

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

CONSERVATION LAW FOUNDATION, INC. and
BUZZARDS BAY COALITION, INC.,

Plaintiffs,

v.

LISA P. JACKSON, Administrator,
United States Environmental Protection Agency, and

CURT SPALDING, Regional Administrator, Region 1,
United States Environmental Protection Agency,

Defendants.

Case No.: 11-cv-11657

**FIRST AMENDED
COMPLAINT**

Plaintiffs, for their First Amended Complaint, state as follows:

NATURE AND PURPOSE OF ACTION

1. Plaintiffs Conservation Law Foundation, Inc. (“CLF”) and Buzzards Bay Coalition (the “Bay Coalition”) bring this action for injunctive, declaratory, and such other relief as may be necessary to require Defendants Lisa P. Jackson, Administrator of the United States Environmental Protection Agency (“EPA”), and Curt Spalding, Regional Administrator of Region 1 of EPA, to perform their non-discretionary duties under sections 208 and 601-606 of the Federal Clean Water Act (“CWA” or the “Act”), 33 U.S.C. §§ 1288, 1381-1386, and to implement and administer the Act in a manner that is not arbitrary and capricious, or contrary to law, in order to address increasingly severe nitrogen pollution of the embayments of Cape Cod, which has and continues to seriously degrade the water quality of the embayments and adversely impact their ecological, recreational, aesthetic and economic value.

2. This Complaint is necessary to effectuate on Cape Cod “the national policy [of the CWA] that areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollutants in each State.” 33 U.S.C. § 1251(a)(5).

3. The 1978 Water Quality Management Plan/Environmental Impact Statement (“EIS”) for Cape Cod (“Areawide Plan”) was intended to achieve these objectives, through areawide planning, on Cape Cod. The Areawide Plan specifically provides that the “purpose of the [CWA Section] 208 planning program is to identify the water quality management problems of a region and to develop cost effective and environmentally sound approaches to deal with those problems on an area-wide basis.” Water Quality Management Plan/EIS for Cape Cod, Vol. 1 (September 1978) at 1-1. The Plan further states that the “recommendations developed in the 208 plan are designed to provide a comprehensive preventive approach to wastewater and water quality management as well as guidelines for solving existing problems.” *Id.*

4. The Areawide Plan directs that “[t]hose sections of the final plan that are certified by the Governor and approved by EPA will be eligible for continued 208 funding.” *Id.* at 1-2. The Plan emphasizes that it “is not a static document but will be updated on an annual basis to meet new needs and demands.” *Id.* at 1-3.

5. Defendants’ failure to comply with their mandatory duty to annually approve a certified and updated Areawide Plan has resulted in (1) a failure to adequately manage and control the severe nitrogen pollution that now afflicts Cape Cod’s waters and (2) funding decisions that cannot be determined to be in compliance with 33 U.S.C. § 1383(f).

6. To rectify these violations of the CWA, Plaintiffs seek an Order requiring Defendants to comply with their mandatory duties to: (1) annually approve an areawide waste

treatment management plan for Cape Cod; and (2) review and approve an updated areawide waste treatment plan for Cape Cod.

7. In the alternative, insofar as Defendants' regulations, including 40 C.F.R. Part 130, provide that (i) the Commonwealth's submission of Total Maximum Daily Loads ("TMDLs") to EPA for approval act, by operation of law, as certifications and updates to areawide waste treatment management plan(s), and (ii) EPA's approval of a TMDL acts as an "automatic" approval of such certification and update, Defendants' approvals of TMDLs for coastal waters on Cape Cod were – and continue to be – arbitrary, capricious and contrary to law because Defendants failed to take into account – much less apply – the statutory requirements of 33 U.S.C. § 1288 and 40 CFR § 130.6(c).

8. Accordingly, Plaintiffs seek an Order declaring that Defendants' automatic approvals of the Commonwealth's certification(s) and update(s) of the areawide waste treatment management plan for Cape Cod based on Defendants' review and approval of TMDLs for coastal waters on Cape Cod are arbitrary, capricious and contrary to law.

9. Separately, Defendants are also required to conduct an annual oversight review of the Commonwealth of Massachusetts' implementation of the Clean Water State Revolving Fund ("SRF" or "the Fund") to determine its compliance with the Act's requirements regarding administration of the Fund. Subchapter VI, entitled "State Water Pollution Control Revolving Funds," 33 U.S.C. § 1386(e). This obligation includes ensuring compliance with the requirement that "[a] State may provide financial assistance from its water pollution control revolving fund only with respect to a project which is consistent with plans, if any, developed under section[] . . . 1288." 33 U.S.C. § 1383(f).

10. Defendants' annual oversight reviews of the Commonwealth's SRF implementation have been arbitrary and capricious and contrary to law because they have failed to consider any certified, updated, and/or approved Areawide Plan for Cape Cod as a basis for determining compliance with the Act.

11. Defendants have also acted arbitrarily and capriciously and contrary to law in annually determining that the Commonwealth of Massachusetts' implementation of its state revolving loan fund is in compliance with the State Clean Water Revolving Fund provisions of the CWA.

12. These legally inadequate reviews have resulted in funding decisions that cannot be determined to be in compliance with 33 U.S.C. § 1383(f).

13. Defendants' legally deficient annual oversight reviews have been so materially inadequate that millions of dollars of federal taxpayer funding have been, and continue to be, expended in a manner that cannot be determined to be consistent with the Areawide Plan, in direct contravention of the CWA. As a result of Defendants' legally deficient oversight reviews, SRF funds have been spent and continue to be spent on projects that contribute to violations of water quality standards. Furthermore, Defendant's failure to require a coordinated approach to expenditures on Cape Cod informed by an annually-approved areawide plan has resulted in continued nitrogen pollution of the embayments and decline in water quality.

14. Plaintiffs seek an Order declaring that: (1) Defendants' annual oversight reviews of the Commonwealth's compliance with CWA subchapter VI, entitled "State Water Pollution Control Revolving Funds," have been arbitrary and capricious and contrary to law; (2) Defendants have erroneously determined the Commonwealth to be in compliance with CWA Subchapter VI.

