



For a thriving New England

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August 5, 2020

Via Registered Mail—Return Receipt Requested

Mr. Daniel Santos
Director
Department of Public Works
Town of Barnstable
382 Falmouth Road
Hyannis, Massachusetts 02601

Mr. Mark S. Ells
Town Manager
Town of Barnstable
367 Main Street
Hyannis, Massachusetts 02601

**RE: Notice of Intent to File Suit for Violations of the Clean Water Act at the
Barnstable Water Pollution Control Facility, Bearses Way, Hyannis**

Dear Mr. Santos and Mr. Ells:

I write on behalf of the Conservation Law Foundation and its members (“CLF”). The Town of Barnstable (“the Town”) owns and/or operates the Barnstable Water Pollution Control Facility, Bearses Way, Hyannis (“the Facility”). Based on available information, CLF understands that the Town has violated, is violating, and will continue to violate the Clean Water Act (“CWA”), 33 U.S.C. § 1251 *et seq.* by discharging and adding pollutants from the Facility, a point source, into the surface waters of the Lewis Bay System, waters of the United States. This letter puts the Town on notice of CLF’s intent to file suit to halt and remedy harms caused by these past and ongoing violations of federal law.

The Facility

The Town owns and/or operates the Facility, located on Bearses Way in Hyannis. The Facility is the primary wastewater treatment facility serving approximately 2,900 properties. It uses a sequence of treatment processes partially to denitrify raw sewage and then discharge the partially treated effluent through sand beds to the ground. The Facility treats an average daily flow of 1.46 million gallons per day. The Town operates the Facility under a Groundwater Discharge Permit issued by the Massachusetts Department of Environmental Protection (Permit Number 21-1). Under this Permit, the Town is required regularly to monitor and report the concentration of

nitrogen in the effluent that it releases from its sand beds to ground water.

The Facility is located within the drainage of the Lewis Bay watershed system. 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. It is comprised of the primarily lagoonal Lewis Bay and the Hyannis Inner Harbor, Mill Creek and Uncle Roberts Cove sub-embayments, as well as the Snow's Creek, Stewarts Creek, and Halls Creek estuaries, Chase Brook, Mill Pond Creek, and Inner Harbor Creek, among other waterbodies.

Effluent leaves the Facility's sand beds, pouring through the sandy soil below to reach groundwater. Groundwater then transports the effluent into the waters of the Lewis Bay System. The vast majority of the nitrogen within the Facility's effluent reaches these surface waters. It does so without chemical changes. The Massachusetts Estuary Project estuary project estimated that this load was 12,947 kilograms per year. Much of this pollution reaches the waters of the Stewarts Creek estuary, a salt marsh that empties into Hyannis Harbor. Stewarts Creek has among the highest N concentrations in the Lewis Bay system, and receives the largest nitrogen load of any waterbody within the watershed.

Nitrogen pollution from the Facility threatens the Lewis Bay watershed system's ecological integrity and its continued use by individuals, including CLF members. 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. In a process known as "eutrophication," when levels of nitrogen increase, algae and aquatic plant concentrations can reach densities that overwhelm the natural ecosystem. In waters experiencing eutrophication, plants and algae can generate "blooms," meaning they experience explosive population growth. Eutrophic blooms can have severe crowding-out effects on the native aquatic ecosystem, and estuary systems are particularly sensitive to such effects. 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. Fish and shellfish can die from the deprivation of dissolved oxygen. High nitrogen levels also cause red tides, phenomena that occur when toxin-producing algae grow in out-of-control amounts. Algal blooms and red tides are harmful to both animal and human water-users, frequently causing fish kills and beach closures. Eutrophic waterbodies, with algal blooms and red tides, are aesthetically unappealing. Water clarity is reduced in such waterbodies. Algae appear on the surface of the water as a green, green-blue, brown or red film. Algal growth and decay also lead to unpleasant odors.

In the surface waters of the Lewis Bay watershed system, nitrogen pollution from the Facility has contributed to such eutrophication, with algal blooms followed by extreme decreases in dissolved oxygen concentrations. These changes threaten aquatic life and reduced species diversity. The Facility's nitrogen pollution has contributed to the near loss of the benthic community in Lewis Bay. The Facility's nitrogen pollution has contributed to unpleasant odors and scums from blooms in the Lewis Bay system. According to MassDEP, the Lewis Bay system is eutrophic and at risk of further eutrophication from high nutrient loads in the groundwater. MassDEP reports algal blooms, depleted oxygen, elimination of eelgrass meadows, crashes in biodiversity due to nitrogen pollution—including from the Facility—within the drainage. According to MassDEP, this 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.

Clean Water Act Violations

The Clean Water Act prohibits persons from discharging pollutants from a point source to navigable waters without authorization under a National Pollutant Discharge Elimination Scheme (NPDES) permit. 33 U.S.C. § 1342.

