UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

CONSERVATION LAW FOUNDATION, INC., Plaintiff, v. TOWN OF BARNSTABLE, MASSACHUSETTS, Defendant.	Case No. _____ **COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND CIVIL PENALTIES** February 16, 2021 (Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 to 1388)

INTRODUCTION

1. Conservation Law Foundation brings this citizen suit to enforce the Clean Water Act against the Town of Barnstable ("Defendant"), which discharges nitrogen-laden septic wastewater from the Barnstable Water Pollution Control Facility in Hyannis, Massachusetts to the coastal waters of the Lewis Bay Watershed System.

2. At the Hyannis Facility, Defendant collects and partially treats raw sewage from thousands of properties in and around Hyannis.

3. Defendant pours the partially treated sewage water (termed "effluent") into sand beds on the Facility's premises. Even after partial treatment, the Facility's effluent has high concentrations of dissolved pollutants, including nitrogen.

4. Defendant pours 1.46 million gallons of effluent into the sand beds every day.

5. Defendant discharges effluent from the Facility via the sand beds, out and down through the sandy soils beneath and around the Facility, where the pollutants are transferred

quickly and over a short distance by groundwater to the surface waters of the Lewis Bay Watershed System, including to Lewis Bay, Hyannis Inner Harbor, Snows Creek, Stewarts Creek and Halls Creek, among other waterbodies.

6. Historically, the bays and estuaries of the Lewis Bay Watershed System had teemed with diverse aquatic life, and many of these waterbodies were carpeted with meadows of eelgrass—one of nature's most valuable and productive marine habitats.

7. These waterbodies and the natural systems they support are treasured by the residents of and visitors to Cape Cod, including CLF members.

8. Today, the Lewis Bay Watershed System suffers from a severe nitrogen-pollution crisis. As a result of nitrogen pollution, invasive algae have experienced population explosions, eelgrass meadows have been extirpated, rotting detritus starves the seafloor of sunlight, and algal blooms offer only putrid smells and unsightly scums.

9. According to the Massachusetts Department of Environmental Protection (MassDEP), failure to reduce and control nitrogen pollution to these waters could result in complete replacement of eelgrass by macro-algae, a higher frequency of extreme decreases in dissolved oxygen concentrations and fish kills, widespread occurrence of unpleasant odors and visible scum, and a complete loss of benthic macroinvertebrates throughout most of the system.

10. Indeed, according to MassDEP, as a result of nitrogen pollution, many commercial and recreational uses of the Lewis Bay Watershed System will be greatly reduced and could cease altogether.

11. Defendant's discharge from the Hyannis Facility is the largest individual source of nitrogen polluting the waters of the Lewis Bay Watershed System: Defendant discharges 12,947 kilograms of nitrogen into these waters annually.

12. Under the Clean Water Act, no person may discharge pollutants from a point source to the waters of the United States unless so authorized by the Environmental Protection Agency under a National Pollutant Discharge Elimination Scheme permit.

13. Defendant does not have—and has never had—authorization from EPA to discharge pollutants from the Hyannis Facility to the waters of the Lewis Bay Watershed System.

14. Without an order from this Court, the ecological toll of Barnstable's unlawful pollution of the Nation's waters will only grow. Barnstable has plans dramatically to expand the Hyannis Facility in coming years, increasing the flow of effluent through its sand beds, and thus the load of nitrogen it will discharge into the rivers, creeks, ponds, bays, and estuaries of the Lewis Bay Watershed System.

15. To address this unlawful and ongoing damage to this Nation's waters, CLF respectfully requests declaratory, injunctive, and other relief the Court deems just and appropriate, to remedy Barnstable's violations of the Clean Water Act.

JURISDICTION AND VENUE

16. CLF brings this civil suit under the citizen suit provision of the Clean Water Act. 33 U.S.C. § 1365.

17. The Court has subject matter jurisdiction as CLF's action arises under the laws of the United States, namely the Federal Water Pollution Control Act ("Clean Water Act" or "the Act"). 33 U.S.C. § 1365(a)(1); 28 U.S.C. § 1331 (federal question).

