

AMENDMENT X

Warrant Article X: Aquifer Protection District

Ballot Language:

Are you in favor of adoption of Amendment X as proposed by the Planning Board for the town's Zoning Ordinance as follows:

Adopt amendments to the Aquifer Protection District that includes adding Design / Performance section and Maintenance / Inspection section; changing exemptions to Conditional Use Permit; adding the Town Administrator and Fire Chief as the Designated Agents; and in order to align with state regulations.

Approved By The Nottingham Planning Board By A Vote Of (6-0-0)

Proposed Amendment:

ARTICLE III OVERLAY DISTRICTS

A. Aquifer Protection District

1. Authority: The Aquifer Protection District is an Innovative Land Use Control adopted pursuant to RSA 674:16, II and 674:21, I (j).
2. Purpose

The intent of this Ordinance is to provide for the protection of the water resources from contamination by polluting, hazardous or toxic materials. The objectives for establishing an Aquifer Protection District are:

- a) To protect the public health and general welfare of the citizens of Nottingham and adjacent affected towns.
- b) To prevent development and land use practices that would contaminate or reduce the recharge of the identified aquifers; including primary and secondary recharge areas.
- c) To provide for future growth and development of the Town, in accordance with the Master Plan, by insuring the future availability of adequate public and private water supplies.
- d) To encourage uses that can appropriately and safely be located in the aquifer recharge areas.

Private wells are the sole source of drinking water in Nottingham. Local aquifers supply this water. Sustainability of this natural resource is paramount to maintaining the quality of life that currently exists. Our most precious natural resource, water, is threatened by ever increasing demands on water usage from continued development of our Town population increases by both residences and businesses. Without adequate recharge, this water supply would be in danger of being depleted. Therefore, to maintain sustainability of the aquifers and to maintain environmentally sound practices that will ensure the current and future needs of our citizens, extraction of groundwater where the methods used in the extraction do not allow for adequate recharge will not be permitted.

3. District Boundaries

- a) Location - The Nottingham Aquifer Protection District is defined as the area shown on the map entitled, "Aquifer Protection District."

The Aquifer Protection District is a zoning overlay district which imposes additional requirements and restrictions to those of the underlying district. In all cases, the more restrictive requirement(s) shall apply.

- b) Recharge Areas - For purposes of this ordinance, each primary recharge area for each identified aquifer is considered to be co-terminus (abutting) with that aquifer.

4. Use Regulations

- a) Minimum Lot Size - The minimum lot size within the Aquifer Protection District for each dwelling unit if a residential use, shall be three (3) acres, or if a non-residential use, shall be five (5) acres.
- b) Maximum Lot Coverage - Within the Aquifer Protection District, no more than ten percent (10%) of a single lot, including the portion of any new street abutting the lot, may be rendered impervious for any uses.

- c) Prohibited Uses - The following uses are prohibited in the Aquifer Protection Zone except where permitted to continue as non-conforming uses. Prohibited uses shall include, but not be limited to:

1. Disposal of solid waste (as determined by NH RSA 149-M) other than brush or stumps generated on the property on which they are to be disposed.
2. On-site disposal, storage, processing or recycling of toxic or hazardous materials or wastes, including the development or operation of a junk or salvage yard.
3. Buried storage of petroleum fuel and other refined petroleum products except as regulated by the NH Water Supply and Pollution Control Commission (Ws 411 Control of Nonresidential Underground Storage and Handling of Oil and Petroleum Liquids).
4. The development or operation of gasoline stations.
5. Outdoor unenclosed or uncovered storage of road salt and other de-icing chemicals.
6. Dumping of snow containing road salt or other de-icing chemicals.
7. Animal feedlots.
8. Dry cleaning establishments.
9. Industrial uses which discharge contact type wastes on site. Discharge of non-contact cooling water determined to contain no toxic or hazardous substances is permitted.
10. The development or operation of a wastewater or septage lagoons, or waste injection wells.
11. Non-municipal wells that may result in an aquifer volume reduction that exceeds the recharge rate.

