsley served as an expert witness on wastewater impacts and groundwater hydrology. He conducted an assessment of water quality impacts associated with a proposed Chapter 40B high-density affordable housing project on neighboring private drinking water supplies. The case involved a proposed waiver of a local regulation governing wastewater impacts that the Court upheld the finding that the local board of health requirements were valid and the project was not permitted.

Massachusetts Department of Environmental Protection (MADEP) Title 5 (Septic System) and Groundwater Discharge Permitting Advisory Committee and Designation of Nitrogen Sensitive Areas: Mr. Horsley was invited by MADEP to participate in an advisory group tasked with updating and revising Title 5 Regulations and the associated Groundwater Discharge Permit program. This includes the designation of “Nitrogen Sensitive Areas”, the development of wastewater loading standards, the use of alternative septic system technologies, and the roles of local Boards of Health in regulating wastewater and septic systems.

Three Bays Watershed Implementation Plan – Cape Cod Commission and Barnstable Clean Water Coalition, Inc.: Consultant for the design and implementation of integrated watershed restoration plan designed to reduce excessive nutrient loads. Mr. Horsley prepared conceptual designs for wetland restoration, pond restoration, alternative septic system technologies, stormwater bioretention, woodchip bioreactors, and permeable reactive barriers. He designed a Watershed Calculator tool to track the incremental and cumulative nutrient reductions associated with these projects.

Massachusetts Sustainable Water Management Initiative (SWMI): Mr. Horsley was asked by MADEP and MAEEA to serve as an advisor to an interdisciplinary panel to develop guidelines to implement the Massachusetts Water Management Act for the restoration of stream flow in Massachusetts Rivers. The Massachusetts Water Management Act provides the regulatory structure for water withdrawals in the state. The guidance was developed to provide ecological criteria for the decision making related to water withdrawal permit issuance. The criteria were based upon scientific relationships between flow characteristics and two indicator fish species - trout and black dace. The guidance includes a series of possible mitigation measures and offset practices that are designed to either reduce consumptive withdrawals and/or provide return flows to balance the hydrologic budget.

River Restoration for the Atlantic Salmon – United States Army Corps of Engineers and State of Maine: Served as a consulting hydrologist to the U.S. Army Corps of Engineers and the State of Maine for a hydrologic study of river systems in northeastern Maine to assess the relative impacts of various

water users including irrigation pumping associated with the blueberry industry on the flow regime of the Narragausus and Pleasant Rivers. The project included numerous meetings with a broad range of stakeholders including the U.S. Army Corps of Engineers, the State of Maine, blueberry industry representatives, and local government officials. The project resulted in a decision-making model and adaptive management plan to restore natural flows within the rivers for the purpose of providing an adequate habitat for the Atlantic Salmon.

California Water Code – Department of Water Resources: Served as Facilitator and Trainer for the implementation of Assembly Bill (AB) 3030. This project integrated groundwater and surface waters and provides the framework to develop local groundwater management plans to balance water withdrawals and recharge projects to mitigate impacts water resources. Mr. Horsley facilitated a series of workshops with stakeholders throughout the State of California.

Ipswich River Watershed Management Plan: Project Manager to develop a Management Plan for restoration of the Ipswich River. The Ipswich River is one of the most impacted rivers in the United States with significant flow alterations caused by excessive water withdrawals and inefficient land use practices. This Plan provides an analysis of the development patterns within the study area and the resulting hydrologic impacts of water supply withdrawals, sewerage systems, and stormwater management. The project included coordination with an interpretation of a USGS watershed modeling project. It also provides an “Integrated Water Management” approval to a series of recommendations designed to balance the hydrologic budget. These include water conservation, alternative water supplies, stormwater management, and land use planning. Mr. Horsley provided facilitation at a series of meetings with a broad range of stakeholders including federal and state agencies, water suppliers, local government officials and others.

Smart Growth and Smart Energy Toolkit, Massachusetts Executive Office of Environmental and Energy Affairs (EEA): Served as a consultant to the EEA to design an outreach tool for local governments and the development community. The Toolkit includes descriptions of twenty techniques, including transfer of development rights (TDR), transit-oriented development (TOD), village center zoning districts, open space residential design (OSRD), LID, agricultural preservation, integrated water, and wastewater management, brownfields redevelopment, and the newly-legislated Chapter 40R smart growth overlay districts. It also includes case studies and model bylaws on the twelve subject areas.

Massachusetts Climate Change Advisory Committee: Scott served as a member of the Coastal Zone and Oceans Subcommittee of the Climate Change Advisory Committee convened by the Secretary of Massachusetts Environmental and Energy Agency. The Committee was assembled to develop recommendations, strategies, and criteria to implement the *Global Warming Solutions Act* passed by the Massachusetts legislature last year. The main task of the subcommittee is to analyze strategies for adapting to the predicted impacts of climate change in the Commonwealth of Massachusetts. Among other recommendations, Scott proposed regulatory changes to accommodate the landward migration of wetland systems that will result from sea level rise.

Nicaragua Source Water Protection Project: As a consultant to U.S. Environmental Protection Agency (USEPA) and U.S. Agency for International Development (USAID), Scott conducted a two-year case study of three communities (Matagalpa, Esteli, and Ocotal) designed to strengthen the sustainability and resilience of local public drinking water supplies. The project included delineation of wellhead protection areas, identification of contaminant sources and the development of management strategies. It included numerous public hearings and the development of a comprehensive training manual.

PROFESSIONAL EXPERIENCE

2014 - Present	Scott Horsley, Water Resources Consultant
2014 - Present	Harvard University, Adjunct Faculty
1986 - Present	Tufts University, Adjunct Faculty
1988 - 2019	Horsley Witten Group, Inc., Founder and President
1984 - 1988	IEP, Inc., Senior Environmental Scientist
1981 - 1984	Cape Cod Commission, Water Resources Coordinator
1979 - 1981	Barnstable County Health Department, Environmental Research Director

PUBLICATIONS

- Erban, Laura, Wigginton, Sara, Baumgaertel, Brian, Horsley, Bryan, McCobb, Tim, Gleason, Tim, Crocker, Zenus, Horsley, Scott 2024, “Reducing wastewater nitrogen loading by >90% with carbon-amended (woodchip bioreactor) septic systems: a field demonstration in Barnstable, (Cape Cod) Massachusetts”, *Journal of Environmental Management*.
- Horsley, S. 2023, “Colorado River Compact – Seven Western States Compete for Water”, *Harvard Gazette*.
- Horsley, S. 2022, Wellfleet Harbor Targeted Watershed Plan, prepared for Town of Wellfleet, MA and approved unanimously by the Select Board, submitted to MADEP for a Watershed Permit.
- Twitchell JH., Mulvaney KK, Hubbell B, Erban LE, Berry W, Chintala MM, Crocker Z, Gleason TR, Horsley S, Munns, Jr. WR, Rea AW, Amith SN, Soto Reves S. 2019 “Solutions-Driven Research Pilot Problem Formulation Workshop: Report and Evaluation”, U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Laboratory, Atlantic Ecology Division, Narragansett, RI, EPA 600-R-19/107.
- Liss, E., Harrigan, K., Horsley, S., 2018 “Marstons Mills Cranberry Bog Wetland Restoration Master Plan”, prepared for the Barnstable Clean Water Coalition and the Town of Barnstable in collaboration with The Nature Conservancy.
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January 16, 2025

Mr. David Calhoun, Director of Acquisitions
Saxon Partners
25 Recreation Park Drive, Unit 204
Hingham, MA 02043

Re: Nitrogen Loading – The Easterly Falmouth WRRF
375 Sandwich Road, Falmouth, Massachusetts
Fuss & O'Neill Project No. 20240652.A20

Dear Mr. Calhoun:

As requested, we have prepared this letter that details the planned approach relative to Total Maximum Daily Loads (TMDL) compliance for nitrogen that will be discharged from the proposed water resource recovery facility (WRRF) at your planned multi-family development known as The Easterly Falmouth, located at 375 Sandwich Road in Falmouth. As the project is proposed with a Title 5 design flow of 49,950 gallons per day, a Massachusetts Department of Environmental Protection (MassDEP) issued groundwater discharge permit (GWDP) is required to comply with the State regulations (314 CMR 5.00) that govern domestic sewage discharges to groundwater that are greater than 10,000 gallons per day. Furthermore, this site is located in the Coonamessett/Great Pond Watershed, which has been designated as a Nitrogen Sensitive Area (NSA).

As detailed in the preliminary design program for the WRRF, the system will employ what MassDEP considers best available technology (BAT), which is a tertiary level treatment process that utilizes a Membrane BioReactor (MBR). MBRs are unique in the decentralized wastewater treatment space in that they are always configured with a membrane system at the end of the process. That membrane forms a physical barrier between the wastewater and treated effluent so that the effluent must be pulled through the membrane via a vacuum pump to be discharged. This barrier allows for a very high concentration of biological organisms to perform organic and nutrient (nitrogen) removal from the wastewater, which can result in very low concentrations of nitrate-nitrogen in the effluent. For this facility, we anticipate a GWDP limit of 5 mg/L with best operational efforts made to achieve an annual average concentration of 3 mg/L. It is important to note that this is the same two-stage permit configuration that the Town of Falmouth has on their municipal WRRF, so this has been standardized somewhat by MassDEP for this watershed. This level of effluent quality is generally considered by the industry to be the most stringent limits possible to achieve and therefore the maximum possible treatment and nitrogen removal for these types of systems.

Given this high level of treatment, these nitrogen levels would be well below the amount of nitrogen discharged if this site were developed into single family home lots with conventional septic systems under the site's current zoning based on the site analysis completed by Allen & Major Associates. That analysis shows that this site could be approved for thirty-one (31) 4-bedroom single family homes, which we estimate would impart a nitrogen load of 494 kilograms per year (kg/yr) to the watershed. In contrast, the proposed MBR WRRF discharging 49,950 gpd of effluent with a concentration of 5 mg/L nitrogen would impart a nitrogen load of 345 kg/yr (i.e. almost 30% less). It is worth noting that the proposed project includes recharging all stormwater directly into ground as well as a setting aside a large area of the parcel to be left in its natural

Mr. David Calhoun
January 16, 2025
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state in perpetuity. Those features provide additional benefits in the dilution of the nitrogen discharge and maintaining groundwater recharge levels to what is currently occurring.