18. The Court also has jurisdiction to declare the rights and other legal relations of the Parties with the force and effect of a final judgment or decree, to enjoin Defendant to abate its unlawful acts and remediate past violations of federal law, and award further necessary or proper

relief. 28 U.S.C. §§ 2201-02 (declaratory judgment); 33 U.S.C. § 1365(a) (injunctive relief and civil penalties); *id*. § 1365(d) (litigation costs).

19. CLF has satisfied the Clean Water Act's notice requirement. On August 5, 2020, CLF notified Defendant of its intention to file suit for violations of the Clean Water Act. 33 U.S.C. § 1365(a)(1); 40 C.F.R. § 135.2.

20. A true and accurate copy of Plaintiff's Notice Letter (the "Notice Letter") is appended as Exhibit A.

21. More than 60 days have elapsed since CLF's notice to Defendant.

22. During the intervening time, neither the EPA nor the Commonwealth of Massachusetts has commenced an action to redress the violations alleged in this Complaint. 33 U.S.C. § 1365(b)(1)(B).

23. As the source of the violations is located within this judicial district, venue is proper. 33 U.S.C. § 1365(c)(1).

THE PARTIES

24. Plaintiff, CLF, is a nonprofit, member-supported, regional organization dedicated to protecting New England's environment.

25. CLF is incorporated under the laws of Massachusetts with a principal place of business at 62 Summer Street, Boston, Massachusetts.

26. For fifty years, CLF has worked to protect the health of New England's waterways, including addressing the significant water quality impacts of sewage pollution. CLF has a history of working to protect the waters of Cape Cod.

27. CLF actively seeks federal and state agency implementation of the Clean Water Act and, where necessary, directly initiates actions on behalf of itself and its members to enforce the Act.

28. CLF has over 5,400 members, including more than 2,900 members in Massachusetts.

29. CLF members use and enjoy New England's waterways for recreational and aesthetic purposes, including boating, swimming, fishing, hunting, and sightseeing.

30. The waters used and enjoyed by CLF's members include, but are not limited to, the waters of the United States adversely affected by Defendant's unpermitted discharges of pollutants.

31. Defendant is a municipality and therefore a person under the Clean Water Act.

32. Defendant owns and/or operates the Barnstable Water Pollution Control Facility in Hyannis, Massachusetts.

LEGAL BACKGROUND

The Clean Water Act's NPDES Regime:

33. In 1972, Congress passed the Clean Water Act "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a).

34. In service of this purpose, the Clean Water Act forbids the "discharge of a pollutant" from a "point source" to "navigable waters" without the appropriate permit from the Environmental Protection Agency (EPA). 33 U.S.C. § 1311(a); 33 U.S.C. § 1362(12)(A).

35. "Navigable waters" refer to "the waters of the United States, including the territorial seas." 33 U.S.C. § 1362(7); 40 C.F.R. § 120.2.

36. "Waters of the United States" include "[a]ll waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide." 40 C.F.R. § 120.2; 40 C.F.R. § 122.2.

37. "Territorial seas" refer to "the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of three miles." 33 U.S.C. § 1362(8)

38. The category "pollutant" includes "sewage," "sewage sludge," "biological materials," and "chemical wastes." 33 U.S.C. § 1362(6).

39. The Act defines "point source" broadly to include "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." 33 U.S.C. § 1362(14).

40. A "discharge of a pollutant" includes "[a]ny addition of any pollutant or combination of pollutants to . . . the ocean from any point source other than a vessel or other floating craft . . . includ[ing] additions of pollutants into waters of the United States from . . . discharges through pipes, sewers, or other conveyances . . . which do not lead to a treatment works." 40 C.F.R. § 122.2; U.S.C. § 1362(12) ("[a]ny addition of any pollutant to navigable waters from any point source").

41. The Act requires the owner and/or operator of a "point source" to obtain a permit from EPA "when there is a direct discharge from a point source into navigable waters or when there is the functional equivalent of a direct discharge." *Cty. of Maui, Hawaii v. Hawaii Wildlife Fund*, 140 S. Ct. 1462, 1476 (2020).