THE PARTIES

15. Plaintiffs CLF and the Bay Coalition are not-for-profit public interest environmental organizations incorporated under the laws of the Commonwealth of Massachusetts with several thousand members throughout New England. CLF and the Bay Coalition are “persons” as defined under the CWA, 33 U.S.C. § 1362(5).

16. Defendant Lisa P. Jackson is the Administrator of EPA (the “Administrator”) and, in that capacity, is charged with overall supervision, administration, and enforcement of the CWA, including but not limited to effectuation and enforcement of Section 208 of the CWA. She is sued in her official capacity only. If so ordered by the Court, the Administrator has the authority and ability to remedy the harm inflicted by Defendants’ acts and omissions.

17. Defendant Curt Spalding is the Regional Administrator of Region 1 of EPA and, in that capacity, is charged with regional supervision, administration, and enforcement of the CWA, including but not limited to effectuation and enforcement of Section 208 of the CWA. Defendant Spalding is sued in his official capacity only and, if so ordered by the Court, has the authority and ability to remedy the harm inflicted by Defendants’ actions.

STANDING

18. CLF works to address and remedy threats to natural resources in Massachusetts and throughout New England. CLF is a member-supported organization that advocates for the prevention of water pollution and the protection of coastal waters and ecosystems and, by extension, public health and the vitality of local communities. CLF has been involved extensively in local, state, and federal efforts to restore water quality in Massachusetts, including the Cape Cod region.

19. The Bay Coalition is an organization that is dedicated to the restoration, protection, and sustainable use and enjoyment of Buzzards Bay and its watershed. The Bay

Coalition is a member based, not-for-profit organization that advocates for the preservation of Buzzards Bay and its watershed including embayments on Cape Cod. The Bay Coalition is an advocate for, among other things, reducing nitrogen pollution because it is the greatest threat to water quality in the Cape Cod-Buzzards Bay region.

20. CLF and Bay Coalition members live near embayments and other interconnected surface waters on Cape Cod that are degraded by nitrogen pollution and use these waters for recreational, commercial, and aesthetic enjoyment. Activities which CLF and Bay Coalition members conduct in and near the Cape Cod waters include swimming, fishing, boating, and enjoying the views. The nitrogen pollution in the bays is causing degradation of the resource that has limited and continues to limit Plaintiffs' members' ability to engage in these activities. Water quality is critical to CLF and Bay Coalition members' use and enjoyment of the waters. If nitrogen pollution continues unabated, recreational, aesthetic, commercial and other important uses of these waters by CLF, Bay Coalition and their members will be further reduced and could cease altogether.

21. Cape Cod's large tourist industry, which comprises approximately forty percent of the Cape Cod economy, depends on clean waters for the recreational enjoyment of residents and visitors. Continued degradation of the waters of Cape Cod will significantly reduce the commercial and recreational value of these waters and adversely impact CLF, Bay Coalition and their members.

22. CLF's, the Bay Coalition's, and their members' interests have been and continue to be injured by Defendants' failure to fulfill their non-discretionary duties arising under section 208 of the CWA to certify, approve, and implement an areawide waste treatment management plan to prevent, control, and abate water pollution in the Cape Cod region.

Plaintiffs and their members have been and continue to be injured by Defendants' violations of the CWA.

23. CLF's, the Bay Coalition's, and their members' interests have been and continue to be injured by Defendants' automatic approvals of the Commonwealth's certification and update of the areawide waste treatment management plan for Cape Cod based on Defendants' review and approval of total maximum daily loads (TMDLs) for coastal waters on Cape Cod.

24. CLF's, the Bay Coalition's, and their members' interests have been and continue to be injured by Defendants' arbitrary and capricious review of the SRF program and Defendants' unlawful determinations that the Commonwealth is in compliance with subchapter VI of the CWA. Defendants' unlawful actions and omissions continue to contribute to nitrogen pollution in the embayments and fail to address the decline in water quality and the consequential adverse affects on the recreational, aesthetic, commercial and other values and uses of the water bodies.

JURISDICTION AND VENUE

25. The subject matter jurisdiction of this Court is invoked under 33 U.S.C. § 1365(a) (citizen suit provision), 28 U.S.C. § 1331 (federal question), 28 U.S.C. § 2201 (declaratory judgment), and 5 U.S.C. §§ 701-706 (APA).

26. The relief requested is authorized by 22 U.S.C. §§ 2201-02, 33 U.S.C. § 1365(a), and 5 U.S.C. § 706.

27. Venue is appropriate in the District of Massachusetts pursuant to 28 U.S.C. § 1391(e) because the waters that are the subject of this action are located in Massachusetts, Plaintiffs are located, in part, in this judicial district, and Defendants have an official place of business in this District.

GENERAL ALLEGATIONS

28. On August 24, 2010, Plaintiffs, by and through their counsel, notified Defendants and Eric Holder, Esq., Attorney General of the United States, of their intent to file suit under section 505 of the CWA, 33 U.S.C. § 1365, and other federal statutes and regulations, alleging that Defendants failed to fulfill their non-discretionary duties arising under section 208 of the CWA and that Defendants had taken and continued to take actions inconsistent with the Areawide Plan to prevent, control, and abate water pollution in the Cape Cod Region. Plaintiffs alleged, *inter alia*, that Defendants had failed to annually review and approve (or disapprove) the Areawide Plan or, to ensure that such Plan is consistent with the CWA and applicable regulations.

29. Defendants failed to take action under the CWA within the sixty (60) day notice period and their violations continue.

30. In the alternative, Defendants have acted arbitrarily, capriciously and contrary to law in connection with their approval of TMDLs for the coastal waters on Cape Cod insofar as those approvals act as automatic approvals of Cape Cod areawide waste treatment management plans.

31. Further, Defendants have acted arbitrarily and capriciously and contrary to law in annually determining that the Commonwealth of Massachusetts' implementation of its state revolving loan fund is in compliance with the Clean Water State Revolving Fund ("SRF") provisions of the Clean Water Act.

