MODEL GROUNDWATER PROTECTION ORDINANCE





INTRODUCTION

This model ordinance was created in response to numerous requests from municipal officials for more local tools to protect stratified-drift aquifers. This ordinance has been designed for the protection of aquifers as well as other locally important groundwater, which may include wellhead protection areas (see the ordinance for definitions). The purpose of this model is to provide communities with an example of an ordinance that complies with state laws and is consistent with current approaches to groundwater protection. This ordinance does not represent a state or federal requirement. The model is a starting point and should be modified to be consistent with existing local land use development regulations.

Groundwater is a critical natural and economic resource for New Hampshire. It is our most frequently used source of drinking water, in addition to being an integral part of the hydrologic system and vitally important for fish, wildlife, and recreation. The United States Geologic Survey (USGS, 2010) estimates that approximately 90 million gallons of groundwater are supplied for drinking water in New Hampshire per day. Approximately 60 percent of New Hampshire residents rely on groundwater for their drinking water. Of the 2,436 public water supply systems in New Hampshire, 98 percent rely on groundwater. Groundwater also provides an estimated 40 percent of the total flow in New Hampshire's rivers, which in turn feed the state's lakes, reservoirs, and estuaries.

Groundwater can be contaminated when chemicals or other substances are spilled or discharged onto or into the ground. Liquids can flow through the ground into groundwater, and both solids and liquids can be flushed downward by rain and snowmelt. Once contaminants reach groundwater, they often move along with the groundwater flow. The most common causes of groundwater contamination in New Hampshire are leaking underground storage tanks, mishandling of industrial chemicals, and stormwater runoff. The presence in groundwater of some contaminants, such as MtBE (methyl-tertiary-butyl ether) strongly correlate with urban factors (population density, housing density, and the percentage of urban land use or roads) emphasizing the importance of controlling potential contaminants in developed or developing areas.³ Although MtBE has been removed from the national gasoline supply, a statewide effort continues to address MtBE found in groundwater used as a source of drinking water by public water systems and private wells. In 2013, the state settled a lawsuit with 22 gasoline manufacturers and refiners obtaining over \$81 million dollars for statewide remediation of MtBE contamination. In 2014 the NHDES MtBE Remediation Bureau was created and continues to investigate and remediate MtBE contamination sites, test private wells at risk of contamination and provide clean water to those citizens impacted by MtBE. Other compounds in gasoline are harmful to human health, including toluene or benzene; therefore gasoline releases to the ground are still a concern. Some industrial solvents are especially potent contaminants; only 5 ounces of TCE (trichloroethene), a common industrial solvent, can make up to 7.8 million gallons of water unacceptable for drinking based on federal standards. Other substances, such as 1,4 – dioxane (commonly used as a stabilizer in chlorinated solvents and in some cosmetics, detergents and shampoos) are being evaluated by US EPA as potential contaminants to be regulated in drinking water.⁴ When it comes to groundwater resources, "an ounce of prevention is worth a pound of cure"

¹ Two of the catalysts behind local interest in aquifer protection have been the experience with groundwater contaminants (e.g., MtBE) and rapid growth taking place near or in water supply protection areas.

Methyl tert-Butyl Ether Occurrence and Related Factors in Public and Private Wells in Southeast New Hampshire, Joseph D. Ayotte, Denise M. Argue, and Fredrick J. McGarry. (USGS, 2004)

² Locally important groundwater may also include other areas. For background on groundwater protection and the various regulatory and non-regulatory tools available to municipalities, see The DES Guide to Groundwater Protection, available from NHDES' Drinking Water Source Protection Program, (603) 271-7061.

⁴ See http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-3-24.pdf for more information about 1,4 – dioxane. For information about other emerging contaminants, see US EPA's website on Contaminants of Concern, http://water.epa.gov/scitech/cec/

is very applicable; although easy to contaminate, groundwater contamination can be very difficult and expensive to clean-up.

Although there are many state and federal programs that directly or indirectly serve to protect groundwater, local land use controls, inspection programs and public education are necessary to maximize the effectiveness of groundwater protection.