42. To determine whether a discharge of a pollutant is the functional equivalent of a direct discharge from a point source into navigable waters, the Court considers relevant factors including:

(a) "transit time" *id.*;

(b) "distance traveled" *id.*;

(c) "nature of the material through which the pollutant travels" *id.*;

(d) "the extent to which the pollutant is diluted or chemically changed as it travels" *id.*;

(e) "the amount of pollutant entering the navigable waters relative to the amount of the pollutant that leaves the point source" *id.*;

(f) "the manner by or area in which the pollutant enters the navigable waters" *id.* at 1476-77;

(g) "the degree to which the pollution (at that point) has maintained its specific identity" *id*.at 1477.

43. The Court also considers the "underlying statutory objectives" of the Clean Water Act: a determination of whether a discharge is functionally equivalent to a direct discharge should not "create loopholes that undermine the statute's basic federal regulatory objectives." *Id.*

Citizen Enforcement of the Clean Water Act:

44. As described by the Environmental Protection Agency:

> The Clean Water Act (CWA) is the primary Federal statute regulating the protection of the nation's water. The CWA aims to prevent, reduce, and eliminate pollution in the nation's water in order to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters", as described in CWA section 101(a). A stated goal of the CWA is to eliminate discharge of pollutants into navigable waters, as that term is defined in CWA § 502(7) and corresponding case law.

Environmental Protection Agency, *Clean Water Act (CWA) and Federal Facilities* (visited Feb. 16, 2021) https://www.epa.gov/enforcement/clean-water-act-cwa-and-federal-facilities#:~:text=The%20CWA%20aims%20to%20prevent,CWA%20section%20101(a).

45. In passing the Clean Water Act, Congress provided for "[p]ublic participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established . . . under this chapter." 33 U.S.C. § 1251(e).

46. The Act authorizes any interested citizen to bring an action in a federal district court against any "person" in violation of an "effluent standard or limitation . . . or an order issued by the Administrator or a State with respect to such a standard or limitation." 33 U.S.C. § 1365(a)(1).

47. Congress provided that an interested citizen may seek remedies for unauthorized point source discharges of pollutants into navigable waters. 33 U.S.C. §§ 1342, 1365(f).

48. Congress provided the federal district courts jurisdiction "to enforce such an effluent standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties." 33 U.S.C. § 1365(a)(2).

49. A "person" includes a municipality, which is "a city, town, borough, county, parish, district, association, or other public body created by or pursuant to State law and having jurisdiction over disposal of sewage, industrial wastes, or other wastes." 33 U.S.C. §§ 1362(4)–(5).

50. Each separate violation of the Clean Water Act subjects the polluter to a penalty: up to $56,460 per day per violation for all violations of the Clean Water Act that occurred or occur after November 2, 2015, where the penalties are assessed on or after December 23, 2020. 33 U.S.C. § 1319(d); 40 C.F.R. §§ 19.1–19.4.

FACTUAL BACKGROUND

The Soils of Barnstable:

51. Cape Cod's aquifer has been accurately characterized through decades of scientific study.

52. The United States Geological Survey has completed accurate documentation of the characteristics of Cape Cod's groundwater system, including of the soils of Barnstable County.

53. The Town of Barnstable is located in Barnstable County.

54. The Town of Barnstable is situated on a sandy glacial outwash aquifer, a land formation of permeable soil components including sand and gravel.

55. Water moves rapidly through this type of soil.

56. Due to the fast percolation rate of water through a sandy glacial outwash aquifer, where discharged into such soil, effluent moves rapidly to groundwater.

57. Due to the fast percolation rate of water through a sandy glacial outwash aquifer, where effluent is discharged into such soil and such effluent includes dissolved nitrogen, little to no nitrogen is attenuated from the effluent before it reaches groundwater.

58. No nitrogen is attenuated from effluent between the time the effluent reaches groundwater and the time the effluent-polluted groundwater reaches a surface water.

59. Wastewater effluents from wastewater treatment facilities that release effluent into the ground on a sandy glacial outwash aquifer, enter the groundwater system and are transferred to surface water bodies.

60. In the sandy soils of Barnstable County, effluent that has entered the groundwater travels towards the coastal waters at an average rate of one foot per day.

61. Cape Cod has a high groundwater table associated with an upwelling, highly oxygenated, aquifer.

62. On Cape Cod, surface and groundwater flows are pathways for the transfer of land-sourced nutrients to coastal waters.

63. Nitrogen, primarily as plant-available nitrate, is readily transported through oxygenated groundwater systems on Cape Cod.