32. As a result of Defendants' acts and omissions, Plaintiffs have suffered and will continue to suffer injuries to their aesthetic, environmental, recreational, and commercial interests in enjoying and utilizing the affected Cape Cod waters.

SPECIFIC ALLEGATIONS

I. NITROGEN POLLUTION ON CAPE COD HAS CREATED AN ECOLOGICAL DISASTER

33. Nitrogen is a pollutant under the Act.¹

34. Nitrogen pollution is a devastating problem for coastal ecosystems and is the nutrient of primary concern in Cape Cod's coastal waters. Cape Cod's coastal embayment systems are severely degraded by nitrogen pollution, and without major corrective action the problem will only worsen.

A. Cape Cod Has Unique Hydrogeologic Conditions

35. The Cape Cod embayments are partially enclosed surface water bodies that cannot easily "flush out" nitrogen that enters them.²

36. Cape Cod has unique soils and geology, and a highly productive groundwater aquifer that directly flows into the embayments.³

37. Cape Cod soils are sandy and very permeable; therefore, water flowing through the aquifer flows through the soils of the Cape and into the affected embayments and other interconnected surface waters.

B. The Sources of Nitrogen Pollution on Cape Cod

38. On Cape Cod, nitrogen is a significant component of wastewater discharged from septic systems and waste water treatment facilities ("WWTF") and is present in stormwater runoff collected and conveyed through stormwater drainage systems.

¹ 33 U.S.C. § 1362(6).

² See, e.g., Pleasant Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Oct. 24, 2007, at 2; Centerville River – East Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Dec. 20, 2007, at 2.

³ Cape Cod Commission, *Cape Cod Comprehensive Regional Wastewater Management Strategy Development Project Final Report* (2003), at 1.

39. Nitrogen is added into Cape Cod aquifers from these sources. Water containing nitrogen pollution travels directly from these sources through the aquifer and into surface waters connected to the embayments. Alternatively, water containing nitrogen pollution first travels from these sources into numerous sub-embayments, which allow nitrogen to reach embayments and other directly connected surface waters.⁴ In certain circumstances, stormwater containing nitrogen is discharged directly into surface waters, which flow into embayments.

(1) *Septic Systems.*

40. The vast majority of the controllable nitrogen threatening the Cape Cod embayments comes from septic systems.⁵ In a septic system, a pipe deposits nitrogen-laden sewage and wastewater into an underground septic tank. The nitrogen-laden wastewater is then discharged from the septic tank into a leaching field that is intended to provide further pollutant removal in the soil. However, on Cape Cod, septic systems add nitrogen into aquifers that flow through the highly permeable soils with little pollutant removal from leaching fields, and then discharge into embayment systems and connected surface waters.

41. Nitrogen discharged from septic systems through the Cape Cod aquifer undergoes very little attenuation – i.e., reduction in concentration – before it discharges to embayment systems.

⁴ See, e.g., Massachusetts Estuaries Project, *Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Centerville River, Town of Barnstable, Massachusetts* (Nov. 2006), at 1.

⁵ See, e.g., Centerville River – East Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Dec. 20, 2007, at 14 (“In the Centerville River - East Bay embayment system overall, the highest N loading from controllable sources is from septic systems.”).

42. Septic systems on Cape Cod are generally not designed to remove nitrogen, and even fully functioning systems remove only one to three percent of nitrogen before the wastewater leaves the tank.⁶

43. Only twenty to twenty-two percent of the nitrogen leaving the septic tanks on Cape Cod is attenuated in the nearby soil.⁷ Virtually no attenuation occurs after the nitrogen is added into the aquifer and travels to the embayment systems.⁸

(2) *Stormwater Systems*

44. Stormwater systems on Cape Cod collect stormwater from impervious surfaces and funnel nitrogen-laden stormwater into pipes.

45. Discharges from stormwater pipes then add nitrogen pollution into the aquifer and/or surface waters, from which it flows into the degraded embayments. In some areas of Cape Cod, stormwater discharges make up as much as forty-five percent of the controllable nitrogen load.⁹

46. The Total Maxim Daily Loads (“TMDLs”) adopted by EPA under Section 303(d) of the CWA, 33 U.S.C. section 1313(d), recognize that municipal stormwater systems are point sources of pollution under the CWA.¹⁰

(3) *Wastewater Treatment Facilities*

⁶ See, e.g., Mass. Estuaries Project, Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Centerville River System, Barnstable, Massachusetts: Final Report, Nov. 2006, at 30-31. The MEP Technical reports, on which the TMDLs were based, account for current nitrogen removal rates by existing septic systems.

⁷ *Id.*

⁸ *Id.*

⁹ See, e.g., Little Pond Embayment System TMDLs for Total Nitrogen, approved by EPA Region 1 on Mar. 3, 2008, at 6, Fig. 4 (describing stormwater as “land use”-based nitrogen loading).

¹⁰ See, e.g., Centerville River – East Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Dec. 20, 2007, at 17; Great, Green, and Bourne Pond Embayment Systems TMDLs for Total Nitrogen, approved by EPA Region 1 on July 18, 2007, at 18.

47. WWTFs also discharge nitrogen-laden effluent into the aquifer that then flows in an underground plume directly into the affected Cape Cod embayments.

48. These WWTFs contribute substantially to excessive nitrogen pollution.

49. For example, as set forth in the MEP Report applicable to the West Falmouth Harbor embayment system that served as the basis for the West Falmouth Harbor TMDL, the WWTF in the West Falmouth Harbor system deposits over 13,000 kilograms (or approximately 28,600 pounds) of nitrogen into the embayment system each year, and constitutes fully three-quarters of the controllable nitrogen load.¹¹

50. The WWTFs are composed of pipes and other conveyances that add nitrogen as a pollutant into and through the aquifers into the bays.