In addition to the advanced treatment levels and benefits of the project's open space and groundwater recharge features, two additional measures can be employed to decrease the proposed nitrogen load: (i) a permeable reactive barrier (PRB) to remove any additional nitrogen discharged from the leaching facility; and (ii) placing a nitrogen fertilizer restriction on the property.

The PRB is a concept that has been in use for decades in the site remediation space for groundwater plume cleanup and has more recently been used in several nitrogen removal projects in Barnstable County, with at least two ongoing in Falmouth. The PRB concept utilizes a reactive barrier as a carbon source and substrate to encourage denitrification bacterial growth within it, which will then use the dissolved nitrate-nitrogen in groundwater as an oxygen source. Data from the several PRB pilot studies on the Cape and in other nitrogen impaired watersheds show that properly sized and constructed PRBs can reliably remove 99% of all nitrates from the groundwater flow that passes through the barrier. This is critical to understand because a PRB sited downgradient from the Easterly's WRRF effluent disposal system would capture not only the nitrates from the project's WRRF, but also any background nitrates that would be present in groundwater from upgradient septic system discharges. The overall effect of this approach is to reduce the Easterly's discharge to net-zero for nitrogen while also removing background nitrogen from groundwater, thereby improving (reducing) the overall TMDL in the watershed.

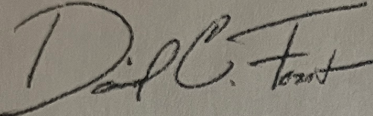
To complete this work, Fuss&O'Neill has partnered with Paul Dombrowski, PE at Isotec Remediation Technologies, who has extensive experience in the design, installation and monitoring of PRBs for plume reduction and over a decade's experience specific to PRBs and nitrogen reduction on Cape Cod. Based on the hydrogeological studies completed for the proposed WRRF discharge, we have developed the attached figure that details the extent of the nitrogen discharge from the effluent disposal field as it migrates downgradient in groundwater and have selected a preliminary location of the planned PRB.

Finally, we have reviewed the benefits of incorporating a nitrogen fertilizer deed restriction for the property and have consulted the Buzzard's Bay Coalition calculation tool for fertilizer nitrogen discharges in connection with such deed restrictions. The Coalition's calculation tool suggests that providing a deed restriction for fertilizer use at this site would further reduce the nitrogen discharge into the watershed and might allow for the Town of Falmouth to become eligible for nitrogen credits from MassDEP as part of their TMDL watershed compliance planning.

Mr. David Calhoun
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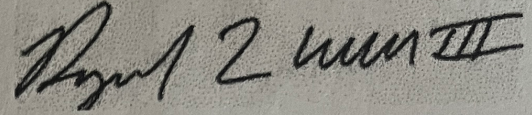
We hope this description of the project's multi-faceted approach to nitrogen removal and assistance with the TMDL challenges are helpful and that you will contact us if we can be of further assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Formato".

David C. Formato, PE
Vice President | Business Line Manager

Reviewed by:

A handwritten signature in black ink, appearing to read "Raymond L. Willis, III".

Raymond L. Willis, III, PE
Associate

Attachment

Scott Horsley
Water Resources Consultant
65 Little River Road • Cotuit, MA 02108 • 508-364-7818

March 10, 2025

Mr. Jeff Gould
MassDEP Southeast Regional Office
20 Riverside Drive
Lakeview, MA 02347

Ms. Susan Murphy, Chair
Falmouth Zoning Board of Appeals
59 Town Hall Square
Falmouth, MA 02540

Ms. Amy Lowell, Wastewater Superintendent
Town of Falmouth
416 Gifford Street
Falmouth, MA 02540

Mr. George Pucci, Special Counsel to the town of Falmouth
KP Law
101 Arch Street, 12 Floor
Boston, MA 02110

RE: The Easterly - 375 Sandwich Road in Falmouth, Massachusetts

Dear Mr. Gould, Ms. Murphy, Ms. Lowell, and Mr. Pucci:

I have been retained by concerned abutters to the above-referenced project including Fran Chevarley at 40 Meredith Drive to review the water quality impacts of the above-referenced project.

Experience and Qualifications: I am a hydrologist with over thirty years of experience in evaluating water resources projects designed to protect and/or restore water quality. I have worked as a consultant to federal, state, and local government agencies, non-governmental organizations, and private industry throughout the United States, Central America, the Caribbean, the Pacific Islands, Bulgaria, and China. I have served as an instructor for a nationwide series of United States Environmental Protection Agency (USEPA) workshops on drinking water protection and watershed management and am currently working for the USEPA, Office of Research and Development. I have also served on numerous advisory boards to the USEPA, the National Academy of Public

Administration, Massachusetts Department of Environmental Protection (MADEP), Massachusetts Executive Office of Energy and Environmental Affairs, and the National Groundwater Association. I have received national (USEPA) and local awards for my work in the water resources management fields. I currently serve as Adjunct Faculty at Harvard University and Tufts University, where I teach graduate level courses in water resources policy, wetlands management, green infrastructure, and low impact development. These courses focus on the critical role of local governments who have the primary responsibility and authority of regulating land uses in critical water resource protection areas. I have served as an expert witness in several prior litigation matters in federal court on behalf of the USEPA and the U.S. Department of Justice (DOJ) as well as state court and administrative appeals before the MADEP.

I am currently serving as a consultant to the towns of Wellfleet and Truro, MA where I am providing wastewater management design advice on three MGL Chapter 40B projects which will add over 600 affordable housing units. All three of these projects will be served with on-site wastewater treatment plants and will achieve a “net zero” nitrogen load, as required by state and federal laws.

General Comments: The proposed Project is located within a critical watershed to the Coonamessett River and Great Pond, both of which have been documented to be nitrogen-sensitive areas (under state law) and where water quality restoration efforts are required by the Clean Water Act (federal law). I understand that Chapter 40B projects are not exempt from and must comply with state and federal laws. Furthermore, and additionally, they must consider valid “local needs”.

The proposed Project will add significant wastewater disposal and associated nitrogen loading within these watersheds where reductions are required by federal and state laws. The Project will contribute to violations of the Massachusetts Surface Water Quality Standards, is inconsistent with “local needs” to comply with the federal Clean Water Act and the Massachusetts Watershed Permit Regulations and does not comply with the Massachusetts Groundwater Discharge Permit Regulations. My specific comments are as follows.

Specific Comments:

1. The Project is located within the watershed to the Coonamessett River, the watershed to Great Pond, and within the Great Pond Coastal Pond Overlay District. These critical areas are formally identified in and along with minimum performance standards in federal, state, and local laws.

2. Great Pond has been officially designated as an “impaired water” by the MADEP under Section 303(d) of the federal Clean Water Act. Reductions in nitrogen loading are required to comply with the Clean Water Act and the Massachusetts Watershed Permit Regulations (314 CMR 21.00)¹.
3. The Massachusetts Estuaries Project (MEP) was commissioned by MADEP and documented water quality impairments and required nitrogen loading reductions. The MEP report requires a reduction of 33% of the existing nitrogen load and 50% of the existing nitrogen load from septic systems for the Coonamessett River/Great Pond watershed².
4. Incorporating the MEP report, the MADEP published a Total Maximum Daily Load (TMDL) report officially documenting the water quality impairment and the required nitrogen loading reductions. The TMDL report requires a reduction of 33% of the existing nitrogen load and 50% of the existing nitrogen load from septic systems for the Coonamessett River/Great Pond watershed³.
5. The town of Falmouth has committed to these federally and state-required nitrogen loading reductions by developing a Comprehensive Wastewater Management Plan (CWMP), a Targeted Watershed Management Plan (TWMP) and implementing land use regulations (Zoning Bylaw) to restrict future increases in nitrogen loading⁴.

¹ Necessary Nitrogen Load Reductions – The proportion of the total Controllable Attenuated Nitrogen Load that must be reduced in order to restore the waterbody to applicable water quality and habitat quality restoration goals that have been identified in a TMDL, Alternative Restoration Plan, MEP Report, or Scientific Evaluation as being necessary to meet the designated uses of the waterbody established by the Department under 314 CMR 4.00: *Massachusetts Surface Water Quality Standards*.

² Massachusetts Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond and Bournes Pond, Falmouth, Massachusetts, 2005. Tables VIII-3 and VIII-4.

³ Massachusetts Department of Environmental Protection, FINAL Great, Green and Bournes Pond Embayment Systems Total Maximum Daily Loads For Total Nitrogen (Report # 96-TMDL-6 Control #181.0), 2006.

⁴ Falmouth Zoning Bylaw, ARTICLE 7 OVERLAY DISTRICTS, 240 – 7.2 Coastal Pond Overlay District and ARTICLE 13 PERFORMANCE REQUIREMENTS, 240 – 13.1 Specified Performance Standards.

6. All three local initiatives and commitments address “local needs” and have been formally approved by the Commonwealth of Massachusetts. MADEP has approved the CWMP and TWMP plans and the Massachusetts Attorney General has approved the Zoning Bylaw. The town of Falmouth has invested significant funding to develop these plans in conformance with state and federal laws and has appropriated public funds to reduce the required nitrogen loading in this watershed.
7. According to the Hydrogeologic Report prepared by the Applicant’s consultant, Geohydrocycle, the Project proposes to discharge 49,950 gallons/day of wastewater within the watershed⁵. At a presumed treatment level and effluent concentration of 3 mg/liter this represents an additional, increased nitrogen load of 207 kg/yr within the Coonamessett/Great Pond watershed. Including stormwater infiltration and lawn fertilizers, the total project nitrogen load is estimated at 247 kg/yr (see Table 1).
8. To offset this nitrogen load the Project will have to connect 57 existing homes in the neighborhood to the proposed wastewater treatment plant. According to the MEP report each home generates approximately 4.93 kg/year⁶. Connecting these homes to the wastewater treatment plant would lower their effluent nitrogen concentration from 26.25 mg/liter to 3 mg/liter resulting in a net reduction of 4.37 kg/year per home. To achieve the offset of 247 kg/year the Project would have to connect 57 homes to the wastewater treatment plant (see Table 2).

Table 1 – Nitrogen Load Impact (Proposed Project)

wastewater (kg/yr)	207
fertilizer (kg/yr)	8
stormwater (kg/yr)	33
Total Load Addition (kg/yr)	247

⁵ Geohydrocycle, Hydrogeologic Report (submitted to MADEP), October 9, 2024.

⁶ Massachusetts Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Great/Perch Pond, Green Pond and Bournes Pond, Falmouth, Massachusetts, 2005, Table IV-3.