The Barnstable Water Pollution Control Facility:

64. Defendant owns and operates the Barnstable Wastewater Treatment Facility ("the Facility"), located on Bearses Way, in Hyannis.

65. The Facility serves as primary wastewater treatment facility for approximately 2,900 properties in Hyannis.

66. Wastewater is gathered and brought to the Facility by a network of 55 miles of pipes and 27 pumping stations.

67. Once wastewater enters the Facility, it passes through stages of partial treatment, including septage handling, pretreatment, primary treatment, secondary treatment, and disinfection facilities.

68. The treatment processes at the Facility partially denitrify raw sewage and then pour the partially treated wastewater—"effluent"—to the Facility's sand beds.

69. Defendant releases effluent from the sand beds, through their boundaries, out of the Facility, and into the sandy soil below.

70. An average 1.46 million gallons of wastewater flow through the Facility daily.

Discharges from the Facility:

71. At the Facility, Defendant discharges pollutants, including but not limited to nitrogen (which may be present in the form of ammonia, nitrate, nitrite, and/or Total Kjeldahl Nitrogen (TKN)) to the waters of the Lewis Bay Watershed System.

72. There is no NPDES permit that covers discharges from the Facility.

73. Barnstable operates the Facility under a MassDEP-issued state Groundwater Discharge Permit.

74. This state Groundwater Discharge Permit regulates nitrogen discharges with a view to protecting public drinking water supplies.

75. In order to protect drinking water supplies, the state permit sets a nitrogen concentration limit of 10 mg/L. This is the maximum concentration that state authorities and EPA set to protect infants from methemoglobinemia or blue-baby syndrome, a potentially fatal blood disorder that can result from high levels of nitrate.

76. The state permit's nitrogen limit is not intended to, and does not protect the integrity of surface waterbodies.

77. Discharges with a nitrogen concentration of 10 mg/L limit are concentrated enough to cause eutrophication, algae blooms, and fish kills in coastal waters.

78. The state Groundwater Discharge Permit is issued under state law. It is not—and does not substitute for—a NPDES permit issued pursuant to the Clean Water Act.

79. For this reason, compliance with the state Groundwater Discharge Permit does not equate to compliance with federal law, including the Clean Water Act.

80. The state Groundwater Discharge Permit requires Defendant regularly to monitor and report the concentration of nitrogen in the effluent it releases from the Facility's sand beds to groundwater.

81. According to the reported information, since 2016, Defendant has continually discharged effluent containing pollutants, including nitrogen, from the Facility.

82. The Massachusetts Estuaries Project is a collaborative effort between local and federal governmental entities, and non-profit and academic institutions, including MassDEP, the University of Massachusetts, the United States Geological Survey, the Cape Cod Commission, with support from, among others, Defendant.

83. The Massachusetts Estuaries Project was formed to conduct studies of waterbodies in the Commonwealth to "help determine current nitrogen loads to southeastern Massachusetts estuaries and evaluate reductions that would be necessary to support healthy ecosystems."

84. In 2006, the Massachusetts Estuaries Project completed a technical report evaluating nitrogen pollution within the Lewis Bay Watershed System.

85. According to the Massachusetts Estuaries Project's 2006 report, the median nitrogen concentration of effluent Defendant discharges from the Facility ranges between 4 to 8 mg/L, with an average total nitrogen concentration of 5.51 mg/L.

86. Public records dating back to 2016 show that concentrations of total nitrogen in effluent that Defendant discharges from the Facility has monthly averages reaching as high as 12.79 mg/L.

87. The Massachusetts Estuaries Project estimated that the Facility discharges a load of 12,947 kilograms of nitrogen in its effluent annually.

Nitrogen Crisis in the Lewis Bay Watershed System:

88. The Facility is located within the drainage of the Lewis Bay Watershed System.

89. The Lewis Bay Watershed System is a complex estuary located within the towns of Barnstable and Yarmouth on Cape Cod, Massachusetts. Its southern shore is bordered by Nantucket Sound.

90. The Lewis Bay Watershed System includes multiple surface waters, including Lewis Bay, Hyannis Inner Harbor, Snows Creek, Stewarts Creek and Halls Creek, among other waterbodies.

91. After the Facility's partially treated effluent leaves the sand beds, this wastewater pours through the sandy soil below to reach groundwater.