- d) Conditional Uses

The Planning Board may grant a Conditional Use Permit for a use which is otherwise permitted in the underlying district, if the permitted use is involved in one or more of the following:

1. Storage, handling, and use of regulated substances in quantities exceeding 55 gallons or 660 pounds dry weight at any one time, provided that an adequate spill prevention, control and countermeasure (SPCC) plan, in accordance with Article VII, is approved by the [local Fire Department, Health officer or Emergency Management officer].

2. Any use that will render impervious more than 15 percent or 2,500 square feet of any lot, whichever is greater.
3. Any activities that involve blasting of bedrock.
4. In granting such approval the Planning Board must first determine that the proposed use is not a prohibited use (as listed in Article IX of this Ordinance) and will be in compliance with the Performance Standards in Article VI as well as all applicable local, state and federal requirements. The Planning Board may, at its discretion, require a performance guarantee or bond, in an amount and with surety conditions satisfactory to the Board, to be posted to ensure completion of construction of any facilities required for compliance with the Performance Standards.
5. Conditional uses shall develop stormwater management and pollution prevention plans and include information consistent with Developing Your Stormwater Pollution Prevention Plan: A Guide for Industrial Operators (US EPA, Feb 2009) The plan shall demonstrate that the use will:
 - a) Meet minimum stormwater discharge setbacks between water supply wells and constructed stormwater practices as found within the Innovative Land Use Planning Techniques: A Handbook for Sustainable Development, Section 2.1 Permanent (Post-Construction) Stormwater Management, (NHDES, 2008 or later edition).
 - b) Minimize, through a source control plan that identifies pollution prevention measures, the release of regulated substances into stormwater.
 - c) Stipulate that expansion or redevelopment activities shall require an amended stormwater plan and may not infiltrate stormwater through areas containing contaminated soils without completing a Phase I Assessment in conformance with ASTM E 1527-05, also referred to as All Appropriate Inquiry (AAI).
 - d) Maintain a minimum of four feet vertical separation between the bottom of a stormwater practice that infiltrates or filters stormwater and the average seasonal high water table as determined by a licensed hydrogeologist, soil scientist, engineer or other qualified professional as determined by the Planning Board.
6. Conditional uses using regulated substances shall submit a spill control and countermeasure (SPCC) plan to the Town Administrator and Fire Chief, who then shall determine whether the plan will prevent, contain, and minimize releases from ordinary or catastrophic events such as spills, floods or fires that may cause large releases of regulated substances. It shall include:
 - a) A description of the physical layout and a facility diagram, including all surrounding surface waters and wellhead protection areas.
 - b) Contact list and phone numbers for the current facility response coordinator(s), cleanup contractors, and all appropriate federal, state, and local agencies who must be contacted in case of a release to the environment.
 - c) A list of all regulated substances in use and locations of use and storage.
 - d) A prediction of the direction, rate of flow, and total quantity of regulated substance that could be released where experience indicates a potential for equipment failure.
 - e) A description of containment and/or diversionary structures or equipment to prevent regulated substances from infiltrating into the ground.
 - f) List of positions within the facility that require training to respond to spills of regulated substances.
 - g) Prevention protocols that are to be followed after an event to limit future large releases of any regulated substance.

e) Permitted Uses

The following activities may be permitted provided they are conducted in accordance with the purposes and intent of this Ordinance:

1. Any use permitted in the underlying district of the Zoning Ordinance, except as prohibited and/or regulated by Special Exception in Section f of this Article.
2. Maintenance, repair or any existing structure, provided there is no increase in impervious surface above the limit established in Section 4 and Section 6 of this Article.
3. Farming, gardening, nursery, forestry, harvesting and grazing of no more than five (5) animals, turf management, provided that fertilizers, pesticides, manure, and other leachables are used according to the best management practices as prescribed by the Rockingham County Conservation District, if applicable, and at levels that will not cause groundwater contamination. All said leachables must be stored under shelter.

f) Special Exceptions for Lots of Record

1. Upon application to the Zoning Board of Adjustment, a special exception shall be granted to permit the erection of a structure within the Aquifer Protection District on a non-conforming lot provided that all of the following conditions are found to exist:
 - a) The lot upon which an exception is sought was an official lot of record as recorded in the Rockingham County Registry of Deeds, prior to March 13, 1990, when this Aquifer Protection District was first adopted.
 - b) The use for which the exception is sought cannot feasibly be carried out on a portion or portions of the lot which are outside the Aquifer Protection District.
 - c) Due to the provisions of the Aquifer Protection District, no reasonable and economically viable use of the lot can be made without exception.
 - d) The design and construction of the proposed use will, to the extent practical, be consistent with the purpose and intent of this Section.

g) Non-conforming Use

No nonconforming use may be expanded, changed to another nonconforming use, or renewed after it has been discontinued for a period of 12 months or more. All existing non-conforming uses must be in compliance with all applicable state and federal requirements, including Env-Wq 401, Best Management Practices Rules.