Table 2 – Potential Nitrogen Offsets with Sewer Connections

existing load/home (on septic)	4.93
load/home with wastewater treatment	0.56
load reduced/home (kg/yr)	4.37
number homes required to be sewerred	57
Total Load Reduced (kg/yr)	247

9. As currently designed, the Project does not comply with the Falmouth Zoning Bylaw performance standards for nitrogen loading, is inconsistent with the TWMP and will contribute to violations of Surface Water Quality Standards (314 CMR 5.00)⁷.
10. The town of Falmouth was formally designated as a “waste management agency” under the federal Clean Water Act, making the town legally responsible to restore water quality by reducing nitrogen loads to Coonamessett River and Great Pond⁸.
11. The Falmouth Zoning Board of Appeals conditionally-approved the Comprehensive Permit with the understanding (and presumption) that the Project would connect neighboring properties currently on septic systems to the Project’s wastewater treatment plant as an offset to achieve a “net zero” nitrogen loading. However, there is no requirement or funding provided to either construct the treatment plant with this capacity or for the collection system to connect the neighboring homes. Apparently, the developer is assuming or expecting (incorrectly) that the neighbors will pay for the collection system to achieve the required “net zero” performance standards for the benefit of the developer of the Project.

⁷ The Zoning Board of Appeals Decision (Waiver #4), filed with Falmouth Town Clerk July 29, 2024, specifically states that the waiver to comply with the Coastal Protection District was not approved and must be complied with. This retains the performance standard of net zero nitrogen loading.

⁸ Cape Cod Commission, Cape Cod 208 Plan Update (2015)

Summary and Conclusions:

In summary, this Project does not comply with the town of Falmouth Zoning Bylaw and performance standards and is inconsistent with and in conflict with the MADEP-approved Comprehensive Wastewater Management Plan (CWMP), the MADEP-approved Targeted Watershed Management Plan (TWMP), the MADEP Total Maximum Daily Load (TMDL) report, the federal Clean Water Act, the Massachusetts Groundwater Discharge Permit Regulations, and the Massachusetts Surface Water Quality Standards Regulations.

The proposed Project will add nitrogen loading in a watershed where reductions are required by federal and state laws and it will contribute to violations of the Massachusetts Surface Water Quality Standards. The Project does not comply with the required offsets and net-zero nitrogen loading performance standards. I recommend that MADEP require that the Project comply with a net-zero nitrogen loading performance standard.

Please contact me directly with any questions that you might have.

Sincerely,

A handwritten signature in black ink, consisting of several overlapping loops and a final horizontal stroke, representing the name Scott W. Horsley.

Scott W. Horsley

Water Resources Consultant

Areas of Expertise

- Targeted Watershed Planning
- Wastewater & Stormwater Management
- Water Quality Impacts & Restoration
- Green Infrastructure & Nature-Based Solutions
- Hydrologic Modeling & Assessment
- Integrated Water Management
- Smart Growth/ Low Impact Development
- Education & Training

Professional Affiliation

- Tufts University, Graduate Department of Urban and Environmental Planning and Policy
- Harvard University, Extension, Graduate Department of Sustainability
- Massachusetts Stormwater Advisory Committee
- Massachusetts Sustainable Water Management Initiative Advisory Committee
- Massachusetts Climate Change Adaptation Advisory Committee
- MADEP Title 5 Advisory Committee
- Charles River Watershed Association Advisory Board

Scott W. Horsley

Water Resources Consultant and University Lecturer
Curriculum Vitae

Scott Horsley has over 30 years of professional experience as a consultant to federal, state, and local government agencies, non-profit organizations, and private industry throughout the United States, Bulgaria, Nicaragua, the Caribbean, the Pacific Islands, and China. Scott has been an innovator in the environmental profession and thrives on bringing innovative and interdisciplinary approaches to challenging projects. Scott has a strong understanding of the full range of technical, planning, and policy issues associated with water resources and land use management projects. Scott has served as an expert witness in the field of hydrology in numerous state and federal court cases. He has served as an instructor for a nationwide series of U.S. Environmental Protection Agency (EPA) workshops on water resource management. He has also served on numerous advisory boards and committees to the EPA, the National Academy of Public Administration, Massachusetts Department of Environmental Protection (MADEP), Massachusetts Executive Office of Energy and Environmental Affairs (EEA), National Groundwater Association, and Massachusetts Audubon Society. Scott has received national (EPA) and local awards (Mashpee Conservation Commission) for his work in the wetlands and stormwater management fields. Scott Horsley serves as Adjunct Faculty at Tufts University in the Graduate Department of Urban & Environmental Policy & Planning and at the Harvard Extension School in the Graduate Department of Sustainability.

REPRESENTATIVE PROJECTS

Lake Tashmoo Targeted Watershed Plan – Town of Tisbury (Martha’s Vineyard), MA: Working with the Tisbury Water Resources Committee to develop a restoration plan for Lake Tashmoo. According to the Massachusetts Estuaries Project (MEP) Lake Tashmoo is receiving nitrogen loading from wastewater, stormwater and fertilizers and requires a 32% reduction to achieve compliance with the Clean Water Act. The plan will include a sewer collection system, advanced septic systems that use a woodchip bioreactor system, fertigation wells, and stormwater retrofits. A responsible management entity (RME) is being developed to manage the operation, maintenance, and monitoring of the plan.

Wellfleet Targeted Watershed Management Plan – Town of Wellfleet, MA: As a consultant to the Town of Wellfleet prepared a Targeted Watershed Plan including an adaptive management plan integrating non-traditional (nature-based) and traditional (wastewater treatment facilities) nutrient reduction technologies. The plan includes a permeable reactive barrier (PRB), shellfish and aquaculture, ecosystem restoration, stormwater remediation, fertilizer management, and the use of decentralized, on-site septic systems that utilize innovative and alternative technologies. The overall goal of the project is to provide the town guidance in obtaining a MADEP Watershed Permit and compliance with the Clean Water Act. The Targeted Watershed Plan was unanimously approved by the Wellfleet Select Board, was confirmed to be

Awards • Harvard University, Petra Shattuck Excellence in Teaching Award (2023) • Mashpee (MA) Conservation Commission Annual Environmental Achievement Award (2002) • EPA Environmental Technology Innovator Award for Stormwater Treatment Design (1999) Patent United States Patent Number 5,549,817 for Stormwater Treatment System/Apparatus Academic Background Master of Arts, Marine Affairs - Environmental Protection, University of Rhode Island (1981) Marine Ecosystems Research Laboratory, University of Rhode Island (1980) Princeton Groundwater Pollution & Hydrology Course with David Miller, John Cherry, and Robert Cleary (1985) Bachelor of Science, Biology, Southeastern Massachusetts University (1976)	consistent with the Cape Cod 208 Plan by the Cape Cod Commission. The advanced septic system program was approved by the Massachusetts Clean Water Trust for SRF funding and placed on the Intended Use Plan (IUP). Water Resources Management - Manchester-by-the Sea, MA: Scott is serving as a consultant to the town of Manchester-by-the-Sea and their Water Resources Protection Task Force. He is advising on drinking water supply management issues including sustainable yield, source water protection, future water sources, and water rates. Scott has supervised a thermal survey to determine groundwater discharge areas to Gravelly Pond, the town's surface water reservoir and has prepared a hydrologic budget. Watershed Restoration Research Project: Scott is currently working as a member of a research team that includes USEPA Office of Research & Development, United States Geological Survey (USGS), The Nature Conservancy, the Town of Barnstable and the Barnstable Clean Water Coalition. The project is designed to research, develop, and pilot-test multiple nature-based technologies to reduce nutrient loads to the coastal embayment known as Three Bays. Scott assisted in the design of a woodchip-based bioreactor/ permeable reactive barrier (PRB) and is now working with the research team to construct and monitor it as part of a wetland restoration project in a cranberry bog at the headwaters of the watershed. He is also advising on a project to evaluate the use of a new class of innovative and alternative septic systems that utilize a woodchip-based bioreactor. Preliminary data from these systems indicate nutrient reductions of 90%. The project includes the development of a Responsible Management Entity (RME) to oversee the operation, maintenance, and monitoring of the systems. Expert Witness, Hydrologist - United States Environmental Protection Agency and United States Department of Justice – United States v. Charles Johnson (437 F.3d 157, First Circuit Court, 2006): Expert Witness for U.S. Environmental Protection Agency (EPA) and U.S. Department of Justice (DOJ) in a federal Clean Waters Act enforcement case involving the filling of wetlands in Carver, MA by the construction and operation of cranberry bogs. Scott served as the Hydrology Expert Witness and provided testimony regarding the hydrologic interactions (or “nexus”) between the subject wetlands, groundwater, and the adjacent stream. He provided advice on the application of the guidance from the Rapanos U.S. Supreme Court decision relative to the jurisdiction of wetlands in the Weweantic River watershed. He also developed a nutrient-loading and attenuation model and has provided expert witness testimony regarding the nutrient attenuation capabilities of wetlands and their nexus to the Weweantic River. Scott has also prepared a wetland restoration plan for the cranberry bogs to enhance the nutrient attenuation capabilities of wetlands (abandoned cranberry bogs) in the watershed. The case resulted in two favorable decisions for the United States enforcing the Clean Water Act. Cape Cod 208 Water Quality Management Plan: Consultant to the Cape Cod Commission for the preparation and implementation of the Cape Cod 208 Water Quality Plan. Fifty-three estuaries are impacted by excessive nutrient loading derived from wastewater, stormwater, fertilizers and natural sources. The Cape Cod 208 Plan presents an innovative alternative approach that
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includes a broad range of traditional (sewage collection and treatment plants) and non-traditional (or nature-based) technologies including fertigation wells, shellfish restoration, permeable reactive barriers, fertilizer management, innovative & alternative septic system technologies, ecotoilets and other decentralized solutions. An adaptive management plan provides a practical framework to implement and optimize an integrated array of strategies to attain compliance with the Clean Water Act. Mr. Horsley led a team of scientists and engineers in the development of a non-traditional/nature-based approach and conducted dozens of public stakeholder workshops.

Expert Witness, Hydrologist - Massachusetts Supreme Judicial Court - Reynolds v. Stow Zoning Board of Appeals: Mr. Horsley served as an expert witness on wastewater impacts and groundwater hydrology. He conducted an assessment of water quality impacts associated with a proposed Chapter 40B high-density affordable housing project on neighboring private drinking water supplies. The case involved a proposed waiver of a local regulation governing wastewater impacts that the Court upheld the finding that the local board of health requirements were valid and the project was not permitted.