C. *The Effect of Nitrogen on Water Quality*

51. Excessive nitrogen inputs – and the resulting imbalances in other water quality parameters – kill eelgrass beds, a cornerstone species of the ecosystem in Cape Cod’s embayments and an important indicator of water quality.¹² According to the Massachusetts Department of Environmental Protection (“MassDEP”), “[b]efore an ecosystem becomes totally degraded, much of its ecological and economic value has been lost. In many coastal systems, the beginning of this change is the loss of eelgrass.” MassDEP, *Embayment Restoration and Guidance for Implementation Strategies* (2003), at 9. Because eelgrass health is such a useful

¹¹ Massachusetts Estuaries Project, *Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for West Falmouth Harbor, Falmouth, Massachusetts* (May 2006), at 34.

¹² See, e.g., Great, Green, and Bourne Pond Embayment Systems TMDLs for Total Nitrogen, approved by EPA Region 1 on July 18, 2007, at 8; Jennifer L. Bowen & Ivan Valiela, *The Ecological Effects of Urbanization of Coastal Watersheds: Historical Increases in Nitrogen Loads and Eutrophication of Waquoit Bay Estuaries* (2001), at 1497.

proxy for and important factor in water quality, eelgrass restoration is a primary nitrogen management goal.¹³

52. Excessive nitrogen has caused dramatic declines in eelgrass in Cape Cod's bays. Eelgrass beds across the region have significantly declined. Three TMDLs for the region recently approved by the EPA report a complete disappearance of eelgrass altogether in their targeted embayments.¹⁴ The high quality plant and animal communities supported by the eelgrass beds in the Cape Cod embayments at the time of preparation of the Areawide Plan are now severely degraded.

53. The TMDLs acknowledge that, without proper nitrogen management, nitrogen loading is certain to increase further, accelerating this degradation.

54. Increasing levels of nitrogen concentrations in the coastal embayment receiving waters also result in the damaging proliferation of algae, epiphyton, nuisance plant species, and invasive species. This proliferation decreases water clarity, produces unpleasant odors and scums, and reduces dissolved oxygen levels. This process has led to decreased biodiversity, dramatic changes in the composition and dominance of species, and increased levels of toxicity. Severe cases of nitrogen pollution have led to major fish kills, increases in undesirable invasive species, reduced biodiversity, and loss of plant and animal species necessary for a healthy ecosystem.

¹³ See, e.g., Pleasant Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Oct. 24, 2007, at 16; Great, Green, and Bourne Pond Embayment Systems TMDLs for Total Nitrogen, approved by EPA Region 1 on July 18, 2007, at 15.

¹⁴ Centerville River – East Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on Dec. 20, 2007, at 5; Popponesset Bay TMDLs for Total Nitrogen, approved by EPA Region 1 on Jan. 22, 2008, at 4-5; Three Bays System TMDLs for Total Nitrogen, approved by EPA Region 1 on Feb. 13, 2008, at 7.

II. CAPE COD SECTION 208 AREAWIDE PLAN

55. On information and belief, sometime prior to or during 1975, the Governor of the Commonwealth of Massachusetts identified the waters of Cape Cod as an area with significant water quality control problems, therefore requiring the development of an areawide waste management plan. 33 U.S.C. §1288(a) (2).

56. On February 27, 1975, the Cape Cod Planning and Economic Development Commission (“CCPEDC”)¹⁵ was designated by the Administrator as the Areawide Planning Agency for Cape Cod. FY 74-75 208 Areawide Management: Designated 208 Agencies – Principal Contacts, (EPA 1975) at 1 (“as of July 1, 1975, the following one hundred and forty nine (149) areas and agency designations have been approved by the Administrator...”); 33 U.S.C. §1288(a) (2-3). At that time, the CCPEDC was a unit of Barnstable County government. The functions of the CCPEDC related to water quality planning and management were subsequently transferred to the Cape Cod Commission (“CCC”). The Cape Cod Commission is a unit of Barnstable County government.

57. Under Section 208, designation of areawide planning agencies “shall be subject to the approval of the Administrator.” 33 U.S.C. § 1288(a) (7); 40 CFR §130.9(a). Once designation and EPA approval are final, such designation remains in full force and effect unless and until formal “de-designation” occurs. 40 CFR §130.9(b)(1-3). Upon such de-designation, “the State agency shall assume direct responsibility for continued water quality planning and oversight of implementation within the area.” *Id.* at 130.9(c), *see also* 33 U.S.C. §1288(a)(6)

¹⁵ The obligations of the CCPEDC were later transferred to Cape Cod Commission (“CCC”) through the Cape Cod Commission Act, which provides that “[t]he powers, duties, responsibilities and obligations of the Cape Cod planning and economic development commission . . . shall be transferred to the Cape Cod commission immediately upon its creation under this act.”

(“The State shall act as planning agency for all portions of such State which are not designated under paragraphs (2), (3), and (4) of this subsection.”)

58. On information and belief, sometime during 1975, the CCPEDC received grant funds from EPA to conduct a section 208 areawide waste management study for the Cape Cod region and develop an areawide waste management plan.

59. On information and belief, in or around September 1978, the CCPEDC, acting as the designated areawide waste treatment management planning agency, published the Areawide Plan. The Areawide Plan provided an integrated approach to addressing the management of water quality and wastewater disposal problems on Cape Cod. This included identification of known water pollution and management problems, emerging issues of concern, and areas with high quality waters.

60. A Final Section 208 Areawide Water Quality Management Plan/EIS for Cape Cod, Massachusetts was prepared by U.S. EPA, Region 1 and by the Cape Cod Economic Development Agency and was signed by the Regional Administrator of the U.S. EPA, Region 1 and by the Cape Cod Economic Development Agency in September, 1978. 33 U.S.C. §1288(b)(3).

61. On information and belief, sometime subsequent to September, 1978, the then-Governor of the Commonwealth of Massachusetts certified and submitted the Areawide Plan to EPA.

62. On information and belief, the Administrator approved the Final Areawide Plan for Cape Cod.

63. The final Areawide Plan recommended, *inter alia*: (1) improving wastewater management; (2) enacting more stringent land use controls; (3) implementing nonpoint source controls; and (4) conducting periodic monitoring and analyses of various water quality indices.