Local Approaches to Groundwater Protection

There are many tools that cities and towns can use to protect groundwater. Some of these tools involve passing new zoning or changing existing zoning, while others are entirely non-regulatory. The most effective way to protect groundwater is by controlling land uses, either through acquisition of the land or easements, or through land use controls. Land use controls can include zoning ordinances (such as this one), site plan review regulations, and subdivision regulations. Local regulations can also address specific activities such as gravel excavations, blasting, septic system operation and maintenance, and the use of underground storage tanks, fertilizer, and wastewater residuals (e.g., sludge or biosolids). NHDES' Innovative Land Use Planning Techniques: A Handbook for Sustainable Development⁵ includes a variety of model ordinances and related information to assist municipalities to adopt land use policies and zoning that help to protect water resources. Non-regulatory approaches include household hazardous waste collection and public education. All of these techniques are described in The NHDES Guide to Groundwater Protection.⁶

Planning as a Prelude to Zoning

Before adopting a groundwater protection ordinance, the municipality should address the need for groundwater protection in its master plan, typically in the natural resources chapter. Groundwater protection may also be addressed in a document (incorporated by reference into the master plan) often referred to as the *Water Resources Management and Protection Plan*.

Guidance on drafting such a plan is available from NHDES (271-0688). This document should inventory local water resources (i.e., wetlands, rivers, aquifers) and address a wide range of water resources management issues, including identifying the value and use of specific water resources, a summary of current threats and an analytical approach to evaluating whether local land use controls will be needed to protect water resources now, and in the future. Communities that share an aquifer should consider developing regional aquifer management plans or other collaborative efforts to protect shared groundwater resources.

⁵Available by calling (603) 271-7889 or online from DES' Watershed Assistance webpage, found by clicking on the "A to Z" list at www.des.nh.gov/ for a link to Watershed Assistance.

⁶Available by calling (603) 271-0688 or online from DES' Drinking Water Source Protection Program webpage, found by clicking on the "A to Z" list at www.des.nh.gov/ for a link to Drinking Water Source Protection.

A more detailed analysis geared toward management and protection of water supplies (including groundwater) can be compiled into a drinking water source protection plan. Source water protection planning usually involves assembling a team of interested stakeholders. A source protection plan identifies source water threats and corresponding management approaches. The plan sets priorities for community actions necessary to protect drinking water sources (i.e., aquifers, wells and/or surface water sources). In some communities, source water protection may address the protection of areas to develop water supply wells in the future. Alternatively, with the expectation of greater industrial or commercial development, a source protection plan may focus on land use management. Examples of source protection plans in New Hampshire are found online at www.des.nh.gov (search "source water protection plan"). For information about developing a source water protection plan, contact the Drinking Water Source Protection Program at (271-0688) or the Granite State Rural Water Association at (756-3670).

Restrictive Zoning or Better Management of Land Uses?

More than one third (92) of New Hampshire communities have some form of groundwater or aquifer protection zoning, most of them relying on land use restrictions to minimize the risk of groundwater contamination. The advantages of this approach include its simplicity, the relatively low cost of administration, and the high degree of protection that can be achieved if there are no existing land uses that may pose a risk of groundwater contamination. The main drawbacks of relying exclusively on restrictive zoning are that most existing uses⁷ are allowed to continue (i.e., they are "grandfathered") and some land uses that may pose a low risk if properly designed and managed, are prohibited.

Alternatively, many New Hampshire municipalities and water suppliers rely on inspection programs to protect their groundwater resources, especially in wellhead protection areas. These inspection programs typically rely on the Best Management Practices (BMP) Rules for Groundwater Protection, Env-Wq 401, which are common-sense practices that apply to the storage, handling, and disposal of regulated substances. Inspection programs may be either voluntary or mandatory, meaning that the facility owner may or may not have the option to deny the inspector access to the facility. Mandatory inspection programs typically derive their authority from a local health ordinance or from groundwater reclassification, a cooperative state-local approach. The advantage of inspection programs over restrictive zoning is that a greater variety of commercial and industrial land uses may be permitted. The disadvantage of relying too heavily upon inspection is that high-risk land uses are still permitted, despite the fact that their potential contamination risks may not be acceptable even with periodic inspections.

Specialized expertise is not needed in order to conduct BMP inspections. NHDES has successfully trained dozens of health officers and water supply operators to conduct inspection programs and has found their background and experience appropriate. Call 271-0688 if you are interested in this training. Communities with public water supplies that already conduct BMP inspections within wellhead protection areas (WHPAs) should discuss and coordinate BMP inspection activities. This model ordinance integrates inspection into a zoning ordinance as described in the following section.