Massachusetts Department of Environmental Protection (MADEP) Title 5 (Septic System) and Groundwater Discharge Permitting Advisory Committee and Designation of Nitrogen Sensitive Areas: Mr. Horsley was invited by MADEP to participate in an advisory group tasked with updating and revising Title 5 Regulations and the associated Groundwater Discharge Permit program. This includes the designation of “Nitrogen Sensitive Areas”, the development of wastewater loading standards, the use of alternative septic system technologies, and the roles of local Boards of Health in regulating wastewater and septic systems.

Three Bays Watershed Implementation Plan – Cape Cod Commission and Barnstable Clean Water Coalition, Inc.: Consultant for the design and implementation of integrated watershed restoration plan designed to reduce excessive nutrient loads. Mr. Horsley prepared conceptual designs for wetland restoration, pond restoration, alternative septic system technologies, stormwater bioretention, woodchip bioreactors, and permeable reactive barriers. He designed a Watershed Calculator tool to track the incremental and cumulative nutrient reductions associated with these projects.

Massachusetts Sustainable Water Management Initiative (SWMI): Mr. Horsley was asked by MADEP and MAEEA to serve as an advisor to an interdisciplinary panel to develop guidelines to implement the Massachusetts Water Management Act for the restoration of stream flow in Massachusetts Rivers. The Massachusetts Water Management Act provides the regulatory structure for water withdrawals in the state. The guidance was developed to provide ecological criteria for the decision making related to water withdrawal permit issuance. The criteria were based upon scientific relationships between flow characteristics and two indicator fish species - trout and black dace. The guidance includes a series of possible mitigation measures and offset practices that are designed to either reduce consumptive withdrawals and/or provide return flows to balance the hydrologic budget.

River Restoration for the Atlantic Salmon – United States Army Corps of Engineers and State of Maine: Served as a consulting hydrologist to the U.S. Army Corps of Engineers and the State of Maine for a hydrologic study of river systems in northeastern Maine to assess the relative impacts of various

water users including irrigation pumping associated with the blueberry industry on the flow regime of the Narragausus and Pleasant Rivers. The project included numerous meetings with a broad range of stakeholders including the U.S. Army Corps of Engineers, the State of Maine, blueberry industry representatives, and local government officials. The project resulted in a decision-making model and adaptive management plan to restore natural flows within the rivers for the purpose of providing an adequate habitat for the Atlantic Salmon.

California Water Code – Department of Water Resources: Served as Facilitator and Trainer for the implementation of Assembly Bill (AB) 3030. This project integrated groundwater and surface waters and provides the framework to develop local groundwater management plans to balance water withdrawals and recharge projects to mitigate impacts water resources. Mr. Horsley facilitated a series of workshops with stakeholders throughout the State of California.

Ipswich River Watershed Management Plan: Project Manager to develop a Management Plan for restoration of the Ipswich River. The Ipswich River is one of the most impacted rivers in the United States with significant flow alterations caused by excessive water withdrawals and inefficient land use practices. This Plan provides an analysis of the development patterns within the study area and the resulting hydrologic impacts of water supply withdrawals, sewerage systems, and stormwater management. The project included coordination with an interpretation of a USGS watershed modeling project. It also provides an “Integrated Water Management” approval to a series of recommendations designed to balance the hydrologic budget. These include water conservation, alternative water supplies, stormwater management, and land use planning. Mr. Horsley provided facilitation at a series of meetings with a broad range of stakeholders including federal and state agencies, water suppliers, local government officials and others.

Smart Growth and Smart Energy Toolkit, Massachusetts Executive Office of Environmental and Energy Affairs (EEA): Served as a consultant to the EEA to design an outreach tool for local governments and the development community. The Toolkit includes descriptions of twenty techniques, including transfer of development rights (TDR), transit-oriented development (TOD), village center zoning districts, open space residential design (OSRD), LID, agricultural preservation, integrated water, and wastewater management, brownfields redevelopment, and the newly-legislated Chapter 40R smart growth overlay districts. It also includes case studies and model bylaws on the twelve subject areas.

Massachusetts Climate Change Advisory Committee: Scott served as a member of the Coastal Zone and Oceans Subcommittee of the Climate Change Advisory Committee convened by the Secretary of Massachusetts Environmental and Energy Agency. The Committee was assembled to develop recommendations, strategies, and criteria to implement the *Global Warming Solutions Act* passed by the Massachusetts legislature last year. The main task of the subcommittee is to analyze strategies for adapting to the predicted impacts of climate change in the Commonwealth of Massachusetts. Among other recommendations, Scott proposed regulatory changes to accommodate the landward migration of wetland systems that will result from sea level rise.

Nicaragua Source Water Protection Project: As a consultant to U.S. Environmental Protection Agency (USEPA) and U.S. Agency for International Development (USAID), Scott conducted a two-year case study of three communities (Matagalpa, Esteli, and Ocotal) designed to strengthen the sustainability and resilience of local public drinking water supplies. The project included delineation of wellhead protection areas, identification of contaminant sources and the development of management strategies. It included numerous public hearings and the development of a comprehensive training manual.

PROFESSIONAL EXPERIENCE

2014 - Present	Scott Horsley, Water Resources Consultant
2014 - Present	Harvard University, Adjunct Faculty
1986 - Present	Tufts University, Adjunct Faculty
1988 - 2019	Horsley Witten Group, Inc., Founder and President
1984 - 1988	IEP, Inc., Senior Environmental Scientist
1981 - 1984	Cape Cod Commission, Water Resources Coordinator
1979 - 1981	Barnstable County Health Department, Environmental Research Director

PUBLICATIONS

- Erban, Laura, Wigginton, Sara, Baumgaertel, Brian, Horsley, Bryan, McCobb, Tim, Gleason, Tim, Crocker, Zenus, Horsley, Scott 2024, “Reducing wastewater nitrogen loading by >90% with carbon-amended (woodchip bioreactor) septic systems: a field demonstration in Barnstable, (Cape Cod) Massachusetts”, *Journal of Environmental Management*.
- Horsley, S. 2023, “Colorado River Compact – Seven Western States Compete for Water”, *Harvard Gazette*.
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December 26, 2025

Andrew Osei P.E., Chief
Wastewater Management Program
Bureau of Water Resources
Department of Environmental Protection
20 Riverside Drive, Lakeville, MA 02347

RE: Draft GWDP #1018-0

Dear Mr. Osei:

I have reviewed the draft groundwater discharge permit to Falmouth Southerly LLC for a project at 375 Sandwich Road, Falmouth, MA. The project is located adjacent to the Coonamessett River, within the watershed of the Great Pond Estuary. **This draft permit will result in a net increase in nitrogen loading to an impaired water body that will be a violation of Massachusetts Surface Water Standards and is clearly inconsistent with the federal Clean Water Act and the Massachusetts Department of Environmental Protection's Watershed Permit Regulations that also require nitrogen loading reductions.**

Great Pond has been officially designated as an "impaired water" by the MADEP under Section 303(d) of the federal Clean Water Act and has a TMDL designation. Reductions in nitrogen loading to Great Pond are required to comply with the Clean Water Act. Massachusetts DEP regulations require that projects in a watershed with impaired waters and TMDLs cause *no net increase in nitrogen* delivery to those waters. The actions described in this permit will not offset the nitrogen released to the groundwater as result of the Easterly Development, as required by the Clean Water Act and Massachusetts DEP regulations.

I request that this draft permit be modified to: **(1) require a limit of no more than 5 mg N/L of total nitrogen concentration in the effluent released to the groundwater allowed by this permit for a wastewater treatment plant to be consistent with the calculations in the permit and Town agreements; (2) require nitrogen offsets equal to any increased new nitrogen released by this project plus a margin of safety of 20 percent to account for any unintentional overages in the permit concentration limit; (3) The mechanism (or mechanisms) by which required offsets will be achieved — whether by the Town or by the developer — and the timeline for implementation must be concurrent with the timeline for the development of the project and explicitly described in a modified permit; and (4) requires a plan that offsets additional nitrogen inputs via fertilizer and stormwater from this development.**

My Qualifications: I am a property owner in Falmouth, with a house not far from the Coonamessett River and Great Pond estuary. I am a Ph.D.-level environmental scientist with over 45 years of research experience working on fish, fisheries, streams, estuaries and wetlands. I have worked for my entire career on the impacts of excess nitrogen loading to estuaries on open water, eelgrass and saltmarshes. I have published over 145 referred scientific journal articles, in journals such as Nature, Ecology, Ecological Applications, Journal of the Canadian Fisheries and Aquatic Sciences, and Aquatic Conservation: Marine and Freshwater Ecosystems. I was a member of the Town of Falmouth Conservation Commission for several years. I have worked with The Coonamessett River Trust (CRT), a local Falmouth group of concerned citizens, to restore, promote and preserve the natural heritage and ecological integrity of the Coonamessett River Watershed. As part of this effort, I have led and participated in studies of river habitats, the measurement of nitrogen uptake within the river channel, river nutrients and discharge, and monitoring of fish that use the Coonamessett, including river herring (volunteer counts and video monitoring) and brook trout.