III. CHANGES IN WATER QUALITY CONDITIONS SINCE THE 1978 AREAWIDE PLAN

64. The Clean Water Act, as interpreted by EPA in its regulations, requires that areawide plans established pursuant to Section 208 be “updated as needed to reflect changing water quality conditions.” 40 C.F.R. § 130.6(e). Despite clear evidence (including from studies commissioned by EPA itself) of changing water quality conditions, the Areawide Plan has not been updated since 1978.

65. Nitrogen pollution of coastal embayments was not identified as a significant water quality concern in the 1978 Areawide Plan, but was specifically identified as looming trend. Areawide Plan at 2-4 (Long term “water quality trends of concern” included eutrophication of coastal embayments from nitrogen pollution originating from “On-site sewage systems in high densities”.)

66. Since the mid-1980’s EPA has funded studies that have documented water quality impairments in coastal embayments on Cape Cod resulting from nitrogen pollution.

67. In 1989, EPA approved the list compiled by the Commonwealth of Massachusetts pursuant to Section 304(l) of the CWA, 33 U.S.C. § 1314(l), as part of the Commonwealth’s Nonpoint Source Assessment Report. The EPA-approved 304(l) list included Pocasset Harbor in Bourne, Little Sippewisset Creek in Falmouth, Great Sippewisset Creek in Falmouth, Phinneys Harbor in Bourne, and West Falmouth Harbor in Falmouth as impaired for dissolved oxygen.

68. In 1992, EPA approved the Buzzards Bay Comprehensive Conservation Management Plan developed pursuant to 33 U.S.C. § 1330(f), which identified eutrophication impairments from nitrogen pollution in coastal embayments surrounding Buzzards Bay as a priority problem and adopted an action plan for managing nitrogen inputs. The embayments identified with nitrogen impairments included bays on Cape Cod.

69. A full decade later in 2002, EPA funded and participated in the Waquoit Bay Watershed Ecological Risk Assessment, which documented that nitrogen loading was the most significant threat to the ecological health of Waquoit Bay. U.S. EPA National Center For Environmental Assessment, *Waquoit Bay Ecological Risk Assessment: The effect of land-derived nitrogen loads on estuarine eutrophication*, Oct. 2002, EPA/600R-021079, at 7-1. (“Waquoit Bay Study”). The EPA Waquoit Bay Study noted that the study results were of regional and national significance and should influence EPA’s decision-making on pollution control.

70. In 2003, EPA approved the revised Massachusetts Bays Comprehensive Conservation Management Plan, which included recognition of the nitrogen pollution afflicting Cape Cod’s embayments outside of Buzzards Bay.

71. Since adoption of the 1978 Areawide Plan for Cape Cod, extensive scientific study developed by or available to EPA has demonstrated an ongoing and increasing trend of accelerated climate change and the impact of that change on affected embayments.

72. Federally-sponsored research has concluded that global temperatures are rising and, in turn, affect weather patterns and water quality.¹⁶ Climate science is unequivocal about

¹⁶ See, e.g., Nat’l Assessment Synthesis Team, *Climate Change Impacts on the United States: The Potential Consequences of Climate Variability and Change* (2001).

the fact that, under the most probable future scenario, coastal ecosystems will be subjected to more strains than they would be without climate change.

73. Climate change will impact the seasonal timing of runoff to freshwater and coastal systems. Furthermore, climate science demonstrates that climate change creates uncertainty with regard to the range of possible future impacts of such change on coastal ecosystems.

74. The 1978 Areawide Plan fails to mention climate change.

75. Defendants' failures to annually approve or to require updates of the Areawide Plan means that the impact of climate change on water quality conditions has not been evaluated in the context of Section 208.

76. On information and belief, between 1992 and 2010 EPA approved numerous lists submitted by the Commonwealth of Massachusetts pursuant to Section 303(d) of the CWA 33 U.S.C. § 1313(d), which documented the decline in water quality in the coastal bays of Cape Cod over that period of time as nitrogen pollution of the bays and associated impacts became increasingly apparent.

77. The EPA-approved 303(d) lists identified specific Cape Cod embayments that exceed the Commonwealth's water quality standards for nitrogen and thus require preparation of a TMDL.¹⁷

78. To date, EPA has approved thirteen TMDLs developed and submitted by MassDEP for nitrogen-threatened embayments on Cape Cod and Nantucket, as follows:

- 1) Stage Harbor, Sulphur Springs, Taylors Pond, Bassing Harbor and Muddy Creek (Chatham) TMDLs for Total Nitrogen, approved by EPA Region 1 on June 21, 2006;

¹⁷ See MassDEP, Final Massachusetts Year 2008 Integrated List of Waters (CWA §§ 303d & 305b) (approved by EPA Region 1 on May 4, 2009), *available at* <http://www.mass.gov/dep/water/resources/tmdls.htm>.

- 2) Quashnet River, Hamblin Pond, Little River, Jehu Pond, and Great River (Waquoit Bay System) TMDLs for Total Nitrogen, approved by EPA Region 1 on November 7, 2007;
- 3) Great, Green, and Bournes Pond Embayment Systems TMDLs for Total Nitrogen, approved by EPA Region 1 on July 18, 2007;
- 4) Popponeset Bay TMDLs for Total Nitrogen, approved by EPA Region 1 on January 22, 2008;
- 5) Pleasant Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on October 24, 2007;
- 6) Three Bays System TMDLs for Total Nitrogen, approved by EPA Region 1 on February 13, 2008;
- 7) Centerville River – East Bay System TMDLs for Total Nitrogen, approved by EPA Region 1 on December 20, 2007;
- 8) West Falmouth Harbor Embayment System TMDLs for Total Nitrogen, approved by EPA Region 1 on May 5, 2008;
- 9) Phinney’s Harbor Embayment System TMDLs for Total Nitrogen, approved by EPA Region 1 on February 5, 2008;
- 10) Little Pond Embayment System TMDLs for Total Nitrogen, approved by EPA Region 1 on March 3, 2008;
- 11) Oyster Pond Embayment System TMDLs for Total Nitrogen, approved by EPA Region 1 on May 5, 2008;
- 12) Nantucket Harbor Bay System TMDL for Total Nitrogen, approved by EPA Region 1 on May 12, 2009; and
- 13) Stage Harbor/Oyster Pond, Sulphur Springs/Bucks Creek, Taylors Pond/Mill Creek (Chatham) TMDL Re-Evaluations for Total Nitrogen, approved by EPA Region 1 on June 22, 2009.

