

**ARTICLE 68 WORK GROUP
The Fertilizer Committee**

**REFERENCE LIST OF COMMON DOCUMENTS
As of June 30, 2010
Compiled by Lee W. Saperstein**

Documents Providing Authority

Massachusetts, Commonwealth of, Department of Environmental Protection (DEP), "Nonpoint Pollution Source (NPS) Management Plan," Found on May 16, 2010 at URL: www.mass.gov/dep/water/resources/nonpoint.htm.

The plan itself is hot linked from this menu page and can be downloaded as a Word or PDF document. In the Executive Summary, page 12, it says that a DEP objective is to assist "communities in drafting river protection bylaws and ordinances."

Massachusetts, Commonwealth of, Department of Environmental Protection (DEP), Water, Wastewater, & Wetlands, "Coastal Resources & Estuaries," A web page with links to explanations on the Massachusetts Estuaries Project (MEP) and reports published or planned; found on May 16, 2010, at URL:

<http://www.mass.gov/dep/water/resources/coastalr.htm#reports>. The web page for "What are Estuaries?" <http://www.mass.gov/dep/water/resources/brochure.htm>, explains why nitrogen loading is a problem for estuaries and then states, as part of the suggestions for a solution, that "including limiting use of lawn fertilizers" may be necessary.

Massachusetts, Commonwealth of, Executive Office of Energy and Environmental Affairs, Nantucket Harbor Embayment System, Total Maximum Daily Loads for Total Nitrogen, Report # 97-TMDL-2 Control #249.0, 32 pages, January 28, 2009. Found on May 16, 2010, at URL: <http://www.mass.gov/dep/water/resources/nantuckt.doc>.

This final report on the quality of water in Nantucket Harbor is the most quantitatively definitive on nitrogen (nutrient) loading. It is part of a series of reports that comprise the Massachusetts Estuaries Project (q.v.).

Nantucket, Town of, Annual Town Meeting, April 5-7, 2010, Warrant Article 68, found on May 16, 2010, at URL: http://www.nantucket-ma.gov/Pages/NantucketMA_TownMeeting/2010atm/2010ATMwarrantFCmotionsFINAL.pdf.

This is the Article as proposed by the Board of Selectmen on behalf of the Harbor Plan Implementation Committee (HPIC). It was amended substantially on the floor of the ATM whereby the Town removed most of the technical language of the Article and left the request that the Town write a Home-Rule Petition for the control of fertilizer with the intent of presenting it to the Commonwealth in time for the next legislative session of the General Court. As amended and passed (ATM 10 ART 68 Fert HR(2).doc), this article provides the foundation for the Work Group.

Nantucket, Town of, The Nantucket and Madaket Harbors Plan Review Committee and the Department of Marine and Coastal Resources, Nantucket & Madaket Harbors Action Plan, 204 pages, May 2009 (As approved by the Secretary of the Massachusetts Executive Office of Energy and Environmental Affairs, December 21, 2009). Found on May 16, 2010, at URL: <http://www.nantucketharborplan.com/>.

In the letter of approval (12 pages, included as a preface to the Plan), the Secretary listed a number of federal policy principles to which adherence should be maintained. He said, “The federally-approved CZM Program Plan establishes 20 enforceable program policies and 9 management principles which embody coastal policy for the Commonwealth of Massachusetts.” Relevant to the purposes of the Work Group is this quotation,

“• Water Quality Policy #2: Ensure that non-point pollution controls promote the attainment of state surface water quality standards in the coastal zone.”

The section of the 2009 Harbor Plan that is relevant to the Work Group is Section 2.2, “Water Quality,” p. 18 *et seq.*

Ordinances from other Jurisdictions that Control Fertilizer Use

Dane, County of, Wisconsin, State of, Ordinances, “Establishing Regulations for Lawn Fertilizer and Coal Tar Sealcoat Products Application and Sale,” Chapter 80; found on May 19, 2010, at URL: <http://danedocs.countyofdane.com/webdocs/pdf/ordinances/ord080.pdf>.

Minnesota, State of, Department of Agriculture (MDA), “Phosphorus Lawn Fertilizer Law,” a web brochure, 3 pages; found on May 19, 2010, at URL: <http://www.mda.state.mn.us/phoslaw>. It provides a link to Chapter 18C of the Minnesota State Statutes, “Minnesota’s Fertilizer, Soil Amendment, and Plant Amendment Law” at https://www.revisor.mn.gov/revisor/pages/statute/statute_chapter_toc.php?year=2006&chapter=18C.