This permit will put the Coonamessett River restoration project as well as the millions of dollars the Town has spent to reduce nutrient loading at risk by allowing nutrient loading that is not consistent with federal, state and town regulations. Nearly \$8.5 million in grants from federal, state and local agencies have funded the restoration of the Coonamessett River, plus thousands of volunteer hours and Falmouth town investments. The Town of Falmouth recently spent almost \$30 million for the Little Pond sewer project, which removed 1,000 kg/year of nitrogen from the Great Pond watershed. Falmouth's November 13, 2024 Fall Town Meeting also voted to appropriate \$3.8 million for the engineering, design and permitting of the wastewater collection system for the

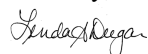
northeastern part of the Maravista peninsula and the Teaticket Path peninsula in the Great Pond watershed. If sufficient offsets are not required, this project would negate those improvements. **To protect the Town's recent large investment to increase water quality, and to be consistent with DEP regulations, the DEP should require a wastewater, fertilizer and stormwater plan, with explicit details, that offsets all of the nitrogen that will be added by this project.**

Mass DEP's Responsibility to Protect Impaired Waters: Massachusetts DEP regulations require that projects in a watershed with impaired waters and TMDLs cause no net increase in nitrogen delivery to those waters. **This draft permit does not meet those standards.**

There is no information in the permit about how required N offsets will occur. **The Town of Falmouth's letter promising offsets is totally inadequate for describing the removal of the nitrogen added by the proposed project and should not be used as the basis for issuing a permit. Absolutely no details are provided in the Town's letter about how or when these offsets will be achieved.** The signed by Wastewater Superintendent Amy Lowell of May 1, 2025 states that the Town of Falmouth shall, in its watershed plan for Great Pond, "include a plan for removing the watershed load added to the watershed by the Easterly project." This letter directly contradicts the Town's claim, in a memo of June 30, 2023 written by Amy Lowell that, "there is no existing sewer line in the vicinity," and that, "[M]ore importantly, the Town's wastewater treatment and discharge facilities do not have the capacity to accommodate the wastewater flow from this development. This lack of detail is completely inappropriate for the issuance of a groundwater discharge permit. Allowing a project to go forward with just a promise that offsets will magically occur — with no details of how the project will meet the regulations — sets a dangerous precedent. No plan— not a single detail or even a generic approach planned—is provided as to how the \$750,000 will achieve the offset. And given that tens of millions of dollars have been required in other watersheds, \$750,000 is not sufficient to achieve the required offsets. Bringing this project to net zero nitrogen—as required by law—will undoubtedly require approval of more public funds by Falmouth Town Meeting. Approval of such funds is not guaranteed; therefore this letter cannot ensure that the nitrogen reductions stated in Amy Lowell's May 1 2025 letter can be achieved by the Town.

Additionally, the implementation of the current Great Pond Watershed plan is 8 – 10 years in the future. By that time The Easterly development will have been polluting the Coonamesett River and Great Pond for over a decade causing further degradation of already impaired waters. This does not meet the law and is not an acceptable outcome.

Sincerely,



Linda Deegan, Ph.D.
39 Marvin Circle,
Falmouth MA 02540

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF APPEALS AND DISPUTE RESOLUTION

In re Easterly Wastewater Treatment Facility) Groundwater Discharge Permit No. 1018-0)	OADR No. 2026-013 DEP No. 25-WP79-0137-APP/1018-0
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Affidavit of Callum LaFrance, Esq.

I Callum LaFrance state under oath as follows in support of Petitioners' motion to stay:

1. I am an attorney in good standing in the Commonwealth (BBO #716172) and offer this testimony based on my expertise in Environmental Justice ("EJ").
2. I am a graduate of Vermont Law School, where I served as a post-graduate Legal Fellow in the Environmental Justice Clinic. More recently, I have served as an attorney for the Environmental Justice Assistance Network in Boston, which provides legal and technical support to low-income residents and communities of color who are suffering from environmental injustices and health consequences from polluted air, unsafe water and other environmental hazards. A copy of my CV is attached at **tab A**.
3. Based on my EJ training and experience, I am familiar with how Environmental Justice principles and policies have been applied in practice and codified into law in Massachusetts, including in recent amendments to the Massachusetts Environmental Policy Act ("MEPA"), G.L. c. 30, §§ 62, 62J, 62K, 62L.
4. Environmental Justice stems from the recognition that marginalized communities suffer a disproportionate share of adverse environmental and public health impacts from the pollution of natural resources and often are excluded from the decision making process for locating and regulating the causes of such impacts. The Commonwealth adopted its first Environmental Justice Policy in 2002. Effective in 2022, Massachusetts enacted a comprehensive protocol to facilitate meaningful involvement of EJ communities in environmental impact review as part of MEPA.
5. As a result of these recent statutory reforms, Environmental Justice principles must be considered by all Commonwealth agencies in any project review or policy determination in order "to reduce the potential for unfair or inequitable effects upon an environmental justice population." G.L. c. 30, § 62K. The law requires special measures in EJ population areas to enhance "meaningful public involvement," including documents in languages other than English, translation services at public meetings, and holding those meetings in places accessible by public transportation. Id. § 62J. "Environmental justice population" is defined to include neighborhoods that meet certain demographic and geographic criteria, including those where "annual median household income is not more than 65 per cent of the statewide annual median household income". Id. § 62.

6. In addition to amending MEPA itself, the agency adopted a comprehensive “MEPA Public Involvement Protocol for Environmental Justice Populations” (Eff. Jan. 1, 2022, a copy of which is attached at **tab B**) Under the Protocol, which applies to any project filed after Jan. 1, 2022, “projects triggering certain MEPA ENF review thresholds provide opportunities for ‘enhanced public participation’ by surrounding EJ populations . . . [to] conduct ‘enhanced analysis or impacts and mitigation,’ in addition to enhanced public participation.” (MEPA Protocol, p. 2) The enhanced review applies to wastewater thresholds, including those at issue in this appeal, 301 CMR 11.03(5). (Id.)

7. The MEPA Protocol has itself been codified into MEPA regulations. Among the regulatory changes, MEPA requires an EIR for any project within the Designated Geographic Area of an EJ Population. 301 CMR 11.06(7)(b). The Designated Geographic Area is defined as the area within one mile of an EJ Population, regardless of whether the project meets or exceeds certain review thresholds. For projects that meet or exceed those thresholds, the Designated Geographic Area extends to five miles of the project site. Id. 11.02.

8. Environmental Populations are mapped throughout the Commonwealth and can be viewed with an online tool called EJ Maps Viewer (<https://mass-eoeaa.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53>) The EJ Map Viewer shows two EJ neighborhoods in East Falmouth within close proximity to the project site at 375 Sandwich Road. Attached is a map (**tab C**) I created using GIS that shows the project site less than a mile from EJ neighborhoods.

9. Under the MEPA Protocol, projects like this one must identify and describe all EJ Populations within 5 miles of the project site and must further evaluate the likely effects of the project on EJ Populations within 1 mile of the project site. (MEPA Protocol, pp. 2, 9-12) ENF submissions for projects in such areas must include an EJ Screening Form that separately addresses the identifying characteristics of affected EJ Populations, potential effects from the project on those EJ Populations, and Public Involvement Activities of the Applicant to engage EJ Populations in the MEPA review process. (Id. pp. 12-13) Among other activities, Applicants must identify native languages spoken by EJ Populations, evaluate adverse environmental impacts and related public health consequences, and “ensure that EJ populations have ample opportunity to meaningfully engage in MEPA project reviews” (Id. p. 4)

10. As shown on my map (**tab C**), several dozen residential properties lie within the mapped East Falmouth EJ neighborhood less than a mile from the project site. Over two dozen of them have residents who signed affidavits attesting that they were not aware of the groundwater discharge permit at issue in this appeal, were never notified of the application or draft permit, and remain concerned about how the permitted discharge would impact their neighborhood. This response is consistent with others I have witnessed in my work with EJ populations.

Signed under oath this 14th day of April, 2026.



Callum LaFrance

Tab A

Callum LaFrance

Environmental Justice Attorney

Curriculum Vitae

PROFESSIONAL SUMMARY

Callum LaFrance is an Environmental Justice Attorney based in Massachusetts. He has worked for several years with BIPOC organizations and Tribal Nations to combat the health impacts of both planned and present environmental pollution. He contributes to land access and ownership preservation for low-income and BIPOC populations through work with heirs-property initiatives and eviction prevention.

EDUCATION

Vermont Law and Graduate School, South Royalton, VT

J.D., May 2024

- GPA: 3.55; Top 25% (42/163)
- Social Justice Mission Scholar
- Environmental Justice Clinic, Student Clinician (Spring 2024)
- *Vermont Journal of Environmental Law*, Managing Editor (2023–2024)
- Center for Agricultural and Food Systems, Research Assistant (Fall 2023 – Spring 2024)
- Teaching Assistant, Local Farm and Food (Prof. Benjamin Varadi) (Fall 2023)
- NALSA, Vice President (2023–2024)
- Vermont Immigration Assistance Project, Intake and Language Specialist

University of Massachusetts Amherst, Amherst, MA

B.A., Theatre and English, 2018

ENVIRONMENTAL JUSTICE & LEGAL EXPERIENCE

Vermont Law School – Environmental Justice Clinic & Center for Agriculture and Food Systems, South Royalton, VT

Legal Fellow, August 2024 – August 2025

While a Fellow for the Environmental Justice Clinic at VLS, Callum assisted many EJ organizations and individuals. Two exemplary clients are Local Environmental Action Demanded (LEAD), and the community in Uniontown, Alabama.

LEAD is an EJ community lead organization in Oklahoma that fights to ensure the government and industry will clean up Tar Creek, one of the longest uncompleted Superfund Sites, and the surrounding land and waters impacted by one of the largest lead mines in the U.S. Among several other completed tasks, Callum served on a team that helped LEAD get a spot at the table with EPA to guide the clean-up process and give voice to EJ populations of the watershed.

Callum, along with other clinicians, supported the work of EJ organizers in Uniontown, Alabama to hold the operators of Arrowhead Landfill, a landfill the size of Central Park, the EPA, and the Alabama Department of Environmental Management responsible for the mismanagement of the landfill. Callum coordinated with clinic staff, community members, and technical specialists to address the landfill's pollution through undertreated wastewater, improper capping, dust and off-gassing, and truck and train traffic.

Center for Agriculture and Food Systems, South Royalton, VT
Summer Honors Intern, May 2023 – August 2023

- Drafted proposed amendments to the Farm Bill for partner organizations
- Prepared legal memoranda translating complex state contracts for local farm organizations
- Developed legal fact sheets addressing heirs' property issues in New York
- Facilitated breakout sessions at the 1890s University Strategy Meeting with USDA

Vermont Law School (Prof. Hillary Hoffmann), South Royalton, VT
Legal Research Assistant, June 2022 – July 2022

- Researched state and federal land use laws related to the creation of a National Park Commission

Vermont Superior Court, Environmental Division – Pro Se Clinic, Montpelier, VT
Legal Assistant, August 2023 – September 2023

- Assisted pro se litigant in researching, drafting, and filing an Appellee brief to the Vermont Supreme Court addressing issues of notice

ADDITIONAL LEGAL & COMMUNITY EXPERIENCE

Environmental Justice Assistance Network, Boston, MA
Volunteer Attorney, March 2026 – Present

Callum assisted EJ communities around Franklin Park to submit an Amicus Brief addressing the City of Boston's failure to meet their statutory duty to notify and engage the EJ communities in the planning of a new White Stadium.

Callum is supporting an EJ residents group suffering impacts from a large construction project on their street.

Volunteer Lawyers Project Housing Clinic, Boston, MA

Volunteer Attorney, October 2025 – Present

Callum helps people facing eviction by drafting motions and representing them in a limited capacity in negotiations and hearings.