79. Each of these TMDL approvals confirm that water quality conditions have declined dramatically since EPA’s approval of the Areawide Plan as a result of excessive nitrogen loading in embayments.

IV. THE EPA HAS FAILED TO PERFORM ITS MANDATORY DUTIES UNDER THE CWA TO ANNUALLY APPROVE AN AREAWIDE PLAN FOR CAPE COD AND TO REQUIRE NEEDED UPDATES TO THE AREAWIDE PLAN.

80. Section 208(a) of the CWA, 33 U.S.C. § 1288(a), requires the Governor of each State to: (1) identify each area within the State that has substantial water quality control issues, (2) designate the boundaries of any identified area, and (3) designate a single representative organization (planning authority) to develop effective waste treatment management plans, subject to the approval of the Administrator. 33 U.S.C. § 1288(a)(7); 40 CFR §130.9(a). This

planning process is intended to generate a unified framework for activities to abate water pollution in a geographic area and integrate technical needs for pollution control with management arrangements capable of implementing those controls.

81. Section 208(b) of the CWA, 33 U.S.C. § 1288(b), requires the designated planning authority to implement an areawide waste treatment planning process.

82. Section 208(b)(3) of the CWA, 33 U.S.C. § 1288(b)(3), requires that areawide waste treatment management plans be certified annually by the Governor of each State and that such annually certified plans be submitted to the Administrator for approval.

83. On information and belief, since the Administrator's initial approval of the Areawide Plan, *over thirty years ago*, neither the Administrator nor the Regional Administrator has annually approved any areawide plan.

84. While the 1978 Plan is still in effect, the Plan has not been annually approved by EPA, and has become insufficient to address the deteriorating water conditions on Cape Cod that EPA has documented for the last thirty years. The Administrator and Regional Administrator therefore have failed to fulfill their non-discretionary duties as set forth in section 208 of the CWA and the CWA regulations. CWA regulations and the 1978 Areawide Plan approved by EPA both require update of the Areawide Plan. The Plan acknowledges that:

Those sections of the final plan that are certified by the Governor and approved by EPA will be eligible for continued 208 funding. Through such approval EPA and the state will also be indicating their intention to comply with the recommendations within the limitations of their authority. It must be emphasized that the 208 plan, however, is not a static document but will be updated on an annual basis to meet new needs and demands.

Areawide Plan at 1-2.

85. The Areawide Plan also states:

Updating 208 Plan – Annual updates of the 208 plan are required by PL 92-500. The Water Resources Advisory Council will assist the staff in preparing the update, will review and comment on the update and advise the CCPEDC on its acceptability. For

federal grant eligibility, treatment facility proposals must be consistent with the 208 plan, so that revisions to the plan can be very significant to the towns.

Areawide Plan at 2-124.

86. The Areawide Plan designates the CCPEDC (now CCC) as the Regional Agency for various management purposes, including to “update 208 plan, continue regional water quality planning.” Areawide Plan at 3-132.

87. On information and belief, since the Administrator’s initial approval of the Areawide Plan, *over thirty years ago*, the CCPEDC and its successor the CCC have never prepared a new or updated Areawide Plan despite well documented and dramatic declines in water quality conditions, adoption of new water quality limitations, and adoption of TMDLs among other new requirements 40 C.F.R. § 130.6(e).

V. DEFENDANTS’ AUTOMATIC APPROVAL OF CERTIFIED UPDATES OF THE AREAWIDE PLAN THROUGH APPROVAL OF THE CAPE COD TMDLS WAS ARBITRARY, CAPRICIOUS AND CONTRARY TO LAW

88. EPA’s “Water Quality Planning and Management” regulations require that approved TMDLs “shall be included in the WQM plan.” 40 CFR § 130.6(c)(1); (d)(2).

89. According to the Federal Register Notice adopting EPA’s “Water Quality Planning and Management” regulations: “Under the statute, when EPA approves a TMDL submitted to it under section 303(d), the TMDL is to be automatically incorporated into the State’s WQM plan. The regulation treats [State] submittal and [EPA] approval [of TMDLs] as the equivalent of a WQM plan update, certification and approval. Consequently, approved TMDL’s will be immediately effective for NPDES permit and WQM plan consistency determinations as required by section 208(e).” 50 Fed. Reg. 1774, 1777 (Jan. 11, 1985).

90. Furthermore, EPA stated in the Federal Register that: “One commenter suggested that since TMDLs must be incorporated into WQM plans which must be approved by EPA, a separate EPA review of TMDLs is not necessary. We do not agree since section 303(d)(2) of the Act provides that after TMDLs are approved by EPA, they shall be incorporated into WQM plans. While the Act’s requirements may result in two separate reviews, a combined review of proposed TMDLs and related WQM plan elements would be advantageous.” *Id.*

91. As set forth in paragraph 78 above, EPA has approved TMDLs for waters on Cape Cod based on 40 C.F.R., Part 130.

92. By operation of law EPA’s approval of the Cape Cod TMDLs constitutes “automatic incorporation” and approval of certified updates to the areawide water quality management plan.

93. EPA’s approvals of the certified updates to the areawide plan are arbitrary, capricious and contrary to law because the TMDLs do not address the required statutory plan elements set forth at 33 U.S. C. § 1288(b)(2) or the mandatory requirements of 40 C.F.R. §130.6(c), including, *inter alia*, that these EPA approvals based on 40 C.F.R., Part 130 do not mention the required components of water quality management plans.