92. Groundwater then transports the effluent with its nitrogen load into the surface waters of the Lewis Bay Watershed System.

93. Nearly all of the nitrogen within the Facility's effluent reaches these surface waters, without any chemical changes.

94. The Facility's sand beds are located approximately 1.5 miles from surface waters within the Lewis Bay Watershed System, including Stewarts Creek and Hyannis Inner Harbor.

95. The pollutant-laden groundwater beneath and around the Facility moves at an average rate of one foot per day.

96. Drawing upon groundwater modeling conducted by the United State Geological Survey, the Massachusetts Estuaries Project determined which surface waters received groundwater flow from effluent discharged at the Facility and the magnitude of the nitrogen load.

97. The Massachusetts Estuaries Project determined that Defendant's effluent discharges from the Facility contributed:

- 627 kilogram of nitrogen per year to Hyannis Inner Harbor;

- 988 kilograms of nitrogen per year to Halls Creek;
- 4,219 kilograms of nitrogen per year to Snows Creek;
- 7,112 kilograms of nitrogen per year to Stewarts Creek.

98. From these surface waters, nitrogen from the Hyannis Facility mixes with other connected waters of the watershed, contributing to elevated nitrogen concentrations and the nitrogen crisis in the Lewis Bay Watershed System.

99. Nitrogen pollution from the Facility threatens the Lewis Bay Watershed System's ecological integrity and continued use of these waters by individuals, including CLF members.

100. In coastal waters, nitrogen is a limiting nutrient for algal populations. This means that algal populations increase in direct proportion to increases in available supplies of nitrogen.

101. In a process known as "eutrophication," when levels of nitrogen increase, algae and aquatic plant concentrations can reach densities that overwhelm the natural ecosystem.

102. In waters experiencing eutrophication, plants and algae can generate "blooms," meaning they experience explosive population growth.

103. Eutrophic blooms can have severe crowding-out effects on the native aquatic ecosystem, and estuary systems are particularly sensitive to such effects.

104. Blooms result in large quantities of rotting organic matter in the waterbody. The resulting processes of decay exhaust available supplies of dissolved oxygen in the water and render the water so turbid that sunlight cannot reach the seafloor.

105. Fish and shellfish can die from the deprivation of dissolved oxygen.

106. High nitrogen levels also cause red tides, phenomena that occur when toxin-producing algae grow at out-of-control rates.

107. Algal blooms and red tides are harmful to both animal and human water-users, frequently causing fish kills and beach closures.

108. Eutrophic waterbodies, with algal blooms and red tides, are aesthetically unappealing.

109. Water clarity is reduced in such waterbodies.

110. Algae appear on the surface of the water as a green, green-blue, brown or red film.

111. Algal growth and decay also lead to unpleasant odors.

112. Under Section 303(d) of the Federal Clean Water Act, the Commonwealth of Massachusetts is required to identify waters for which effluent limitations normally required are not stringent enough to attain water quality standards and to establish "total maximum daily load" allocations ("TMDLs") for such waters in connection with the pollutants of concern.

113. The Commonwealth's TMDLs establish the maximum loadings of the pollutant of concern, from all contributing sources, that a waterbody may receive and still meet and maintain its water quality standards and designated uses.

114. In setting a TMDL for a body of water, the Commonwealth must determine present water quality conditions in the waterbody and determine whether the waterbody is presently meeting its water quality standards and designated uses, and, if not, the sources of the pollutants of concern.

115. Where a TMDL is necessary, the Commonwealth must submit a proposed TMDL to EPA for the federal agency's approval.

116. In March 2015, MassDEP submitted a final TMDL ("the Lewis Bay TMDL") regarding the Lewis Bay Watershed System to EPA.

117. The pollutant of concern for MassDEP's Lewis Bay TMDL was nitrogen.

118. In the Lewis Bay TMDL, MassDEP determined that the Lewis Bay Watershed System is eutrophic and at risk of further eutrophication from nitrogen loads in the groundwater.

119. MassDEP determined that ecological damage occurs in these waterbodies at a nitrogen concentration above 0.38 mg/L.

120. MassDEP found that nitrogen concentrations in the surface waters of the Lewis Bay system range from 0.42 mg/L to 1.92 mg/L.

