# SECTION 10.0 GROUNDWATER PROTECTION OVERLAY DISTRICT BYLAW

[Section 10.D. and GPOD Map amended by Article 17. Of the Annual Town Meeting of April 29, 2013, effective April 29, 2013, approved by the Attorney General on June 14, 2013 and posted according to law on June 26, 2013.]

[Section 10.D. and GPOD Map amended by Article 23. Of the Special Town Meeting of November 4, 2013, effective November 4, 2013, approved by the Attorney General on February 27, 2014 and posted according to law on March 12, 2014.]

#### 10.A PURPOSE OF DISTRICT

The purpose of this Groundwater Protection Overlay District is to:

- 10.A.1. Promote the health, safety, and general welfare of the community by ensuring an adequate quality and quantity of drinking water for the residents, institutions, and businesses of the Town of West Newbury;
- 10.A.2. Preserve and protect existing and potential sources of drinking water supplies;
- 10.A.3. Conserve the natural resources of the town; and
- 10.A.4. Prevent temporary and permanent contamination of the environment.

# 10.B. THE GROUNDWATER PROTECTION DISTRICT IS AN OVERLAY DISTRICT SUPERIMPOSED ON THE ZONING DISTRICTS.

This overlay district shall apply to all new construction, reconstruction, or expansion of existing buildings and new or expanded uses. Applicable activities and uses in a portion of one of the underlying zoning districts which fall within the Groundwater Protection District must additionally comply with the requirements of this district. Uses prohibited in the underlying zoning districts shall not be permitted in the Groundwater Protection District.

## 10.C. DEFINITIONS:

For the purposes of this section, the following terms are defined below:

Aquifer: Geologic formation composed of rock, sand or gravel that contains significant amounts of potentially recoverable water.

<u>Groundwater Protection District:</u> The zoning district defined to overlay other zoning districts in the Town of West Newbury. The groundwater protection district may include specifically designated recharge areas.

<u>Impervious Surface</u>: Material or structure on, above, or below the ground that does not allow precipitation or surface water to penetrate directly into the soil.

Mining: The removal or relocation of geologic materials such as topsoil, sand, gravel, metallic ores, or bedrock.

Potential Drinking Water Sources: Areas which could provide significant potable water in the future.

Recharge Areas: Areas that collect precipitation or surface water and carry it to aquifers. Recharge areas may include areas designated as Zone I, Zone II, or Zone III.

Toxic or Hazardous Material: Any substance or mixture of physical, chemical, or infectious characteristics posing a significant, actual, or potential hazard to water supplies or other hazards to human health if such substance or mixture were discharged to land or water in the Town of West Newbury. Toxic or hazardous materials include, without limitation; synthetic organic chemicals, petroleum products, heavy metals, radioactive or infectious wastes, acids and alkalis, and all substances defined as Toxic or Hazardous under Massachusetts General Laws (M.G.L.) Chapter(c.) 21C and 21E and 310 CMR 30.00, and also include such products as solvents and thinners in quantities greater than normal household use.

Zone I: The 100 to 400 foot protective radius around a public water system well or wellfield which must be owned by the water supplier or controlled through a conservation restriction.

Zone II: The area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at safe yield with no recharge from precipitation), as defined in 310 CMR 22.00. The determination of the location and extent of Zone II shall be in conformance with the criteria set forth in 310 CMR 22.00 and in the DEP's <u>Guidelines and Policies for Public</u> Water Systems.

Zone III: The land area beyond the area of Zone II from which surface water and groundwater drain into Zone II, as defined in 310 CMR 22.00. Activities in Zone III are not regulated in this bylaw.

10.D. ESTABLISHMENT AND DELINEATION OF GROUNDWATER PROTECTION DISTRICT For the purposes of this district, there are hereby established within the town certain groundwater protection areas, consisting of aquifers or recharge areas which are delineated on a map. This map is entitled "Groundwater Protection Overlay District, Town of West Newbury," produced by Merrimack Valley Planning Commission, and dated September 20, 2004, amended April 29, 2013, amended November 4, 2013. This map is hereby made a part of the town zoning bylaw and is on file in the Office of the Town Clerk and the Office of the Planning Board.

# 10.E. DISTRICT BOUNDARY DISPUTES

If the location of the District boundary in relation to a particular parcel is in doubt, resolution of boundary disputes shall be through a Special Permit application to the Special Permit Granting Authority (SPGA). Any application for a special permit for this purpose shall be accompanied by adequate documentation.