VI. EPA HAS FAILED TO FULFILL OBLIGATIONS UNDER THE SRF PROVISIONS OF THE CWA (§§ 601-606)

94. Subchapter VI of the CWA, entitled “State Water Pollution Control Revolving Funds,” sets forth the legal provisions governing each State’s administration of a SRF for water pollution control and the Administrator’s mandatory annual oversight obligations. The Commonwealth of Massachusetts has received \$1.143 billion in federal clean water capitalization grants pursuant to the SRF since the inception of this program. State Revolving Fund Annual Report 2010, Massachusetts Water Pollution Abatement Trust and Massachusetts

Department of Environmental Protection (September 30, 2010) at 2. Pursuant to Section 606(e) of the CWA, 33 U.S.C. § 1386(e), the Administrator has a mandatory, non-discretionary duty to “conduct an annual oversight review of each state plan prepared under subsection (c) of this section, each State report prepared under subsection (d) of this section, and other such materials as are considered necessary and appropriate in carrying out the purposes of this subchapter.”¹⁸

In such annual review, the Administrator must “determine compliance with this subchapter.”

Id.

95. Section 603(f) of the CWA, 33 U.S.C. § 1383(f), provides that “a State may provide financial assistance from its water pollution control revolving fund only with respect to a project which is consistent with plans, if any, developed under section[] . . . 1288 of this title.” *See also* 40 CFR §35.3125(e)(“*Water quality management planning*. The SRF may provide assistance only to projects that are consistent with any plans developed under sections 205(j), 208, 303(e), 319 and 320 of the Act.”); 40 CFR §130.6(f)(“Construction grant and permit decisions must be made in accordance with certified and approved WQM plans”).

96. In recognition of the requirements of the CWA, the Commonwealth of Massachusetts’ most recent approved SRF Intended Use Plan (“IUP”) states:

Title VI of the Federal Clean Water Act (FWCA) and subsequent regulations and guidance require that the Commonwealth certify compliance with or acceptance of a number of conditions. These include the following:Consistency with Planning. The Commonwealth agrees that it will not provide assistance to any project unless that project is consistent with plans developed under Section 205(j), 208, 303(e), 319 or 320.

2010 IUP at Section 10, p.13, available <http://www.mass.gov/dep/water/wastewater/10cwiup.pdf>

¹⁸ Subsection 606(c) requires States to “annually prepare a plan identifying the intended uses” of the SRF (known as the “Intended Use Plan”). 33 U.S.C. § 386(c). Subsection 606(d) requires States to prepare and submit an annual report to EPA. *Id.* at § 1386(d).

97. Section 208(d) of the CWA, 33 U.S.C. § 1288(d), prohibits grants for construction of publicly owned treatment works within an area designated under [Section 208(c) of the CWA, 33 U.S.C. § 1288(c)] and for which an areawide waste treatment management plan has been approved under [Section 208(b) of the CWA, 33 U.S.C. § 1288(b)], except to the designated waste treatment management agency and for works in conformity with such plan.

98. The Areawide Plan for Cape Cod provides that the “EPA Construction Grants Division should support implementation of the 208 Plan by adopting the funding policies set forth in this section. The EPA should monitor the implementation of [federal construction funds for publicly owned treatment works under Section 201 of the Clean Water Act] by [the Massachusetts Division of Water Pollution Control] *to assure consistency.*” Areawide Plan, at 2-29 (emphasis added).

99. According to EPA’s “SRF Annual Review Guidance” States are required to demonstrate to EPA during the annual review that “The State provided assistance to projects consistent with water quality management plans developed under Section 205(j), 208, and 303(e).” U.S. EPA, SRF Annual Review Guidance, at 7-6 (December 30, 1988).¹⁹

100. As alleged in Paragraphs 83-87 above, however, the Areawide Plan under section 208 of the CWA for the Cape Cod Region has not been updated by the CCPEDC or its successor CCC, certified by the Governor, submitted by the Governor to the Administrator or Regional Administrator, or approved by the Administrator or Regional Administrator in over thirty years, in violation of the CWA.

¹⁹ The Guidance provides further that “[t]his documentation will be provided in the [Intended Use Plan] except for substitute projects funded during the year which will be addressed in the Annual Report.” *Id.*

101. Because the Areawide Plan for the Cape Cod Region has not been updated, certified and approved, the Commonwealth of Massachusetts' cannot administer the SRF in a manner consistent with section 208 of the CWA, as required by section 603(f) of the CWA.

102. Notwithstanding the foregoing, Massachusetts continues to administer the SRF in a manner that is not in accordance with law. In contravention of her annual review obligations, under section 606(e) of the CWA, 33 U.S.C. § 1386(e), the Administrator has failed to make the determination that Massachusetts' SRF implementation is not in compliance with Section 603(f) of the CWA.²⁰

103. The Administrator's annual reviews and determinations of compliance with respect to Massachusetts' administration of the SRF have also been arbitrary and capricious because there has been no duly updated, certified and approved Areawide Plan, and because EPA's annual determinations of compliance under Section 606(e) have been unsupported by the administrative record developed for purposes of the annual reviews. Each annual oversight review constitutes a Final Agency Action within the meaning of section 704 of the Administrative Procedure Act, 5 U.S.C. § 704.

104. As a result of Defendants' actions and omissions, Plaintiffs have suffered and will continue to suffer injuries to their aesthetic, environmental, recreational, and commercial interests in enjoying and utilizing the affected Cape Cod waters.

²⁰ Section 1385(a) of the Clean Water Act, 33 U.S.C. § 1384(b), directs that if the Administrator determines that a State has not complied with requirements under Title VI, it must provide notice to the State of such failure and prescribe corrective action. If the State fails to implement correction actions consistent with EPA's notification of noncompliance within sixty (60) days of receiving such notice, EPA shall withhold further payments to the SRF fund indefinitely until corrective action is taken. Consistent with these requirements, EPA's "Initial Guidance for State Revolving Funds" (January 28, 1988) states under the heading "Compliance Assurance" "[i]f the annual review or audit reveals that the State has not complied with its capitalization grant agreement or other requirements under Title VI, section 605 requires the RA [Regional Administrator] to notify the State of such non compliance and prescribe the necessary corrective action."

COUNT I (CWA § 208)

105. Plaintiffs reallege and incorporate by reference the allegations of Paragraphs 1 through 104, as if fully rewritten herein.

