



---

CAPE COD  
COMMISSION

## Chronology of Cape Cod Commission Activities Related to Pesticide and Fertilizer Use on Cape Cod: 2010 through 2013

NSTAR updates its Vegetation Management Plan every five years and its Yearly Operational Plan annually. The utility company submits both plans to the Massachusetts Department of Agricultural Resources for review. The 2008-2012 Vegetation Management Plan identified all 15 Cape Cod towns for potential herbicide applications in the utility's rights-of-way (ROW). The 2010 Yearly Operational Plan also detailed planned herbicide applications in all Cape Cod towns except Mashpee.

In response to the 2010 NSTAR plan, many Cape Cod municipalities, organizations, and individuals raised concerns about the potential impacts of herbicide spraying on the environment and on public health, expressing particular concern about its potential impacts on the quality of drinking water. Through subsequent discussion with Barnstable County officials and the Cape Cod Commission, NSTAR agreed to a one-year moratorium on herbicide spraying to allow the Commission's technical staff the time to identify and verify the location of private and public wells within the proposed application area and to update relevant maps.

The Commission staff worked throughout 2010 on the detailed study, first reviewing and mapping the setback limits required by law for herbicide applications in the vicinity of private wells and other "sensitive areas." The staff then identified the developed parcels within the setback buffers and used local water district/department records to filter out parcels that rely on public water. From there, the staff was able to identify properties likely to be reliant on private on-site wells, and mailed to each of the property owners a description of the mapping project along with a questionnaire requesting information to definitively locate the wells on each property. With this information, the staff and a Barnstable County AmeriCorps member used hand-held Global Positioning

System (GPS) units to record the coordinates of the privately owned wells within 100 feet of the utility's ROW. The staff then mapped the wells and other sensitive areas, including municipal wells, and shared the updated maps with the affected towns and with NSTAR.

Meanwhile, the Barnstable County Commissioners formed an Ad Hoc Committee on Vegetation Management to review the risks of herbicide applications and recommend short-term and long-range strategies to reduce or eliminate certain vegetation management practices that are not known to be safe for the environment or Cape Cod drinking water. The committee met every two weeks from October 2010 through January 2011, and ultimately found that NSTAR's management plan was within applicable rules, regulations, and guidelines. The Committee recommended, however, that "materials used within the NSTAR herbicide application plan be reviewed and updated" by the US Environmental Protection Agency (EPA), and that the migration and effects of those materials in Cape Cod soils be studied more closely.

In March 2011, the Cape Cod Commission developed a *Four-point Vegetation Management and Environmental Protection Plan* to advance the work previously conducted by the Commission staff and by the Ad Hoc Committee. The plan proposes to better protect drinking water supplies and the environment, incorporate the 2010 private-well mapping results, and increase the region's understanding of the magnitude and impacts of pesticide (including herbicide) and fertilizer use across the Cape. Specifically, the four-point plan encompasses:

**1. Mapping the Public and Private Drinking Water Supply Wells**

Described above; completed in 2010.

**2. Monitoring Groundwater for Potential Herbicide Impacts**

The Commission, NSTAR, and the Massachusetts Department of Agricultural Resources developed a monitoring plan and identified resources to conduct pre-application (baseline) and post-application monitoring within the utility's ROW, but they were unsuccessful in obtaining state funding to implement the monitoring. Although NSTAR could have funded the monitoring and lab testing, participants wished to avoid a perceived conflict of interest and the monitoring/testing has not yet been completed.

**3. Cape-wide Study of Pesticide and Fertilizer Use**

In its FY2013 budget, Barnstable County's Regional Government provided funds for a study of Cape-wide pesticide and fertilizer use. With a portion of those funds, the Commission's technical staff worked with a Barnstable County AmeriCorps member to make an inventory of pesticide and fertilizer products on the shelves of local retailers, with the permission of those businesses. With the balance of the funds, the technical staff hired external consultants to quantify the use of these substances. The consultants examined data aggregated from all entities that use pesticides

and fertilizers to manage vegetation on Cape Cod, including utilities, licensed commercial applicators (golf courses, landscapers, etc.), government and institutional entities, agricultural concerns, and residents. The study includes a survey of Cape residents and estimates the volume of pesticide and fertilizer use within each of these categories. It also includes “best management practices” for various user groups to promote proper application and reduce the use of these chemicals region-wide. Currently under review in draft form, the study report will be released for public comment later this year. Once final, it will help the Commission to incorporate goals into the Cape Cod Regional Policy Plan to reduce overall use and improper application of pesticides and fertilizers.

#### **4. Public Education and Outreach**

Pending the final study report, the Commission and other Barnstable County organizations will translate the best management practices into educational materials to be disseminated to pesticide and fertilizer users.

To support the efforts of Cape Cod towns to develop local regulations that manage fertilizer use, the Cape Cod Commission nominated a Cape-wide Fertilizer Management District of Critical Planning Concern (DCPC) in July 2013. If, following public hearings, Barnstable County’s Regional Government designates the DCPC, the planning period will provide towns a window of opportunity to adopt regulations that otherwise would have been preempted by recent changes in Massachusetts state law. Cape towns may be able to establish restrictions on the time, place, and manner of fertilizer application to minimize fertilizer runoff that contributes excess nitrogen to groundwater and degrades the water quality in groundwater, bays, and estuaries in many locations across the Cape.

Meanwhile, NSTAR updated both its Vegetation Management Plan and its Yearly Operational Plan in 2013 and recently announced plans to resume the application of herbicides along its ROW in Barnstable, Bourne, Brewster, Chatham, Falmouth, Harwich, Orleans, and Sandwich, as well as several towns on Martha’s Vineyard, between October 14 and November 1, 2013.