The Town is a person under the Act. The Facility is a “point source” as defined in the Act. 33 U.S.C. §1362(14); *see also Conservation Law Found., Inc. v. Longwood Venues & Destinations, Inc.*, 422 F. Supp. 3d 435, 445 (D. Mass. 2019). The Town adds nitrogen and septic wastewater—pollutants under the Act—from the Facility to the surface waters of the Lewis Bay system, navigable waters of the United States. The Town’s discharges reach the surface waters of the Lewis Bay watershed system—including the Stewart’s Creek sub-embayment—via groundwater transfer in a manner functionally equivalent to a direct discharge. The Facility’s pollutant discharges to these surface waters are continuous and ongoing. Neither the Town nor anyone else is authorized under a NPDES permit to discharge pollutants from the Facility to these or any other navigable waters.

The Town has discharged pollutants from the Facility to the navigable waters of the Lewis Bay watershed system without authorization under an NPDES permit on each day of the five years preceding the date of this notice; it will continue to do so each day in the future. Each of these unauthorized discharges constitutes a violation of the Clean Water Act.

Conclusion

Additional information, including information in the parties’ possession, may reveal further details about the Clean Water Act violations described above. This letter covers all such violations. This letter is being provided pursuant to Section 505(b) of the Clean Water Act. 33 U.S.C. § 1365(b). CLF would welcome the opportunity to discuss this matter with you. If you are interested in discussing the matter, or if you believe any of the above information is incorrect, if you take steps to permanently correct the Clean Water Act violations, if you believe you are currently in compliance with the Clean Water Act, or if you have any questions concerning this notice, please contact me as soon as possible at (617) 850-1739 or at the address listed below. If you would like to meet in person to discuss this matter, I am available to meet at a mutually agreeable time and place.

Sincerely,

CONSERVATION LAW FOUNDATION INC.

By their attorney

Ian Coghill
Conservation Law Foundation

62 Summer Street
Boston, MA 02210
(617) 850-1739

cc: By certified mail – return receipt requested

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Millie Garcia-Serrano, Regional Director, Southeast Region
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August 5, 2020

Via Registered Mail—Return Receipt Requested

David Southworth
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Southworth Willowbend LLC
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Phyllis Fireman
President & Director
Willowbend County Club Inc.
130 Willowbend Drive
Mashpee, MA 02649

Patricia Kilgallon
Property Manager
Southworth Willowbend LLC
Willowbend Community Trust
130 Willowbend Drive
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Joseph Deitch
Chairman
Southworth Development LLC
120 Wells Avenue
Newton, MA 02459

Alexander L. Jackson, IV
Trustee & Chairman of the Board of
Trustees
Willowbend Community Trust
130 Willowbend Drive
Mashpee, MA 02649

Alexander L. Jackson, IV, Trustee
Barbara Brandt-Saret, Trustee
Joyce T. Hosford, Trustee
Cotuit Bay Condominium Trust
418 Quinaquisset Ave
Mashpee, MA 02649

RE: Notice of Intent to File Suit for Violations of the Clean Water Act at the Willowbend Community Complex

Dear Sirs and Madams:

I write on behalf of the Conservation Law Foundation and its members (“CLF”).¹ Willowbend Country Club Inc. (formerly known as Willowbend Development Corporation), Southworth Willowbend LLC, Willowbend Community Trust, Willowbend Golf and Country Club, and Cotuit Bay Condominium Trust (collectively “the Willowbend Entities”) own and/or operate the Willowbend Community Complex located at 130 Willowbend Drive in Mashpee, Massachusetts (“the Willowbend Property” or “the Property”). Based on available information, CLF understands that the Willowbend Entities have violated, are violating, and will continue to violate the Clean Water Act (“CWA”), 33 U.S.C. § 1251 *et seq.* by discharging and adding

¹ CLF is a 501(c)(3) nonprofit, member-supported organization dedicated to the conservation and protection of New England’s environment.

pollutants from the Willowbend wastewater system, a point source, into the Popponeset Bay system, a water of the United States. This letter puts the Willowbend Entities on notice of CLF's intent to file suit to halt and remedy harms caused by these past and ongoing violations of federal law.

The Willowbend Facility

The Willowbend Entities own and/or operate an 805-bedroom community with function rooms, a tennis club, clubhouses and office space in Mashpee ("the Property"). Sewage from the Property is conveyed to the Willowbend Facility ("the Facility"), a wastewater system. Wastewater operations firm White Water manages the Facility on behalf of the Willowbend Entities. The Facility is designed to accommodate an influent flow of 132,500 gallons per day; a state groundwater discharge permit currently limits flow to 113,000 gallons per day. After raw sewage passes through a rotating biological contactor process (partially reducing nitrogen levels from raw sewage), the Willowbend Entities discharge partially treated effluent from the Facility to the soil via "three disposal beds utilizing chambers providing 82,950 [square feet] of infiltration area."