106. On information and belief, for each calendar year since 1979, the Administrator has failed to annually approve an updated and certified areawide waste treatment management plan for the Cape Cod Region as required by section 208 of the CWA, 33 U.S.C. § 1288, in direct violation of the non-discretionary duties set forth therein.

107. On information and belief, for each calendar year since 1979, the Administrator has failed to require the annual certification and submission of such plan by the Commonwealth of Massachusetts as required by section 208 of the CWA, 33 U.S.C. § 1288, in direct violation of the non-discretionary duties set forth therein.

**COUNT II (CWA § 208) (CHANGING WATER QUALITY
CONDITIONS/NEW REQUIREMENTS)**

108. Plaintiffs reallege and incorporate by reference the allegations of Paragraphs 1 through 107 as if fully rewritten herein.

109. Despite EPA's own actions documenting, and even approving, numerous TMDLs setting forth the dramatically deteriorating water quality conditions in the waters within the Areawide Plan for the Cape Cod Region, the Administrator, upon information and belief, has at least since 1979 failed to require, review, and/or approve needed updates to the Areawide Plan to reflect these well-documented changing water quality conditions, in direct violation of the mandatory duties set forth at 40 CFR §130.6(e). Separately, despite EPA's own actions documenting, and even approving, numerous TMDLs setting forth new requirements for water pollution control and management for waters within the Areawide Plan for the Cape Cod Region, the Administrator, upon information and belief, has at least since 1979 failed to require,

review, and approve needed updates to reflect these new requirements, in direct violation of the non-discretionary duties set forth at 40 CFR §130.6(e).

COUNT III (CWA § 208 & APA § 706(2))

110. Plaintiffs reallege and incorporate by reference the allegations of Paragraph 1 through 109 as if fully rewritten herein.

111. Insofar as Defendants' approvals of the Cape Cod TMDLs are, by operation of law, automatic approvals of certified updates to the Commonwealth's areawide water quality management plans, Defendants' approvals were arbitrary, capricious and contrary to law, in violation of section 706(2) of the Administrative Procedure Act. 5 U.S.C. §§ 704, 706(2).

COUNT IV (CWA § 606 & APA § 706(2))

112. Plaintiffs reallege and incorporate by reference the allegations of Paragraph 1 through 111 as if fully rewritten herein.

113. The Administrator's determination on an annual basis that the Commonwealth of Massachusetts' Intended Use Plan prepared pursuant to Section 606(c) is in compliance with subchapter VI of the CWA is contrary to Section 606(e) of the CWA and is arbitrary and capricious in violation of section 706(2) of the Administrative Procedure Act. 5 U.S.C. §§ 704, 706(2).

RELIEF REQUESTED

WHEREFORE, Plaintiffs pray for an order by this Court:

1. Declaring that the Administrator and Regional Administrator have failed to annually approve the areawide waste treatment management plan for the Cape Cod region in violation of section 208 of the CWA;
2. Declaring that the Administrator and Regional Administrator have failed to approve needed updates to the areawide waste treatment management plan for the Cape Cod region to reflect changing water quality conditions and new requirements, in violation of section 208 of the CWA and 40 CFR § 130.6(e);

3. Declaring that the Administrator and Regional Administrator have failed to require annual updates to the areawide waste treatment management plan for the Cape Cod region to reflect changing water quality conditions and new requirements, in violation of section 208 of the CWA and 40 CFR § 130.6(e);
4. Establishing a schedule for the undertaking and completion by Defendants of activities necessary to assure appropriate update and approval of an areawide waste treatment management plan for the Cape Cod region, including but not limited to:
 - (a) Affirming that the Cape Cod Commission continues to be the areawide planning agency for the planning area or confirming that the Commonwealth of Massachusetts has assumed all areawide management planning obligations under the CWA pursuant to Section 208(a)(6) of the CWA and 40 CFR § 130.9(c);
 - (b) Requiring submission of an updated and certified Areawide Plan within 1 year of the date of the Court's Order; and
 - (c) Approving such updated plan after a determination that such plan is in compliance with all aspects of Sections 208(b)(2)(A) through (K), including a fully enforceable regulatory program under Section 208(b)(2)(C) to regulate both point and nonpoint sources under Section 1281(c) of the CWA.
5. Declaring and finding that the Administrator and Regional Administrator have acted arbitrarily, capriciously and contrary to law by automatically approving certified updates to the areawide plan through approval of the Cape Cod TMDLs without considering or assuring full compliance with the mandatory plan elements set forth at 33 U.S.C. § 1288(b)(2) and 40 CFR § 130.6(c) and remanding this matter to EPA for full consideration of and compliance with these mandatory requirements;
6. Declaring and finding that the Administrator has acted arbitrarily and capriciously and contrary to law by determining that the Commonwealth's administration of the clean water state revolving fund is in compliance with the CWA in EPA's mandatory annual review under Section 606(e) of the CWA;
7. Declaring that the Administrator has failed to notify the Commonwealth of Massachusetts that it is administering financial assistance from its state revolving fund for water pollution control for projects in a manner inconsistent with the Areawide Plan, developed pursuant to section 208 of the CWA, in violation of section 603(f) of the CWA;
8. Issuing an injunction requiring the Administrator to notify the Commonwealth of its noncompliance with section 603(f) of the CWA and require certification and update of the Areawide Plan within one (1) year of the date of such notification;

9. Granting such other and further relief as may be necessary and appropriate to ensure compliance with sections 603(f) and 606(e) of the CWA;
10. Retaining jurisdiction of the case for the purpose of supervising Defendants' full compliance with the Court's Order;
11. Awarding Plaintiffs their costs in bringing this litigation, including but not limited to attorney and expert witness fees; and
12. Granting such other and further relief as may be necessary and appropriate.

Dated: September 10, 2012

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Certificate of Service

I hereby certify that these documents filed through the ECF system will be sent electronically to the registered participants as identified on the Notice of Electronic Filing (NEF) on September 10, 2012. There are no nonregistered participants in this docket.

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