121. Nitrogen concentrations are particularly high in waterbodies polluted by the Facility: 1.25 mg/L in Stewarts Creek and 1.57 mg/L in Snows Creek.

122. MassDEP found that groundwater contributed the principal nitrogen load to the Lewis Bay Watershed System.

123. According to MassDEP, nitrogen pollution is causing "degraded water quality, adverse impacts to ecosystems, and limits on the use of water resources" in the Lewis Bay Watershed System.

124. MassDEP reports algal blooms, depleted oxygen, elimination of eelgrass meadows, crashes in biodiversity due to nitrogen pollution—including from Defendant's discharges of effluent from the Facility—within the surface waters of the Lewis Bay Watershed System.

125. In the surface waters of the Lewis Bay Watershed System, nitrogen pollution from the Facility has contributed to eutrophication, with algal blooms followed by extreme decreases in dissolved oxygen concentrations.

126. These changes threaten aquatic life and reduced species diversity.

127. The Facility's nitrogen pollution has contributed to the near loss of the benthic community in the Lewis Bay Watershed System.

128. The Facility's nitrogen pollution has contributed to unpleasant odors and scums from blooms in the Lewis Bay Watershed System.

129. In the Lewis Bay TMDL, MassDEP found that:

> Coastal communities, including Barnstable . . . rely on clean, productive, and aesthetically pleasing marine and estuarine waters for tourism, recreational swimming, fishing, and boating, as well as for commercial fin fishing and shellfishing. Failure to reduce and control [nitrogen] loadings could result in complete replacement of eelgrass by macro-algae, a higher frequency of extreme decreases in dissolved oxygen concentrations and fish kills, widespread occurrence of unpleasant odors and visible scum, and a complete loss of benthic macroinvertebrates throughout most of the system. **As a result of these environmental impacts, commercial and recreational uses of Lewis Bay waters will be greatly reduced, and could cease altogether**. (emphasis added).

130. More than five years have elapsed since MassDEP made this finding, however, Defendant continues to discharge effluent including pollutants such as nitrogen from the Facility to the surface waters of the Lewis Bay Watershed System on each day of the five years preceding the date of this complaint.

Defendant's Plans for Intensified Discharge from the Facility:

131. Based on, *inter alia*, MassDEP's Lewis Bay TMDL, Defendant adopted an "Interim Regulation for the Protection of Saltwater Estuaries" into its regulations, incorporating findings from the Lewis Bay TMDL as Defendant's own determinations.

132. In the Interim Regulation, Defendant states that "[t]he findings of a state-wide estuary investigation indicate that a substantial portion of the Town's saltwater estuaries are in jeopardy from the long-term buildup of nitrate-nitrogen, primarily from the subsurface discharge of sewage effluent."

133. In the Interim Regulation, Defendant states "most of the nitrate-nitrogen in these watersheds is from subsurface discharge of sewerage effluent into the groundwater that flows to these embayments," and recognize "the adverse impact to these estuaries from such discharges."

134. In November 2020, Defendant submitted a final Comprehensive Wastewater Management Plan ("the Barnstable Plan") and associated environmental impact report to the Commonwealth's Department of Environmental Protection for review.

135. In the Barnstable Plan, Defendant relies upon and incorporates the findings of the Massachusetts Estuaries Project's 2006 report and the Lewis Bay TMDL.

136. By submitting the Barnstable Plan, Defendant again incorporated all findings from the Lewis Bay TMDL as Defendant's own determinations.

137. According to Defendant, "once fully implemented," the Barnstable Plan "will satisfy the nutrient removal targets to achieve the TMDLs in the Town's embayments."

138. "The Plan is primarily focused on [a] sewer expansion program which will be completed in three (3), 10-year phases, for a total of a 30 years."

139. The planned sewer expansion—if realized—would increase the flow of raw sewage into the Hyannis Facility.

140. The Barnstable Plan anticipates that sewering will more than double the current flow to the Hyannis Facility.

141. Defendant also expects modest population growth over the coming decade.

142. Defendant's "realistic" expectation is that buildout in the Lewis Bay watershed will generate an additional flow 123,670 gallons of wastewater per day from residences, and an additional 433,500 gallons per day from commercial properties.

143. The Hyannis Facility's current effluent disposal capacity is insufficient to accommodate the volume of effluent anticipated to pass through the Facility under the Barnstable Plan.