The burden of proof shall be upon the owner(s) of the land to show where the bounds should be located. At the request of the owner(s), the town may engage a professional civil or sanitary engineer, hydrologist, geologist, or soil scientist to determine more accurately the boundaries of the district with respect to individual parcels of land, and may charge the owner(s) for the cost of the investigation. The Zone II district boundary and methodology must be approved by the Massachusetts Department of Environmental Protection (DEP).

#### 10.F. USE REGULATIONS

In the Groundwater Protection District the following regulations shall apply:

#### 10.F.1. Uses Allowed in Zone I

Only uses related to the operation and maintenance of the public water supply are permitted in the Zone I defined in 310 Code of Massachusetts Regulations 22.00.

# 10.F.2. Uses Allowed in Zone II

- a. The following uses are <u>allowed</u> within the Groundwater Protection District, provided that all necessary permits, orders, or approvals required by local, state, or federal law are also obtained:
- b. conservation of soil, water, plants, and wildlife;
- c. outdoor recreation, nature study, boating, fishing, and hunting where otherwise legally permitted;
- d. foot, bicycle and/or horse paths, and bridges;
- e. normal operation and maintenance of existing water bodies and dams, splash boards, and other water control, supply and conservation devices;
- f. maintenance, repair, and enlargement of any existing structure, subject to Section
- g. (prohibited uses) and Section 10.G (special permitted uses);
- h. residential development, subject to Section 10.F.3. (prohibited uses) and Section 10.G (special permitted uses);
- i. farming, gardening, nursery, conservation, forestry, harvesting, and grazing, subject to Section 10.F.3 (prohibited uses) and Section 10.G (special permitted uses);
- h. construction, maintenance, repair, and enlargement of drinking water supply related facilities such as, but not limited to, wells, pipelines, aqueducts, and tunnels.
- j. Underground storage tanks related to these activities are categorically not permitted.

#### 10.F.3. Uses Prohibited in Zone I and II

The following uses are prohibited:

Statutes and regulations cited are as in effect on March 1, 1999, and as subsequently amended.

- a. landfills and open dumps as defined in 310 CMR 19.006;
- b. automobile graveyards and junkyards, as defined in M.G.L. c. 140B, §1;
- c. landfills receiving only wastewater and/or septage residuals including those approved by the Department pursuant to M.G.L. c. 21, §26 through 53; M.G.L.c.111, §17; M.G.L c. 83, §6 and 7, and regulations promulgated thereunder;
- d. facilities that generate, treat, store, or dispose of hazardous waste that are subject to M.G.L. c. 21C and 310 CMR 30.00, except for the following:
  - i) very small quantity generators as defined under 310 CMR 30.000;
  - ii) household hazardous waste centers and events under 310 CMR 30.390;
  - iii) waste oil retention facilities required by M.G.L. c. 21, § 52A;
  - iv) water remediation treatment works approved by DEP for the treatment of contaminated ground or surface waters;
- e. petroleum, fuel oil, and heating oil bulk stations and terminals including, but not limited to, those listed under Standard Industrial Classification (SIC) Codes 5171 and 5983. SIC Codes are established by the US Office of Management and Budget and may be determined by referring to the publication, Standard Industrial Classification Manual, and any other subsequent amendments;

- 3.f. storage of liquid hazardous materials, as defined in MGL.c.21E, and/or liquid petroleum products unless such storage is:
- above ground level, and;
- ii) on an impervious surface, and
- iii) either
  - a) in container(s) or above ground tank(s) within a building, or;
  - b) outdoors in covered container(s) or above ground tank(s) in an area that has a containment system designed and operated to hold either 10% of the total possible storage capacity of all containers, or 110% of the largest container's storage capacity, whichever is greater;
- g. storage of sludge and septage, unless such storage is in compliance with 310 CMR 32.30 and 310 CMR 32.31;
- h. storage of deicing chemicals unless such storage, including loading areas, is within a structure designed to prevent the generation and escape of contaminated runoff or leachate;
- i. Contamination of groundwater by improper storage of animal manure:
- j. Manure generated by residential and recreational uses, not for resale and not incidental to commercial landscaping:

Storage of animal manure must be contained or otherwise controlled from excessive leaching, in accordance with best management practices such as described in the West Newbury Livestock Guidelines; and as determined by the Planning Board. Any accumulation shall be removed at least every 2 years.