New Jersey, State of, Department of Environmental Protection, Division of Water Quality, Bureau of Nonpoint Pollution Control, http://www.state.nj.us/dep/dwq/bnpc_home.htm, provides information about nonpoint pollution sources including a fertilizer “tip” card: http://www.state.nj.us/dep/dwq/pdf/tipcard_fertilizerfinal.pdf.

New Jersey, State of, Department of Environmental Protection, “CleanWaterNJ,” provides advice to individuals and home owners, such as this page on gardening: <http://www.cleanwaternj.org/garden.html>.

New Jersey, State of, Department of Environmental Protection, Division of Watershed Management, “Rules and Guidance,” <http://www.nj.gov/dep/watershedmgt/rules.htm>, “Fertilizer Application Model Ordinance,”

<http://www.nj.gov/dep/watershedmgmt/DOCS/TMDL/Fertilizer%20Application%20Model%20Ordinance.pdf>.

Sanibel, City of, Florida, State of, "Welcome to Sanibel's Fertilizer Information Website," <http://www.sanibelh2omatters.com/fertilizer/>; includes links to their fertilizer control ordinance and their various educational, licensing, and outreach efforts.

Suffolk, County of, New York, State of, Department of Environment and Energy, "Suffolk County Fertilizer Reduction Initiative," a web brochure found on May 19, 2010, at URL: <http://www.suffolkcountyny.gov/departments/EnvironmentandEnergy/fri.aspx>. This web site has links to their web page for "Healthy Lawns/Clean Water" at <http://suffolkcountyny.gov/healthylawns/> and to their local law referenced separately below.

Suffolk, County of, New York, State of, "Local Law No. 41-2007, Suffolk County, New York: A Local Law to Reduce Nitrogen Pollution by Reducing Use of Fertilizer in Suffolk County;" found on May 19, 2010, at URL: <http://legis.suffolkcountyny.gov/resos2007/i2117-07.htm>.

Westchester, County of, New York, State of, "Article XXVI, Chapter 863, Laws of Westchester County, Restrictions on the Application and Sale of Lawn Fertilizer within the County of Westchester;" 863-1301 to 863-1309, found on May 19, 2010, at URL: http://www.westchestergov.com/pdfs/ENVFACIL_2008LawnFertilizerLaw.pdf.

Westchester, County of, New York, State of, "Phosphorus Fertilizer Ban," a web brochure found on May 19, 2010, at URL: http://www.westchestergov.com/printerfriendly/environment_fertilizerban.htm.

Documents that Further Define the Problem and/or Give Solutions

Nantucket Landscape Association, *et al.*, "Best Management Practice for Turf, Tree, and shrub Fertilization on Nantucket Island," 18 pages, February, 2003.

United States Department of Agriculture (USDA), Natural Resources Conservation Service, (NRCS), "Core 4. Conservation Practices Training Guide: The Common Sense Approach to Natural Resource Conservation," Part II. "Nutrient Management." 395 pages, August 1999. Found on May 16, 2010, at URL: <http://www.nrcs.usda.gov/technical/ECS/agronomy/core4.pdf>.

The technical reference section of the NRCS is immense. The Electronic Field Office Technical Guide is accessed by individual location so as to give the best reference for a particular locality. Its menu provides links to all resource conservation topics. A starting point is <http://www.nrcs.usda.gov/technical/efotg/>.

USDA, NRCS, National Handbook of Conservation Practices (NHCP), Conservation Practice Standard, "Nutrient Management," Code 590, 8 pages, August 2006. Found on May 16, 2010, at URL: <http://nrcs.usda.gov/technical/standards/> and then open menu for

national standards and then slide down to nutrient management or go directly to <ftp://ftp-fc.sc.egov.usda.gov/NHQ/practice-standards/standards/590.doc>.

The NHCP is the go-to reference for federal guidance on agricultural conservation: <http://www.nrcs.usda.gov/technical/standards/nhcp.html>.

United States Environmental Protection Agency, State-EPA Nutrient Innovations Task Group, "An Urgent Call to Action," August 2009, 170 pages. Found on May 16, 2010, at URL: <http://www.epa.gov/waterscience/criteria/nutrient/nitreport.pdf>.