5. Hydrogeologic Study

- a) Within the Aquifer Protection District, a hydrogeologic study shall be required, at the applicant's expense for developments involving the subdivision of three (3) lots or greater.
- b) Standards - Hydrogeologic studies shall be performed by a qualified hydrogeologist. These studies shall be sufficiently detailed to evaluate the development's impacts to groundwater within the parcel to be developed and the surrounding land.

6. Design and Performance Standards

- a) Nitrate Loading - No development shall cause the nitrate-nitrogen (NO₃-N) concentration to exceed 5 mg/l in the groundwater beyond the site.
- b) Safeguards - Provisions shall be made to protect against toxic or hazardous materials discharge or loss resulting from corrosion, accidental damage, spillage, or vandalism through the following measures:

1. Animal manures, fertilizers, and compost must be stored in accordance with Manual of Best Management Practices for Agriculture in New Hampshire, NH Department of Agriculture, Markets, and Food, (June 2011) and any subsequent revisions; NH Department of Agriculture, Markets and Food (DAMF) maybe consulted to help determine whether a particular facility is in compliance with the agriculture BMPs. NH DAMF may order property owners to develop a nutrient management plan when state BMPs related to manure or fertilizers are not followed and RSA 431:35 authorizes local health authorities and NHDES to enforce the plan.
 2. All regulated substances stored in containers with a capacity of five gallons or more must be stored in product-tight containers on an impervious surface designed and maintained to prevent flow to exposed soils, floor drains, and outside drains.
 3. Facilities where regulated substances are stored must be secured against unauthorized entry by means of a door and/or gate that is locked when authorized personnel are not present and must be inspected weekly by the facility owner.
 4. Outdoor storage areas for regulated substances, associated material or waste must be protected from exposure to precipitation and must be located at least 50 feet from surface water or storm drains, at least 75 feet from private wells, and outside the sanitary protective radius of wells used by public water systems.
 5. Secondary containment must be provided for outdoor storage of regulated substances in regulated containers and the containment structure must include a cover to minimize accumulation of water in the containment area and contact between precipitation and storage container(s).
 6. Containers in which regulated substances are stored must be clearly and visibly labeled and must be kept closed and sealed when material is not being transferred from one container to another.
 7. Prior to any land disturbing activities, all inactive wells on the property, not in use or properly maintained at the time the plan is submitted, shall be considered abandoned and must be sealed in accordance with We 604 of the New Hampshire Water Well Board Rules.
 8. Blasting activities shall be planned and conducted to minimize groundwater contamination. Excavation activities should be planned and conducted to minimize adverse impacts to hydrology and the dewatering of nearby drinking water supply wells.
- c) All transfers of petroleum from delivery trucks and storage containers over five gallons in capacity shall be conducted over an impervious surface having a positive limiting barrier¹ at its perimeter. For operations which allow the evaporation of toxic or hazardous materials into the interiors of any structures, a closed vapor recovery system shall be provided for each such structure to prevent discharge of contaminated condensate into the groundwater.
- d) Location - Where the premises are partially outside of the Aquifer Protection Overlay Zone, potential pollution sources such as on-site waste disposal systems should be located outside and down gradient of the Zone to the extent feasible.
- e) Drainage - All runoff from impervious surfaces shall be recharged on the site and diverted toward areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are not feasible and shall be preceded by oil, grease, and sediment traps to facilitate removal of contaminants. Septic System Design and Installation - Septic systems shall be constructed in accordance with the "Subdivision and Individual Sewage

¹ A positive limiting barrier (PLB) is a depression (e.g., groove) in the surface of an otherwise level impervious area designed to impede the flow and contain spilled substances within the perimeter of the impervious area. PLBs are typically constructed and maintained to contain small spills or releases (five to fifteen gallons).