PUBLICATIONS AND PANELS

LaFrance, Callum, *Decolonizing Through Food Sovereignty*, The Beacon, Vermont Journal of Environmental Law, May 2023.

- Moderator for a panel titled “Versatility and Experience” at the 2025 “Climate Justice LIVE” Symposium hosted by the Vermont Journal of Environmental Law
-

LICENSES & AFFILIATIONS

- Admitted to the Massachusetts Bar (BBO #716172), December 18, 2024
-

SKILLS

- Legal Research Platforms: Westlaw, LexisNexis
 - Languages: English (Native), French (Proficient), Spanish (Beginner), Haitian Creole (Beginner)
-

HONORS & AWARDS

- Lex Pro Urbe et Orbe Award Student Pro Bono Award (VLGS, Spring 2024)
 - Eagle Scout (Spring 2014)
-

ADDITIONAL EXPERIENCE

- South Royalton Community Garden, Volunteer Gardener (2021–2025)

Tab B

MEPA Public Involvement Protocol for Environmental Justice Populations

Effective Date: January 1, 2022

IMPORTANT: This MEPA Public Involvement Protocol for Environmental Justice Populations (“MEPA EJ Public Involvement Protocol”) will supersede the transition rules issued on June 24, 2021. Accordingly, the transition rules shall be RESCINDED on the effective date of this protocol. All new Environmental Notification Forms (ENFs) and Expanded Environmental Notification Forms (EENFs) submitted on or after the effective date must ensure compliance with this protocol. Consistent with 301 CMR 11.05(5), the final protocol and revisions to the ENF form will be published in the December 22, 2021 Environmental Monitor in advance of the effective date.

During a transition period from January 1 to February 28, 2022, any ENF/EENFs submitted without complying with the 45-day advance notification requirement in Part II.A. will continue to be accepted, provided the Proponent consents to a minimum two-week extension of the review period and circulates the ENF/EENF to the EJ Reference List provided by the EEA EJ Director prior to publication in the Environmental Monitor; the filing also must be otherwise complete. Starting on March 1, 2022, any ENF/EENFs that do not comply with all aspects of this MEPA Public Involvement Protocol will be rejected as incomplete.

Authority and Background

This protocol addresses the new public involvement requirements for projects undergoing MEPA review as set forth in: (i) **Section 60** of Chapter 8 of the Acts of 2021: *An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy* (the “Climate Roadmap Act” or “the Act”); and (ii) the 2021 update to the Executive Office of Energy and Environmental Affairs (EEA) Environmental Justice Policy (the “2021 EJ Policy”). This protocol accompanies corresponding changes to the Environmental Notification Form (ENF), which are shown in Attachment A and which will be incorporated into the template ENF available on the [MEPA website](#). This protocol also accompanies the *MEPA Interim Protocol for Analysis of Impacts on Environmental Justice Populations* (hereinafter, the “*MEPA Interim Protocol for Analysis of EJ Impacts*”), which implements requirements related to the content of Environmental Impact Reports (EIRs) as set forth in Section 58 of the Act.

On March 26, 2021, Governor Baker signed into law the Climate Roadmap Act, which enacted a new definition of “Environmental Justice [EJ] Population” for purposes of enhancing public involvement and other aspects of the MEPA review process. The new statutory definition of “EJ population” includes four categories of neighborhoods (defined as census block groups) with certain demographic characteristics based on median income level, percentage of residents who are people of color (*i.e.*, minority), and percentage of residents who have limited English proficiency (LEP). In turn, Section 60 of the Act provides that, “[t]o enable the public to assess the impact of proposed projects that affect their environment, health and safety through the [MEPA] project review process . . . , the secretary [of EEA] shall provide opportunities for meaningful public involvement” by EJ populations.

Starting in 2020, the MEPA Office embarked on an effort to update its EJ related review protocols, in consultation with the EEA EJ Director and other EEA agencies. This effort coincided with parallel efforts to update MEPA regulations at 301 CMR 11.00 et seq. The MEPA Office is issuing this *MEPA EJ Public Involvement Protocol* as one component of its overall MEPA Office EJ Strategy to be implemented in 2021-22. This protocol

addresses only the public involvement requirements of the Climate Roadmap Act; other requirements of the Act relative to the content of EIRs will be addressed through a separate *MEPA Interim Protocol for Analysis of EJ Impacts*, which is being issued together with this protocol.

On June 24, 2021, EEA updated the 2017 EJ Policy that was previously in effect. The 2021 update (the “2021 EJ Policy”)¹, consistent with the 2017 EJ Policy, requires that projects triggering certain MEPA ENF review thresholds provide opportunities for “enhanced public participation” by surrounding EJ populations,² and that projects triggering certain mandatory EIR thresholds conduct an “enhanced analysis of impacts and mitigation,” in addition to enhanced public participation.³ The MEPA thresholds to which these EJ requirements apply are those related to wastewater (301 CMR 11.03(5)), air emissions (11.03(8)), and solid and hazardous waste (11.03(9)). This *MEPA EJ Public Involvement Protocol* expands on, but remains consistent with, the requirements of the 2021 EJ Policy. Accordingly, this protocol shall define the public involvement requirements for all MEPA projects filed after the January 1, 2022 effective date.

Protocol

I. Identifying Characteristics of and Likely Effects on EJ Populations

A. Project Location

Consistent with 301 CMR 11.05(7), all ENF/EENFs filed with the MEPA Office will be required to identify the location of the project relative to EJ populations as depicted on the EEA Environmental Justice Maps Viewer (the “EJ Maps Viewer”),⁴ and include a printout of the project location shown on the EJ Maps Viewer as an attachment to the ENF or EENF submittal. The printout shall identify all EJ Populations within 5 miles of the project, and shall measure this distance from the outer boundaries of the project site.⁵ For linear projects along a right of way (ROW) (such as utility and roadway projects), the distance shall be measured from the edge of the ROW in all directions along the entire length of the project.

B. Characteristics of EJ Populations

Consistent with 301 CMR 11.05(5), in addition to attaching the above printout, the ENF/EENF shall describe the characteristics of the EJ populations within 5 miles of the project site as identified in the EJ Maps Viewer (i.e., the census block group identification number and EJ characteristics of “Minority,” “Minority and Income,” etc.).

The ENF/EENF shall also list all languages identified in the “Languages Spoken in Massachusetts” tab of the EJ Maps Viewer as spoken by 5 percent or more of residents who identify as not speaking English “very well” (i.e., have limited English proficiency). Because language access responsibilities of the Commonwealth under Title VI

¹ <https://www.mass.gov/doc/environmental-justice-policy6242021-update/download>

² The specific ENF thresholds are 301 CMR 11.03(5)(b)(1)-(2), (5); 301 CMR 11.03(8)(b); and 301 CMR 11.03(9)(b).

³ The specific EIR thresholds are 301 CMR 11.03(5)(a)(1), (6); 301 CMR 11.03(8)(a)(1); and 301 CMR 11.03(9)(a).

⁴ <https://mass-eoeaa.maps.arcgis.com/apps/MapSeries/index.html?appid=535e4419dc0545be980545a0eeaf9b53>

⁵ The EJ Maps Viewer allows the user to measure the distance between selected points on the map. However, it does not presently allow for a radius to be drawn around a particular location.

of the Civil Rights Act of 1964 and Executive Office for Administration and Finance (A&F) Bullet #16 extend beyond the requirements of the Climate Roadmap Act, languages should be identified for the project for each census tract located in whole or in part within the “designated geographical area” (as defined in 301 CMR 11.02) around the project site, regardless of whether such census tract contains any designated EJ populations. All identified languages should be used for purposes of providing public involvement opportunities under Part II.

With the approval of the EEA EJ Director, the Proponent may modify the list of languages to be used for purposes of conducting public involvement activities, if information made available through local school districts, local boards of health, or other knowledgeable local sources provide more accurate data that are better tailored to the project site. The Proponent may choose to increase the number of languages beyond those identified in the “Languages Spoken in Massachusetts” tab of the EJ Maps Viewer without the approval of the EEA EJ Director. If the list of languages shown in the EJ Maps Viewer has been modified as described herein, the ENF/EENF shall include a list of approved languages for the project, or, if the list has been expanded by the Proponent without input from the EEA EJ Director, shall provide a list of the additional languages that will be used to provide public involvement opportunities under Part II. If a project is exempt from the requirements of Part II, this shall be specified in the ENF/EENF.

C. Likely Effects on EJ Populations

Consistent with 301 CMR 11.05(5), the ENF/EENF shall describe whether the project is “reasonably likely” to negatively affect EJ populations located within the designated geographic area around the project site.

In describing the project’s likely effects on EJ populations, the ENF/EENF shall discuss both the project’s anticipated benefits, as well as its adverse environmental impacts and related public health consequences, using the analysis required in 301 CMR 11.07(6)(n) and the *MEPA Interim Protocol for Analysis of EJ Impacts* as a frame of reference. While MEPA review thresholds at 301 CMR 11.03 provide a guide for a discussion of impacts, the ENF/EENF shall not limit the discussion to impacts that meet or exceed MEPA review thresholds, and, instead, shall address all direct and indirect potential environmental impacts of the project, with a focus on whether such impacts and related public health consequences are likely to extend to EJ populations located within the designated geographic area around the project site. The discussion of likely effects included in the ENF/EENF may take the form of a narrative and need not be exhaustive; however, it must contain a reasonable level of specificity and more than a conclusory statement that the project will have a “net benefit” for the EJ population.

II. Measures to Enhance Public Involvement Prior to Filing ENF/EENF

Section 60 of the Climate Roadmap Act, now codified as M.G.L. c. 30, § 62J, requires that, “[i]f a proposed project affects an environmental justice population,” the Secretary of EEA shall require additional measures to improve public participation by the EJ population. Such measures shall include, as appropriate: “(i) making public notices, environmental notification forms, environmental impact reports, and other key documents related to the secretary’s review and decisions of a project review available in English and any other language spoken by a significant number of the affected environmental justice population; (ii) providing translation services at public meetings for a significant portion of an affected environmental justice population that lacks English proficiency in the project’s designated geographic area; (iii) requiring public meetings be held in accessible locations that

are near public transportation; (iv) providing appropriate information about the project review procedure for the proposed project; and (v) where feasible, establishing a local repository for project review documents, notices and decisions.”