Background Documents including those Submitted by Members of the Committee and the Public

Buzzards Bay National Estuaries Program (BBNEP), "Nitrogen Pollution in Buzzards Bay," a web page found on May 16, 2010, at URL: <http://www.buzzardsbay.org/nitrogen-pollution.htm>, including "Nitrogen Management Strategies and Tools," also found on May 16, 2010, at URL: <http://www.buzzardsbay.org/bbpnitro.htm>.

Coffin, A, Chair, Committee on Long Pond and Madaket Ditch, "Report of the Committee," 24 pages, Voted to be published by Annual Town Meeting of March 22, 1882, and published on March 28, 1882.

Cole, M. L., *et al.*, "Effects of Watershed Land use on Nitrogen Concentrations and δ^{15} Nitrogen in Groundwater," Biogeochemistry, Springer Netherland, Vol. 77, No. 2, page 199-215, Feb 2006.

Horsley Witten Group, "Evaluation of Turfgrass Nitrogen Fertilizer Leaching Rates in Soils on Cape Cod, Massachusetts," Private report prepared for MassDEP, 33 pages, June 29, 2009.

Howes, B. L. *et al.*, Woods Hole Oceanographic Institute (WHOI), "Nantucket Harbor Study: A Quantitative Assessment of the Environmental Health of Nantucket Harbor for the Development of a Nutrient Management Plan," Final Report, 50 pages plus unpaginated tables, figures, references, and appendix, March 1997.

Lehman, J. T. *et al.*, "Evidence for Reduced River Phosphorus Following Implementation of a Lawn Fertilizer Ordinance," Lake and Reservoir Management, Taylor and Francis, London, Vol 25, 9 pages, 2009.

Massachusetts, Commonwealth of, Department of Environmental Protection (DEP), Massachusetts Estuaries Project, Howes, B., *et al.*, "Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Nantucket Harbor, Town of Nantucket, Nantucket Island, Massachusetts," Final Report, 183 pages, November 2006. Found on May 16, 2010, at URL: http://www.oceanscience.net/estuaries/report/Nantucket/Nantucket_Hbr_MEP_Final.pdf.

Massachusetts, Commonwealth of, Department of Environmental Protection (DEP), Massachusetts Estuaries Project, Howes, B., *et al.*, “Linked Watershed-Embayment Model to Determine Critical Nitrogen Loading Thresholds for Sesachacha Pond, Town of Nantucket, Nantucket Island, Massachusetts,” Final Report, 107 pages, November 2006. Found on May 16, 2010, at URL:
http://www.oceanscience.net/estuaries/report/Sesachacha/Sesachacha_MEP_Final.pdf.

Nantucket, Town of, Board of Selectmen, Nantucket Harbor Watershed Work Group, “Report of the Nantucket Harbor Watershed Work Group,” 38 pages, June 1, 2003. Paper copy only.

Nantucket, Town of, Marine and Coastal Resources Department, Annual Reports on Water Quality; paper only:

- Conant, K. L., “Hummock Pond, Annual Report, 2006,” 26 pages, March 2007;
- Conant, K. L., “Hummock Pond, Annual Report, 2007,” 26 pages, March 2008;
- Conant, K. L., “Nantucket Harbor Water Quality, Annual Report, 2006,” 39 pages, January 2007;
- Conant, K. L., “Nantucket Harbor Water Quality, Annual Report, 2007,” 38 pages, December 2007.

NOFA Organic Land Care Committee, S. Little, Chair, “NOFA Standards for Organic Land Care: Practices for Design and Maintenance of Ecological Landscapes,” Northeast Organic Farming Association (NOFA), 4th Edition, 88 pages, April 2009. Found May 16, 2010, at URL:
http://www.organiclandcare.net/sites/default/files/upload/NOFA_Standards_4th_ed_2009.pdf.

Petrovic, A. M., “Report to the Pleasant Bay Alliance on the Turfgrass Fertilizer Nitrogen Leaching Rate,” Self published, 11 pages, August 2008. Dr. Petrovic is with the Cornell University Agriculture Extension Service and has published a series of research reports on nitrogen in ground water. Suffolk County, NY, referenced above, relied on his research extensively.

Tomer, M. D. and M. R. Burkart, “Long-Term Effects of Nitrogen Fertilizer Use on Ground Water Nitrate in Two Small Watersheds.” Journal of Environmental Quality, Vol. 32, pages 2158–2171 (2003).