The Willowbend Facility is located within the drainage of the Quaker Run River (roughly 200 feet away from the Facility), the Santuit River and Shoestring Bay (roughly half a mile from the Facility)—all within the Popponeset Bay watershed. Effluent leaving the Facility pours through the sandy soil below and around the Facility's disposal beds to reach groundwaters. These groundwaters transport the effluent into surface waters of the Popponeset Bay system. The vast majority of nitrogen within the Facility's effluent reaches these surface waters. It does so without chemical changes.

Nitrogen pollution from the Facility threatens Popponeset Bay's ecological integrity and the continued use of these waters by individuals, including CLF members. 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. In a process known as "eutrophication," when levels of nitrogen increase, algae and aquatic plant concentrations can reach densities that overwhelm the natural ecosystem. In waters experiencing eutrophication, plants and algae can generate "blooms," meaning they experience explosive population growth. Eutrophic blooms can have severe crowding-out effects on the native aquatic ecosystem, and estuary systems are particularly sensitive to such effects. 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. Fish and shellfish can die from the deprivation of dissolved oxygen. Eutrophic waterbodies, with algal blooms and red tides, are aesthetically unappealing. Water clarity is reduced in such waterbodies. Algae appear on the surface of the water as a green, green-blue, brown or red film. Algal growth and decay also lead to unpleasant odors.

The Popponeset Bay is impaired due to nitrogen pollution. According to MassDEP, Popponeset Bay is eutrophic and "at risk of further eutrophication from high nutrient loads in the groundwater and runoff from [its] watershed[]." MassDEP reports algal blooms, depleted oxygen, elimination of eelgrass meadows, crashes in biodiversity due to nitrogen pollution within the drainage. Nitrogen pollution—including from the Willowbend Facility—has caused "degraded

water quality, adverse impacts to ecosystems, and limits on the use of water resources” in Popponeset Bay. MassDEP’s analysis incorporated the data and analysis of 2004 technical report on the Popponeset Bay by the Massachusetts Estuaries Project (MEP), which concludes that that Willowbend Facility is contributing nitrogen to Popponeset Bay. In Popponesett Bay, nitrogen pollution from the Facility has contributed to such algal blooms followed by extreme decreases in dissolved oxygen concentrations that threaten aquatic life and reduced species diversity. Nitrogen pollution from the Facility has contributed to widespread losses in eelgrass. In Popponesett Bay nitrogen pollution has eliminated eelgrass meadows. The Facility’s nitrogen pollution has contributed to the near loss of the benthic community. The Facility’s nitrogen pollution has contributed to unpleasant odors and scums from blooms in the Popponeset Bay system.

Clean Water Act Violations

The Clean Water Act prohibits persons from discharging pollutants from a point source to navigable waters without authorization under a National Pollutant Discharge Elimination Scheme (NPDES) permit. 33 U.S.C. § 1342.

The Willowbend Entities are persons under the meaning of the Act. The Willowbend Facility is a “point source” as defined in the Act. 33 U.S.C. §1362(14); *see also Conservation Law Found., Inc. v. Longwood Venues & Destinations, Inc.*, 422 F. Supp. 3d 435, 445 (D. Mass. 2019). The Willowbend Entities add nitrogen and septic wastewater from the Facility to the surface waters of the Popponeset Bay system, which are navigable waters. Septic wastewater and nitrogen are pollutants. The Willowbend Entities’ discharges reach the waters of Popponeset Bay via groundwater transfer in a manner functionally equivalent to a direct discharge. Upon information and belief, the Willowbend Entities release effluent containing septic waste and nitrogen pollutants from the Facility to groundwater less than 200 feet from the surface waters of the Quaker Run River (which feed Shoestring Bay) around half a mile from the waters of Shoestring Bay. Upon information and belief, pollutants transfer from the Facility to these surface waters within a matter of days. The Facility’s pollutant discharges to the bays are continuous and ongoing. Neither the Willowbend Entities nor anyone else is authorized under a NPDES permit to discharge pollutants from the Facility to navigable waters.

The Willowbend Entities have discharged pollutants to Popponeset Bay from a point source—the Facility—without authorization under an NPDES permit on each day of the five years preceding the date of this notice; they will continue to do so each day in the future. Each of these unauthorized discharges constitutes a violation of the Clean Water Act.

Conclusion

Additional information, including information in the parties’ possession, may reveal further details about the Clean Water Act violations described above. This letter covers all such violations. This letter is being provided pursuant to Section 505(b) of the Clean Water Act. 33 U.S.C. § 1365(b). CLF would welcome the opportunity to discuss this matter with you. If you are interested in discussing the matter, or if you believe any of the above information is incorrect, if you take steps to permanently correct the Clean Water Act violations, if you believe you are currently in compliance with the Clean Water Act, or if you have any questions concerning this notice, please

contact me as soon as possible at (617) 850-1739 or at the address listed below. If you would like to meet in person to discuss this matter, I am available to meet at a mutually agreeable time and place.

Sincerely,

CONSERVATION LAW FOUNDATION INC.

By their attorney

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cc: By certified mail – return receipt requested

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