A Combined Approach

⁷ A land use established before a zoning regulation goes into effect may continue unless it includes an activity which is a nuisance or harmful to public health and welfare; it cannot be changed or substantially expanded without being brought into compliance (Cohen v. Henniker, 134 N.H. 425, 427 (1991)

⁸ For a summary of the BMP Rules, see fact sheet WD-DWGB 22-4 in Appendix A.

⁹ For more information about groundwater reclassification, contact NHDES' Drinking Water Source Protection

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I. AUTHORITY

The [City or Town] of [Town Name] hereby adopts this ordinance pursuant to the authority granted under RSA 674:16 as an Innovative Land Use Control pursuant to RSA 674:21. This ordinance shall be administered, including the granting of conditional permits, by the planning board.

II. PURPOSE

The purpose of this ordinance is, in the interest of public health, safety, and general welfare, to preserve, maintain, and protect from contamination existing and potential groundwater supply areas and to protect surface waters that are fed by groundwater.

The purpose is to be accomplished by regulating land uses which could contribute pollutants to designated wells and/or aquifers identified as being needed for present and/or future public water supply.

III. DEFINITIONS

- A. Aquifer: a geologic formation composed of rock, sand, or gravel that contains significant amounts of potentially recoverable water.
- B. Petroleum bulk plant or terminal: means that portion of the property where petroleum products are received by tank vessel, pipeline, tank car, or tank vehicle and are stored or blended in bulk for the purpose of distributing such liquids by tank vessel, pipeline, tank car, tank vehicle, portable tank, or container.
- C. Groundwater: subsurface water that occurs beneath the water table in soils and geologic formations.
- D. Gasoline station: means that portion of a property where petroleum products are received by tank vessel, pipeline, tank car, or tank vehicle and distributed for the purposes of retail sale of gasoline.
- E. Impervious: not readily permitting the infiltration of water.

EXPLANATORY NOTES

RSA 674 includes the zoning enabling law; RSA 675 governs enactment and adoption procedures; and RSA 676 governs administrative and enforcement procedures. RSA 674:21 provides examples of the innovative land use controls that municipalities may adopt under RSA 674:16, including performance standards and environmental characteristics zoning.

This section describes the purposes of this ordinance, which should be consistent with the purposes of an up-to-date, properly adopted master plan. The <u>italicized text at left is optional</u>; protection of drinking water sources is usually more compelling, if for no other reason than the fact that the contamination of drinking water sources has been far more common in New Hampshire than the contamination of surface waters by groundwater.

This term is defined in order to clarify the purpose of the ordinance.

This term is used in Prohibited Uses, Article IX, part G.

From RSA 485-C, the Groundwater Protection Act.

This term is used in Prohibited Uses, Article IX, part G.

"Impervious" is used in Performance Standards Article VI, part D. It is defined to distinguish it from "Impervious surface."

- F. Impervious surface: a surface through which regulated substances cannot pass when spilled. Impervious surfaces include concrete unless unsealed cracks or holes are present. Earthen; wooden, or gravel surfaces; or other surfaces which could react with or dissolve when in contact with the substances stored on them are not considered impervious surfaces.
- G. Junkyard: an establishment or place of business which is maintained, operated, or used for storing, keeping, buying, or selling junk, or for the maintenance or operation of an automotive recycling yard. The word does not include any motor vehicle dealers registered with the director of motor vehicles under RSA 261:104 and controlled under RSA 236:126.
- H. Outdoor storage: storage of materials where they are not protected from the elements by a roof, walls, and a floor with an impervious surface.
- I. Public water system: a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
- J. Regulated substance: petroleum, petroleum products, regulated contaminants for which an ambient groundwater quality standard has been established under RSA 485-C:6, and substances listed under 40 CFR 302, 7-1-05 edition, excluding substances used in the treatment of drinking water or waste water at department approved facilities.
- K. Sanitary protective radius: The area around a public water supply well which must be maintained in its natural state as required by Env-Dw 301 or 302 (for community water systems); Env-Dw 405.14 and 406.12 (for other public water systems).

What is considered impervious with respect to stormwater infiltration is not necessarily considered impervious with respect to containment of regulated substances.

From NH Code of Administrative Rules Env-Wq 401.03(c), Best Management Practices rules for groundwater protection, except that "substances" has been substituted for "contaminants."