Section 60 indicates a broad intent to enhance opportunities for public involvement in reviews of MEPA projects that affect EJ populations. To effectuate this statutory purpose—and to align with the new EIR requirement in Section 58 of the Act —any MEPA project within the “designated geographic area” around one or more EJ populations that is required to submit an EIR in accordance with 301 CMR 11.06(7)(b) must undertake measures to provide public involvement opportunities by the identified EJ populations. Any project consisting of one single family home shall be exempt from the requirements of Part II, but must comply with Part I.

To ensure that EJ populations have ample opportunity to meaningfully engage in MEPA project reviews, best practice dictates that Proponents take early steps to provide public involvement opportunities, starting well before the filing of the ENF/EENF with the MEPA Office. Best practices for such pre-filing outreach and community engagement are described below. It is important to note that the Proponent’s efforts to provide opportunities for public involvement for EJ populations, including any changes made to the project to address any concerns raised by or on behalf of such EJ populations, will be considered when determining whether to approve a request for expedited review procedures under 301 CMR 11.06(8) and (13). To that end, the ENF/EENF must include a detailed description of public involvement activities conducted by the Proponent.

A. Advance Notification

Consistent with 301 CMR 11.05(4), any project that (i) meets or exceeds mandatory EIR thresholds, or (ii) will seek to avail itself of expedited review procedures under 301 CMR 11.06(8) and (13), must provide advance notification of the project no later than 45 days, and no earlier than 90 days, prior to filing. Such advance notification must be provided to community-based organizations (CBOs) and tribes based on a recommended list provided by the EEA EJ Director (the “EJ Reference List”). The EEA EJ Director and the MEPA Office shall be copied on the advance notification at MEPA-EJ@mass.gov—note that only one copy of the advance notification shall be sent to this email address. The Proponent is encouraged to supplement this list by conducting its own local research into additional CBOs, tribes or other neighborhood leaders who may have an interest in projects undertaken at the project site.

The advance notification shall take the form of a completed “Environmental Justice Screening Form,” included as an Addendum hereto, and shall be sent through electronic means at the designated email addresses provided on the EJ Reference List. Unless the Proponent has information to indicate that a particular CBO does not wish to receive the advance notification, all CBOs on the EJ Reference List must be contacted. Circulation to all “tribal contacts” on the EJ Reference List is mandatory for all projects.

Consistent with 301 CMR 11.05(4), the Proponent’s failure to provide advance notification as required herein shall allow the Secretary to require an extension or repetition of the ENF review. The Secretary may also reject an ENF as incomplete if the Proponent has failed to provide advance notification as required, or has undertaken no measures to provide public involvement opportunities by EJ populations prior to filing the ENF.

To the extent any languages have been identified for the designated geographic area (as described in Part I above) the Environmental Justice Screening Form shall be translated into each language identified and attached to the notification sent to each addressee from the EJ Reference List, as well as the copy sent to the EEA EJ Director and MEPA Office. If the list of languages has been modified with or without approval of the EEA EJ Director, as described in Part I, the modified list of languages shall be utilized.

B. Community Outreach and Engagement

As noted, all MEPA projects that are subject to the requirements of this Part II shall undertake measures to promote public involvement through meaningful community outreach and engagement. The CBOs and tribes listed in the EJ Reference List may serve as a resource in efforts to solicit feedback from EJ populations. The specific forms of outreach and community engagement should be tailored to the specifics of each project and the residents and neighborhoods that characterize the applicable EJ populations surrounding the project site. Best practices in community engagement and consensus building should be consulted, including but not limited to the following:

- https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf
- <https://environment.transportation.org/education/environmental-topics/environmental-justice/>
- https://www.environment.fhwa.dot.gov/env_topics/environmental_justice.aspx

A non-exhaustive list of specific outreach and engagement strategies is included below. The Proponent is encouraged to implement as many of these strategies as is feasible and appropriate for the project. However, it is the strong expectation of the MEPA Office that all projects subject to this Part II will, at a minimum, conduct one or more community meetings, if requested by those contacted through the advance notification in Part II.A., prior to filing the ENF/EENF. The Proponent must provide a description of public involvement strategies as part of the ENF/EENF, and specifically state how CBOs and tribes were informed of ways to request a community meeting.

Potential public involvement strategies include:

- Holding a community meeting upon request by anyone contacted through advance notification provided, or upon further dissemination of a written project summary as referenced below
- Wide dissemination of a written project summary (with translation into relevant languages) with basic project details
- Hosting a project website or making project information available through other similar electronic means
- Ensuring outreach to the public is communicated in clear, understandable language and in a user-friendly format
- Engaging in creative outreach by making use of pre-existing groups – such as grassroots organizations and high school groups – and natural areas of congregation – like places of worship, libraries, and farmer’s markets – to disseminate information about new projects, as well as traditional locations such as libraries and government offices
- Use of non-English and/or community-specific media outlets to publicize the project, including local

- public broadcasting stations, specialized newspapers, and community newspapers
- Disseminating information through social media channels
- Organizing town hall meetings or other focused community meetings organized by topic, neighborhood, or interest group
- Holding community meetings during weekend or evening hours, at accessible locations near public transportation, and/or through zoom or other similar web-based service if requested or determined to be more effective for reaching EJ populations. In addition, a “hybrid format” could be considered which allows members of the public to join in-person, on Zoom, or by phone, and makes the content of the meeting available afterwards for those who cannot attend.
- Organizing public education efforts for technical aspects of the project, such as fact sheets with visuals that include a summary of the project and associated technologies and processes, using lay-person language and terms in an effort to ensure the community understands the potential impacts of the project and can provide meaningful input, and holding “science fair” type presentations or teach-ins broken by topics
- Considering door-to-door education efforts through the use of flyers or other canvassing methods
- Identifying specific neighborhoods, residents or other communities surrounding the project site that may be affected and considering targeted outreach and engagement strategies directed at such areas
- Establishing a local information repository that is convenient and accessible for the EJ Population where information related to the project can be obtained

To the extent written project summaries or meeting notices are provided as part of public involvement efforts, the Proponent must translate such materials in all the languages identified in Part I above, and circulate them at or about the same time that English language materials are circulated. If in-person or remote meetings are held, the Proponent must provide oral interpretation services at such meetings in the languages identified in Part I above, provided that the Proponent may require that requests for oral interpretation be made in advance with sufficient time to allow for cancellation of the service by the Proponent without incurring a cancellation fee. If an advance request is required, the Proponent must include in the meeting notice a translated offer to provide oral interpretation services with instructions on how to request the service. The Proponent should make best efforts to provide translation/interpretation services in any other languages requested by members of the public to the extent necessary to ensure meaningful engagement by such individuals. In addition, if any identified census tract located in whole or in part within the designated geographic area around the project indicates that a particular language is spoken by more than 10% of residents in that census tract, it is strongly recommended that the proponent arrange for an oral interpreter to be present at the in-person or remote community meeting, without the need for advance requests.

C. Pre-Filing Consultation

Any project that meets or exceeds any mandatory EIR threshold, and others that seek to avail themselves of expedited review procedures under 301 CMR 11.06(8) and (13), are encouraged to schedule a pre-filing consultation meeting with the MEPA Office and the EEA EJ Director to discuss the outreach and community engagement strategies for the project. Requests for such joint pre-filing consultations may be sent to MEPA-EJ@mass.gov.

In certain circumstances, the MEPA Office, in consultation with the EEA EJ Director, may designate projects as requiring a higher level of pre-filing community engagement, based on the following factors:

- Whether any municipality or census tract surrounding the project site exhibits “vulnerable health criteria” as defined by the Massachusetts Department of Public Health (DPH) EJ Tool,⁶ or the DPH EJ Tool indicates the existence of multiple other sources of pollution affecting the identified EJ populations within the designated geographical area;
- Whether the project’s impacts appear likely to adversely affect the identified EJ populations within 1 mile of the project site, and whether any mitigation is considered for such impacts;
- Whether the project’s location is subject to acute climate change risks

If a project is so designated, the MEPA Office will contact the Proponent to request a pre-filing consultation within 20 days of receiving advance notification of the project under Part II.A.

Any project that falls within any of the categories of projects requiring “enhanced outreach” under the 2021 EJ Policy must schedule a pre-filing consultation, and will be expected to undertake comprehensive measures to engage EJ populations prior to filing.

III. Public Involvement Requirements After Filing ENF/EENF

For any projects subject to the requirements of Part II above, the Proponent shall continue to promote meaningful public involvement by EJ populations after filing the ENF/EENF by maintaining a distribution list that includes the CBOs and tribes identified on the EJ Reference List and the EEA EJ Director (unless any CBO, tribe or the EEA EJ Director elects not to be included), as well as any other individual or entity that specifically requests to be placed on the distribution list during pre-filing consultations or during the course of MEPA review. The Proponent shall use the distribution list to circulate notices of the MEPA Site Visit, summaries of supplemental information submitted to the MEPA office, and any other relevant notices or materials generated during the course of MEPA review. The notice of the MEPA Site Visit shall be translated into any languages identified in Part I above. For other documents, the Proponent shall make best efforts to translate the document, or a summary thereof, upon request by any member of the public. The proponent may require that the request be made with sufficient time to allow for written translation prior to the event or deadline to which the materials relate.

In addition to maintaining a distribution list, the Proponent should submit with its filing a plan to maintain the same level of outreach and community engagement throughout the MEPA review process. As an example, if certain non-English language media were identified as an effective way to communicate with the applicable EJ population, the Proponent should continue to use the same means to convey information about the project during the course of MEPA review. The Proponent should also consider holding additional community meetings as needed, or upon request, at key milestones in the project review, such as when the Proponent is preparing the filing of a final EIR. Specific strategies for outreach and community engagement may be included in the Secretary’s Scope for an EIR.

⁶ <https://matracking.ehs.state.ma.us/Environmental-Data/ej-vulnerable-health/environmental-justice.html>

IV. Public Involvement Requirements for Other MEPA Filings

For Notices of Project Change (NPC), DEIRs, and FEIRs, where the initial ENF/EENF was submitted prior to the effective date of this protocol, the Secretary will determine on a case-by-case basis the need for enhancing public involvement opportunities to meet the spirit of the Climate Roadmap Act. The Secretary will consider the nature and level of impacts associated with the filing, the extent of community engagement conducted to date, and the passage of time since the conclusion of the prior MEPA review (*i.e.*, filings made after a long passage of time may require more public involvement efforts as the public may be unaware of the proposed project or project change). As a general matter, additional requirements for public involvement will be considered for filings that involve EIR-level impacts or projects located within EJ populations, and will consist, at a minimum, of circulation of the filing to the MEPA Office and EEA EJ Director (at MEPA-EJ@mass.gov) and CBOs and tribes on the EJ Reference List. At the discretion of the MEPA Office, a MEPA Site Visit may be held during the MEPA review period, and other applicable provisions of Part III may be applied.