Disposal System Design Rules” (N.H. Code of Administrative Rules, Chapter Ws 1000). However, any Town Ordinance or regulation that is more restrictive shall apply. All new or reconstructed on-lot wastewater disposal systems constructed in the Aquifer Protection District shall be designed by a Sanitary Engineer licensed in New Hampshire. These systems shall be installed under the supervision of said engineer.

The designated Town engineer or septic system inspector of the Town shall inspect the installation of each new system prior to covering and shall certify that the system has been installed as designed. The following site requirements shall apply to all septic system construction in the Aquifer Protection District:

1. At least 24 inches of natural permeable soil shall exist above the seasonal high-water table.
2. At least four feet of natural soil shall exist above bedrock.
3. At least three feet of natural permeable soil shall exist above any impermeable subsoil.
4. No filling of wetlands shall be allowed to provide the minimum distance of septic systems to wetlands.
5. Fill material used for septic system construction shall be generally homogeneous and shall not contain:
 - a) more than 15% organic soil by volume
 - b) more than 25% cobbles (6 in. in diameter) by volume
 - c) more than 15% of clay (0.002 mm particles or smaller) by weight
 - d) tree stumps, mulch, bark, or other large organic matter
7. Exemptions:

The following uses are exempt from the specified provisions of this ordinance as long as they are in compliance with all applicable local, state, and federal requirements.

 - a) Any private residence is exempt from all Performance Standards;
 - a) Any business or facility where regulated substances are stored in containers with a capacity of less than five gallons is exempt from Section 6, Design and Performance Standards, subsection b, items 1 through 9;
 - b) Storage of heating fuels for on-site use or fuels for emergency electric generation, provided that storage tanks are indoors on a concrete floor or have corrosion control, leak detection, and secondary containment in place, is exempt from Performance Standard E;
 - c) Storage of motor fuel in tanks attached to vehicles and fitted with permanent fuel lines to enable the fuel to be used by that vehicle is exempt from Performance Standards E through H;
 - d) Storage and use of office supplies is exempt from Performance Standards E through H;
 - e) Temporary storage of construction materials on a site where they are to be used is exempt from Performance Standards E through H if incorporated within the site development project within six months of their deposit on the site;
 - f) The sale, transportation, and use of pesticides as defined in RSA 430:29 XXVI are exempt from all provisions of this ordinance;
 - g) Household hazardous waste collection projects regulated under NH Code of Administrative Rules Env-Hw 401.03(b)(1) and 501.01(b) are exempt from Performance Standards E through H;
 - h) Underground storage tank systems and aboveground storage tank systems that are in

compliance with applicable state rules are exempt from inspections under Section 8 of this ordinance.

8. Maintenance and Inspection

- a) For uses requiring Planning Board approval for any reason, a narrative description of maintenance requirements for structures required to comply with Performance Standards shall be recorded so as to run with the land on which such structures are located, at the Registry of Deeds for Strafford County. The description so prepared shall comply with the requirements of RSA 478:4-a.
- b) Inspections may be required to verify compliance with Performance Standards. Such inspections shall be performed by the Town Administrator at reasonable times with prior notice to the landowner.
- c) All properties in the Aquifer Protection District known to the Town Administrator as using or storing regulated substances in containers with a capacity of five gallons or more, except for facilities where all regulated substances storage is exempt from this Ordinance under Section 7, shall be subject to inspections under this Article.
- d) The Board of Selectmen may require a fee for compliance inspections. The fee shall be paid by the property owner. A fee schedule shall be established by the Board of Selectmen as provided for in RSA 41-9:a.

9. Administration, General

All development proposals, other than single or two-family residential constructions shall be subject to subdivision or site plan review and approval in accordance with Planning Board Rules and Regulations. Such review and approval shall precede the issuance of any building permit by the Town.

10. Enforcement

The Board of Selectmen shall be responsible for the enforcement of the provisions and conditions of the Aquifer Protection District. If the Board of Selectmen find that a nonconforming use poses a direct hazard to ground water or recharged areas or are actually causing some potentially hazardous foreign substances (oils, salts, chemicals, pesticides, etc.) to be introduced into the aquifer, then they may seek to enjoin same such use in an appropriate legal forum.