From RSA 236:91 IV. Junkyard owners must obtain an annual town or city issued "junkyard" license under RSA 236:111-129 and certify in their application for this license that the yard operates in compliance with best management practices (BMPs) established by NHDES. The BMPs, in addition to other helpful information about auto recycling issues, are available on the NHDES' Green Yards webpage. See the "A to Z" list on www.des.nh.gov for a link to the Green Yards Program webpage. Additional assistance is available by contacting the DES auto salvage yard specialist at 271-2925 or nhgreenyards@des.nh.gov.

"Outdoor storage" is a term used in the Performance Standards (Article VI, part F and G and under Prohibited Uses (Article IX, part. C).

From RSA 485:1-a, XV. The definition used here is abbreviated because the only reference in this ordinance to a public water system is in the definition of wellhead protection area.

From Env-Wq 401.03(h). Chemicals used by NHDES-permitted facilities to treat drinking water or waste water are excluded from the definition of regulated substance because they are used in the treatment of water supplies and are not considered to pose a significant risk to groundwater. Regulated contaminants and petroleum/petroleum products are included with the exception of propane.

The sanitary protective radius ranges from 75 to 400 feet, depending on the amount of water withdrawn from the well. The minimum radius for a community well is 150 feet. The "natural state" requirement for new community wells prohibits any development in the sanitary radius of the well. Other non-community public water systems (i.e. hotels, campgrounds, convenience stores) have a less restrictive natural state requirement that allows a limited set of uses (i.e. parking lots, tennis courts) in the sanitary radii.

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- L. Seasonal high water table: The depth from the mineral soil surface to the upper most soil horizon that contains 2 percent or more distinct or prominent redoximorphic features that increase in percentage with increasing depth as determined by a licensed Hydrogeologist, Soils Scientist, Wetlands Scientist, Civil or Environmental Engineer or other qualified professional approved by the Planning Board or the shallowest depth measured from ground surface to free water that stands in an unlined or screened borehole for at least a period of seven consecutive days.
- M. Secondary containment: a structure such as a berm or dike with an impervious surface which is adequate to hold at least 110 percent of the volume of the largest regulated-substances container that will be stored there.
- N. Snow dump: For the purposes of this ordinance, a location where snow, which is cleared from roadways and/or motor vehicle parking areas, is placed for disposal.
- O. Stratified-drift aquifer: A geologic formation of predominantly well-sorted sediment deposited by or in bodies of glacial meltwater, including gravel, sand, silt, or clay, which contains sufficient saturated permeable material to yield significant quantities of water to wells.
- P. Surface water: streams, lakes, ponds and tidal waters, including marshes, water-courses and other bodies of water, natural or artificial.
- Q. Wellhead protection area: The surface and subsurface area surrounding a water well or wellfield supplying a community public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield.

EXPLANATORY NOTES

Adapted from the definition under Env-Wq 1502.49, NHDES Alteration of Terrain rules. "Water table" refers to a saturated zone in the soil. Estimates of the seasonal highest water table for a soil are based mainly on observations of the water table at selected sites or on physical characteristics of the soil that are considered to be evidence of a saturated zone, typically, gray redoximorphic depletions.(USDA, NRCS TSSH Part 617) Alternatively, it may be measured by creating a borehole and measuring the difference in the elevation of the land surface to standing water over a defined period of time.

From Env-Wq 401.03(i).

Prohibited under Article IX.

From RSA 485-C:2, XIV. Most stratified drift aquifers in the state have been mapped by the United States Geological Survey (USGS). NHDES' One Stop Web GIS viewer can display aquifer location and some characteristics or maps and full technical reports can be obtained from USGS's Pembroke, NH Office (call 226-7800). This definition is not needed if the ordinance is to be used only to protect wellhead protection areas.

From RSA 485-A:2 XIV, Surface waters of the state.

From RSA 485-C:2, XVIII, except that the definition has been narrowed to include only wells for community (residential) public water systems and not other types of public water systems. This definition is not needed if the ordinance is to be used only to protect stratified-drift aquifers. Check with NHDES to see how the wellhead protection areas in your district have been delineated.

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IV. GROUNDWATER PROTECTION DISTRICT

The Groundwater Protection District is an overlay district which is superimposed over the existing underlying zoning and includes within its boundaries.

(1) all of the Wellhead Protection Areas for public water supply wells as defined under Article III, part (I) of this ordinance. The district is shown on the map entitled, Town of [Town Name] Groundwater Protection District, dated [Date Adopted].