144. To reach nitrogen reduction targets in the Lewis Bay watershed, in the Barnstable Plan Defendant states that the Hyannis Facility must be upgraded to reduce average effluent nitrogen concentrations to 3 mg/L.

145. Specifically, Defendant states "[e]xpansion of the aeration system to accommodate the new flows will be required within the first 3-5 years of the plan."

146. Defendant also expects to complete "evaluation, design and construction" of new nutrient removal technologies for the Facility "in years 1-5 of the plan."

147. The Barnstable Plan also requires Defendant to identify and develop additional effluent disposal sites.

148. Defendant has reason to doubt that the Hyannis Facility's capacity for effluent disposal matches the volume of effluent that can pass through the Facility, and for this reason, "[t]o better understand these issues the Town in 2019 hired CDM Smith to study effluent disposal."

149. At the time of the finalization of the Barnstable Plan, the CDM Smith study "w[as] still underway."

150. Defendant's efforts to understand the Hyannis Facility's potential effluent disposal limitations "is still on-going."

151. To date, Defendant has not secured any regulatory approval for an effluent disposal site or sites.

152. To date, Defendant has not secured any legally cognizable interest in an effluent disposal site or sites that would be sufficient to satisfy this aspect of the Barnstable Plan.

153. To date, Defendant has not obtained regulatory approvals or financing for construction of any aspect of the Barnstable Plan.

154. In the absence of the planned upgrade of the Hyannis Facility's nutrient removal technologies and the achievement of an alternative effluent disposal site, Defendant cannot implement the Barnstable Plan to achieve TMDL within the Lewis Bay Watershed System.

155. The Barnstable Plan does not commit Defendant to any date for regulatory applications, regulatory approvals, or securing financing for construction of any aspect of the Barnstable Plan.

156. The Barnstable Plan is not legally binding on Defendant and creates no legal consequences that would bear on Defendant if it were to fail fully to implement the Barnstable Plan.

Defendant's Pollutant Discharges Harm CLF Members:

157. Cape Cod's coastal waters, including those of the Lewis Bay Watershed System, with their shorebirds, and marine wildlife and scenery, attract many CLF members.

158. CLF members and their families use the surface waters of the Lewis Bay Watershed System to swim, sail, canoe, kayak, waterski, fish, and harvest shellfish; while others enjoy observing animals from the beaches or looking out at the water.

159. Excess nitrogen levels and eutrophication in the surface waters of the Lewis Bay Watershed System caused by nitrogen pollution has negatively impacted CLF members' ability to recreate in and near these waters and has decreased CLF members' enjoyment of beach and water activities.

160. Excessive nitrogen in the surface waters of the Lewis Bay Watershed System has a devastating effect on the natural ecosystem in a way that harms CLF members.

161. CLF members and their families who used to enjoy swimming and boating in the surface waters of the Lewis Bay Watershed System now find recreating in the algae- and plant-choked waters less enjoyable.

162. CLF members care about the natural environment of the surface waters of the Lewis Bay Watershed System and are concerned that high nitrogen levels have damaged and will continue to damage their ecosystem and irreparably harm local fish and other aquatic populations.

163. The harmful algal blooms and red tides that can accompany eutrophication threaten the ability of CLF members to swim and boat in the surface waters of the Lewis Bay Watershed System.

164. CLF members who enjoy looking out at the surface waters of the Lewis Bay Watershed System do not derive as much aesthetic pleasure now that these waters have become eutrophic, algae-clogged, showing scum and algae, clouded by organic matter, releasing unpleasant odors, and deprived of their native ecology.

165. CLF members and their families worry about swimming in harmful pollutants discharged by the Facility because of the pollutants' potential direct effects on human health.

166. CLF's members are concerned that Defendant's continued unauthorized discharge of sewage effluent and the resulting high levels of nitrogen in surface waters of the Lewis Bay Watershed System will further damage these waters that are already impaired for nitrogen.

167. CLF's members' usage and enjoyment of surface waters of the Lewis Bay Watershed System will be reduced due to Defendant's continued unauthorized discharge of sewage effluent and nitrogen.

168. The interests of CLF's members have been, are being, and will continue to be adversely affected by Defendant's failure to comply with the Clean Water Act and the National Pollutant Discharge Elimination System.