ADDENDUM: Environmental Justice Screening Form

Project Name	
Anticipated Date of MEPA Filing	
Proponent Name	
Contact Information (e.g., consultant)	
Public website for project or other physical location where project materials can be obtained (if available)	
Municipality and Zip Code for Project (if known)	
Project Type* (list all that apply)	
Is the project site within a mapped 100-year FEMA flood plain? Y/N/yet unknown	
Estimated GHG emissions of conditioned spaces if known (click here for GHG Estimation tool)	

Project Description

1. Provide a brief project description, including overall size of the project site and square footage of proposed buildings and structures if known.
2. List anticipated MEPA review thresholds (301 CMR 11.03) (if known)
3. List all anticipated state, local and federal permits needed for the project (if known)
4. Identify EJ populations and characteristics (Minority, Income, English Isolation) within 5 miles of project site (can attach map from EJ Maps Viewer in lieu of narrative)
5. Identify any municipality or census tract meeting the definition of “vulnerable health EJ criteria” in the DPH EJ Tool located in whole or in part within a 1 mile radius of the project site

6. Identify potential short-term and long-term environmental and public health impacts that may affect EJ Populations and any anticipated mitigation
7. Identify project benefits, including “Environmental Benefits” as defined in 301 CMR 11.02, that may improve environmental conditions or public health of the EJ population
8. Describe how the community can request a meeting to discuss the project, and how the community can request oral language interpretation services at the meeting . Specify how to request other accommodations, including meetings after business hours and at locations near public transportation.

**MEPA Project Types [Note: this list can be omitted when circulating this form.]*

Article 97	Other (Specify)
Agriculture	Marijuana
Airport	Marine Industrial
Aquaculture/Shellfish	Master Plan – Development
Beach Nourishment	Master Plan – Urban Renewal Plan
Coastal Infrastructure	Other (Specify)
Commercial - Office/Lab/R&D	Recreation
Commercial - Hotel	Regulations
Commercial - Warehouse	Remediation
Commercial- Retail	Residential
Dam Removal	Solid Waste
Dam Repair/Replacement	Transportation – Roadways/transit
Dredging	Transportation - Trails
Ecological Restoration	Urban Renewal Plan
Energy Generation	Wastewater – Treatment/conveyance
Energy Storage	Wastewater - CWMP
Energy Transmission	Water Supply - New Source
Industrial	Water Supply – Treatment/conveyance
Institutional - Educational	
Institutional - Medical	

Addendum: ENF Revisions

ATTACHMENTS:

. . .

8. Printout from the [EJ Maps Viewer](#) showing the project location relative to Environmental Justice (EJ) Populations located in whole or in part within a 1-mile and 5-mile radius of the project site.

[NEW] ENVIRONMENTAL JUSTICE SECTION

I. Identifying Characteristics of EJ Populations

- A. If an Environmental Justice (EJ) population has been identified as located in whole or in part within 5 miles of the project site, describe the characteristics of each EJ populations as identified in the [EJ Maps Viewer](#) (i.e., the census block group identification number and EJ characteristics of “Minority,” “Minority and Income,” etc.). Provide a breakdown of those EJ populations within 1 mile of the project site, and those within 5 miles of the site.

- B. Identify all languages identified in the “Languages Spoken in Massachusetts” tab of the [EJ Maps Viewer](#) as spoken by 5 percent or more of the EJ population who also identify as not speaking English “very well.” The languages should be identified for each census tract located in whole or in part within 1 mile and 5 miles of the project site, regardless of whether such census tract contains any designated EJ populations.

- C. If the list of languages identified under Section I.B. has been modified with approval of the EEA EJ Director, provide a list of approved languages that the project will use to provide public involvement opportunities during the course of MEPA review. If the list has been expanded by the Proponent (without input from the EEA EJ Director), provide a list of the additional languages that will be used to provide public involvement opportunities during the course of MEPA review as required by Part II of the *MEPA Public Involvement Protocol for Environmental Justice Populations* (“MEPA EJ Public Involvement Protocol”). If the project is exempt from Part II of the protocol, please specify.

II. Potential Effects on EJ Populations

- A. If an EJ population has been identified using the [EJ Maps Viewer](#) within 1 mile of the project site, describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

- B. If an EJ population has been identified using the [EJ Maps Viewer](#) within 5 miles of the project site, will the project: (i) meet or exceed MEPA review thresholds under 301 CMR 11.03(8)(a)-(b) ___ Yes ___ No; or (ii) generate 150 or more new average daily trips (adt) of diesel vehicle traffic, excluding public transit trips, over a duration of 1 year or more. ___ Yes ___ No

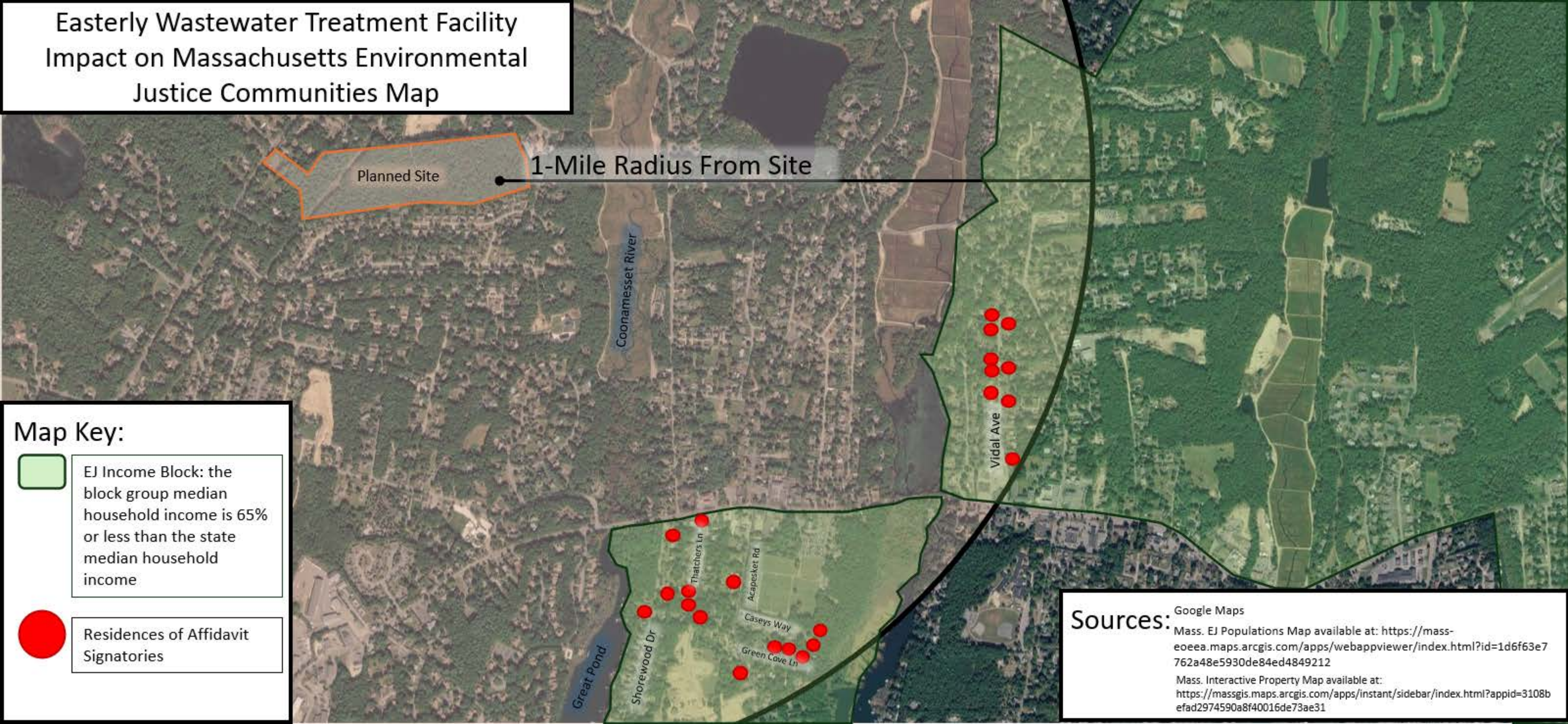
- C. If you answered “Yes” to either question in Section II.B., describe the likely effects of the project (both adverse and beneficial) on the identified EJ population(s).

Public Involvement Activities

- A. Provide a description of activities conducted prior to filing to promote public involvement by EJ populations, in accordance with Part II of the *MEPA EJ Public Involvement Protocol*. In particular:
1. If advance notification was provided under Part II.A., attach a copy of the Environmental Justice Screening Form and provide list of CBOs/tribes contacted (with dates). Copies of email correspondence can be attached in lieu of a separate list.
 2. State how CBOs and tribes were informed of ways to request a community meeting, and if any meeting was requested. If public meetings were held, describe any issues of concern that were raised at such meetings, and any steps taken (including modifications to the project design) to address such concerns.
 3. If the project is exempt from Part II of the protocol, please specify.
- B. Provide below (or attach) a distribution list (if different from the list in Section III.A. above) of CBOs and tribes, or other individuals or entities the Proponent intends to maintain for the notice of the MEPA Site Visit and circulation of other materials and notices during the course of MEPA review.
- C. Describe (or submit as a separate document) the Proponent’s plan to maintain the same level of community engagement throughout the MEPA review process, as conducted prior to filing.

Tab C

Easterly Wastewater Treatment Facility Impact on Massachusetts Environmental Justice Communities Map



Planned Site

1-Mile Radius From Site

Coonamesset River

Vidal Ave

Great Pond

Shorewood Dr

Thatcher's Ln

Acapesket Rd

Caseys Way

Green Cove Ln

Map Key:



EJ Income Block: the block group median household income is 65% or less than the state median household income



Residences of Affidavit Signatories

Sources:

Google Maps

Mass. EJ Populations Map available at: <https://mass-eoeaa.maps.arcgis.com/apps/webappviewer/index.html?id=1d6f63e7762a48e5930de84ed4849212>

Mass. Interactive Property Map available at: <https://massgis.maps.arcgis.com/apps/instant/sidebar/index.html?appid=3108befad2974590a8f40016de73ae31>