Or . . .

(2) the Stratified Drift Aquifer(s) shown on the map entitled, [City/Town Name] Groundwater Protection District, dated [Date Adopted].

Or... a combination of the two.

V. APPLICABILITY

This Ordinance applies to all uses in the Groundwater Protection District, except for those uses exempt under Article XII (Exemptions) of this Ordinance.

VI. PERFORMANCE STANDARDS

The following Performance Standards apply to all uses in the Groundwater Protection District unless exempt under Article XII:

A. For any new or expanded uses that will render impervious more than 15 percent or more than 2,500 square feet of any lot, whichever is greater, a stormwater management plan shall be prepared which the planning board determines is consistent with New Hampshire Stormwater Manual Volumes 1-3, December 2008, NH Department of Environmental Services.

EXPLANATORY NOTES

Two options are presented in the model—one for wellhead protection areas and one for stratified-drift aquifers. A municipality may choose to protect one of these types of groundwater resource areas or both. If it chooses to protect both, the text in this section should be modified, as well as the title of the ordinance (i.e., Wellhead Protection or Aquifer Protection District).

The municipality should develop and update a map to accompany the ordinance. Information on the extent of stratified-drift aquifers may be obtained from maps prepared by USGS, NH Geologic Survey or NHDES. Wellhead protection area (WHPA) maps are available from NHDES. (271-0688) When requesting a WHPA map from NHDES, please specify which types of WHPAs should be included (e.g., community systems only).

See Appendix H, Defining and Revising Boundaries for Aquifer Protection Districts for guidance on drafting and revising the district boundary. The rationale or technical support for such a district should be incorporated into the municipal master plan prior to adoption of this ordinance.

The effectiveness of this model ordinance depends on the ability of the municipality to ensure initial and continuing compliance with these performance standards.

The performance standards apply to all existing uses, including expansions and new uses requiring Planning Board approval, except as noted.

A Planning Board review of a land use application normally occurs when there is new land use activity or expansion of use. Expansion of existing parking areas or other uses that render an area impervious should be subject to this provision.

Any lot could have up to 2,500 square feet of impervious area without requiring a stormwater management plan. For lots less than 0.38 acres the 2,500 square foot impervious area maximum applies while for lots larger greater than 0.38 acres, the 15 percent limit applies.

Defining and Revising Boundaries for Aquifer Protection Districts

NHDES' Drinking Water Source Protection Program completed a survey of New Hampshire municipalities to identify aquifer/groundwater protection ordinances and their key provisions. The survey found a number of ordinances with the following problems:

- District defined in terms of out-of-date maps. Many older ordinances, when initially adopted, relied on aquifer maps prepared in the 1970s and 1980s (the so-called Cotton maps). Those maps were the best available at the time, but the aquifer maps prepared by the United States Geological Survey in the 1990s are based on much more data (earlier mapping, surficial geology data, well logs, well yield data, borings, seismic surveys) and more intensive analysis, and are considered more accurate than the earlier maps. The later maps are also available in digital form, along with mapped groundwater contours and aquifer saturated thickness.
- Ambiguous language describing district. For example, the Cotton maps typically identified "highpotential" and/or "medium-potential" aquifers, while the newer maps identify the saturated thickness
 and transmissivity of the aquifers. Some ordinances contain the old language, without defining the
 terms, while referencing the newer maps. Consequently, it is not clear which areas are included in the
 district.
- In some cases, the ordinance references a map to define the location and extent of the aquifer protection district, but the town officials responding to the survey could not locate the map. In other cases, only one copy of the map existed.
- In some cases, for various other reasons, the ordinance's textual description of the district was not consistent with the map referenced by the same ordinance.
- As a result of the above problems, some towns responding to the survey were unable to clarify the location and extent of their aquifer protection districts!