169. The relief sought in this action will redress these harms.

170. The unlawful acts and omissions described herein have and will continue to irreparably harm Plaintiff's members, for which harm they have no plain, immediate, or adequate remedy at law.

CLAIM FOR RELIEF

Unauthorized Discharge of Pollutants into Waters of the United States

171. Plaintiff incorporates the allegations contained in the above paragraphs as though fully set forth herein.

172. The Clean Water Act prohibits the discharge of any pollutant from any "point source" to waters of the United States, except for discharges in compliance with a NPDES permit issued pursuant to Section 402 of the Act. 33 U.S.C. § 1311(a); 33 U.S.C. § 1342.

173. Defendant is a person that owns and/or operates the Facility.

174. The Facility and its sand beds are point sources.

175. Defendant has discharged pollutants and is currently discharging pollutants, including sewage effluent and nitrogen, from these point sources to navigable waters every day for the past five years.

176. Absent relief from this Court, Defendant will continue to do so every day into the future.

177. Defendant releases pollutants from the Facility and its sand beds that enter groundwater, which transports these pollutants swiftly and over a short distance to the surface waters of the Lewis Bay Watershed System—including Hyannis Inner Harbor, Halls Creek, Snows Creek, and Stewarts Creek—in a manner functionally equivalent to a direct discharge.

178. The surface waters of the Lewis Bay Watershed System—including Hyannis Inner Harbor, Halls Creek, Snows Creek, and Stewarts Creek—are "territorial seas" and "waters of the United States," and therefore "navigable waters."

179. In the surface waters of the Lewis Bay Watershed System, Defendant's discharges of pollutants—including a nitrogen load in excess of 12,000 kilograms per year—causes eutrophication, destruction of native fauna and flora, and ecological crisis, and harms CLF members' enjoyment of these waters.

180. Defendant's pollutant discharges into waters of the United States are not authorized by any NPDES permit.

181. Each and every day on which Defendant has discharged and continues to discharge pollutants from the Facility to the surface waters of the Lewis Bay Watershed System without authorization under a valid NPDES permit constitutes a separate and distinct violation of the Clean Water Act. 33 U.S.C. § 1311(a); 33 U.S.C. § 1342.

182. Past, ongoing and continuing, and future commission of the acts and omissions alleged herein irreparably harm water quality, CLF, and its members, for which harm Plaintiff has no plain, speedy, or adequate remedy at law.

RELIEF REQUESTED

WHEREFORE, Plaintiff respectfully requests that this Court grant the following relief:

(a) Declare Defendant to have violated and to be in violation of Section 301(a) of the Clean Water Act, 33 U.S.C. § 1311(a), for Defendant's unlawful and unauthorized discharges of pollutants from the Facility and its sand beds to waters of the United States;

(b) Enjoin Defendant to submit within 45 days of the Court's order a proposal for the Court's approval that would:

(1) reduce its discharge of nitrogen to a level commensurate with use of modern denitrification technologies, which can reduce concentrations to the 2-3 mg/L range, in order to comply with the technology-based standards of the Clean Water Act; and

(2) otherwise abate the discharge of pollutants from the Facility into waters of the United States except as authorized by and in compliance with a NPDES Permit; and

(3) take appropriate actions to remediate past harms caused by Defendant's past noncompliance with the Clean Water Act;

(c) Impose civil penalties upon Defendant of up to $56,460 per day per violation for all violations of the Clean Water Act that occurred or occur after November 2, 2015, where the penalties are assessed on or after December 23, 2020, pursuant to § 309(d) of the Clean Water Act, 33 U.S.C. § 1319(d), and the regulations governing the Adjustment of Civil Monetary Penalties for Inflation, 40 C.F.R. §§ 19.1–19.4;

(d) Award Plaintiff's costs (including reasonable investigative, attorney, witness, and consultant fees) as permitted by Section 505(d) of the Clean Water Act, 33 U.S.C. § 1365(d);

(e) Award any such other and further relief as the Court may deem appropriate.

JURY DEMAND

Plaintiff does not request a jury trial.

Respectfully submitted this February 16, 2021,

CONSERVATION LAW FOUNDATION, INC.,

By its attorney,

/s/ Ian Coghill
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