To avoid confusion or disagreement regarding the location and the extent of an aquifer protection district, NHDES recommends the following:

- The drafters should take time to understand the various identified groundwater resources that might be included in a local groundwater protection district. This could include NHDES-approved wellhead protection areas (for all public water systems, or just for community systems, or just for certain municipal systems), stratified-drift aquifers (all mapped aquifers, or just areas with a certain minimum transmissivity, or just certain aquifers likely to be of use for municipal water supply), and till areas located up-gradient of certain stratified-drift aquifers. The staff of NHDES' Drinking Water Source Protection Program are available to help municipalities understand and evaluate the alternatives.
- The ordinance should define the district with reference to a current map, citing the name, date, and preparer of the map, and include a textual description of what is intended to be included in the district. A few examples follow:
 - The district shall include all areas of stratified drift contiguous with stratified-drift aquifers shown on (map citation).
 - The district shall include all areas of stratified-drift aquifer with a minimum transmissivity of 1,000 ft² per day associated with aquifers shown on (map citation). [Less inclusive than previous example]
 - o The district shall include all wellhead protection areas approved by the N.H. Department of

Environmental Services for active wells associated with active community water systems. Wellhead protection areas currently included in the district are shown on (map citation).

- The ordinance should include a provision to enable the Planning Board or other body to revise the aquifer protection district boundary based on the availability of new information. For example, new wellhead protection areas could be approved by NHDES, or existing wellhead protection areas could be re-delineated. For stratified-drift aquifers, existing maps are not 100 percent accurate, so the map could be revised "based on the recommendation of a professional geologist using 1:24,000 scale surficial geology maps prepared by the N.H. Geological Survey, if available, other existing data (including wells, borings, or other excavations of sufficient depth), or appropriate field testing methods." Such a redrawing of aquifer boundaries would necessarily rely on the textual description of what is intended to be included in the district; if that definition is not clear, it would be difficult for a geologist to make a recommendation as to what the ordinance intended to include.
- Revisit the map every few years to make sure it includes the latest information, such as new wellhead protection areas (if included) and surficial geology. The rest of the ordinance should also be reviewed periodically to make sure it reflects the latest understanding of groundwater contamination hazards, best management practices, effective regulatory approaches, etc., and is consistent with other local ordinances and state and federal rules and regulations.

TOWN NAME	Name of Groundwater/Aquifer Protection Ordinance	Adoption/Revision Date
HAMPTON FALLS	Section 13- Aquifer Protection District	3/1/2007
HANCOCK	Article 12 Groundwater Protection District	3/1/2007
HAVERHILL	5.2 Aquifer Protection District	3/12/1996
HILL	Wellhead Protection Overlay District	3/12/2002
HINSDALE	Wellhead/Aquifer Protection District	3/10/2009
HOLDERNESS	Section 525: Groundwater Protection	3/8/2011
HOLLIS	Water Supply Cons. Zone/ Aquifer Protection Overlay	3/8/2005
HOOKSETT	Groundwater Resources Conservation District	5/13/2008
KINGSTON	Aquifer Protection Ordinance	3/8/2005
LEE	Aquifer Conservation District	
LITCHFIELD	Aquifer Protection District	3/8/2005
MADBURY	Aquifer and Wellhead Protection Overlay District	3/8/2005
MADISON	Groundwater Protection District	3/8/2011
MERRIMACK	Aquifer Conservation District	4/13/2004
MIDDLETON	Aquifer Protection District	3/1/2001
MILFORD	Groundwater Protection District	3/8/2005
MILTON	Groundwater Protection Overlay District	1/5/2006
MONROE	Aquifer Protection Zone	
NEW BOSTON	Groundwater Resource Conservation District	9/20/2005
NEW DURHAM	Aquifer Protection Overlay District	3/8/2011
NEWBURY	Aquifer Protection Overlay District	4/11/2005
NEWFIELDS	Aquifer Protection District	3/9/2010
NEWMARKET	Aquifer Protection District	2/16/2005
NEWPORT	Groundwater Protection Ordinance	5/11/2004
NORTH HAMPTON	Water Resources & Aquifer Protection	8/9/2004
NORTHFIELD	Groundwater Protection District	3/9/2010
NORTHWOOD	Wellhead Protection Overlay District	3/1/2001
NOTTINGHAM	Aquifer Conservation District	3/13/2004
OSSIPEE	Water Resources Protection District	3/8/2005
PELHAM	Aquiifer Conservation District	3/8/2005
PEMBROKE	Aquifer Conservation District	3/8/2005
PETERBOROUGH	Groundwater Protection Overlay Zone	3/8/2005
PLAISTOW	Aquifer Protection District	3/8/2014
RAYMOND	Groundwater Conservation District	3/1/2002
RINDGE	Aquifer Protection Ordinance	3/14/2006
ROCHESTER	Aquifer Protection Zone	3/2/2013
ROLLINSFORD	Well Site Protection Districts	1/1/2001