- k. Manure for commercial use, such as for landscaping or for resale: Storage of animal manure must be covered or contained in accordance with guidelines from the Natural Resource Conservation Service. Storage time shall be limited to 1 year.
- Mining and removal of earth material to within 4 feet of historical high groundwater as determined through soil analysis by a Certified Soil Evaluator using a method approved by the Department of Environmental Protection. Sand and gravel operations must determine the historical high groundwater table from monitoring wells and historical water table fluctuation data as compiled by the United States Geological Survey. Excavation and grading for residential development, including building foundations, roads, swimming pools, landscaping, gardening, and utility works are exempt. Sanitary disposal waste systems are exempt if constructed in accordance with State (Title 5) and local Board of Health.
- m. discharge to the ground of non-sanitary wastewater including industrial and commercial process waste water, except:
  - i) the replacement or repair of an existing treatment works that will not result in a design capacity greater than the design capacity of the existing treatment works;
  - ii) treatment works approved by the Department designed for the treatment of contaminated ground or surface water and operating in compliance with 314 CMR 5.05(3) or 5.05(13);
  - iii) publicly owned treatment works;
- n. stockpiling and disposal of snow and ice containing deicing chemicals if brought in from outside the district;

o. storage of commercial fertilizers, as defined in MGL Chapter 128, §64, unless such storage is within a structure designed to prevent the generation and escape of contaminated runoff or leachate.

### 10.F.4. Uses and Activities Requiring a Special Permit

The following uses and activities are permitted only upon the issuance of a Special Permit by the Special Permit Granting Authority (SPGA) under such conditions as they may require:

- a. enlargement or alteration of existing uses that do not conform to the Groundwater Protection District;
- b. those activities that involve the handling of toxic or hazardous materials in quantities greater than those associated with normal household use, permitted in the underlying zoning (except as prohibited under Section C). Such activities shall require a special permit to prevent contamination of groundwater;
- c. any use that will render impervious more than 15% or 2,500 square feet of any lot, whichever is greater. A system for groundwater recharge must be provided which does not degrade groundwater quality. For non-residential uses, recharge shall be by storm water infiltration basins or similar system covered with natural vegetation, and dry wells shall be used only where other methods are infeasible. For all non-residential uses, all such basins and wells shall be preceded by oil, grease, and sediment traps to facilitate removal of contamination. Any and all recharge areas shall be permanently maintained in full working order by the owner.

#### 10.G. PROCEDURES FOR ISSUANCE OF SPECIAL PERMIT

10.G.1. The Special Permit Granting Authority (SPGA) under this bylaw shall be the West Newbury Planning Board. Such special permit shall be granted if the SPGA determines, with advice from the Board of Health, the Conservation Commission, and the Water Department that the intent of this bylaw, as well as its specific criteria, are met. The SPGA shall not grant a special permit under this section unless the petitioner's application materials include, in the SPGA's opinion, sufficiently detailed, definite, and credible information to support positive findings in relation to the standards given in this section. The SPGA shall document the basis for any departures from the recommendations of the other town boards or agencies in its decision.

The SPGA is authorized to adopt regulations to administer this bylaw, and to set performance and/or design standards.

- 10.G.2. Upon receipt of the special permit application, the SPGA shall transmit one copy to the Water Department, Board of Health, and the Conservation Commission for their written recommendations. Failure to respond in writing within 35 days of receipt by the Board shall indicate approval or no desire to comment by said agency. The necessary number of copies of the application shall be furnished by the applicant.
- 10.G.3. The SPGA may grant the required special permit only upon finding that the proposed use meets the following standards, those specified in Section 6 of this bylaw, and any regulations or guidelines adopted by the SPGA. The proposed use must:

- a. in no way, during construction or thereafter, adversely affect the existing or potential quality of quantity of water that is available in the Groundwater Protection District; and
- b. be designed to avoid substantial disturbance of the soils, topography, drainage, vegetation, and other water-related natural characteristics of the site to be developed.
- 10.G.4. The SPGA may adopt regulations to govern design features of projects. Such regulations shall be consistent with subdivision regulations adopted by the municipality.
- 10.G.5. The applicant shall file 10 copies of a site plan and attachments. The site plan shall be drawn at a proper scale as determined by the SPGA and be stamped by a professional engineer. All additional submittals shall be prepared by qualified professionals. The site plan and its attachments shall at a minimum include the following information where pertinent:
  - a complete list of chemicals, pesticides, herbicides, fertilizers, fuels, and other
    potentially hazardous materials to be used or stored on the premises in quantities greater
    than those associated with normal household use;
  - b. for those activities using or storing such hazardous materials, a hazardous materials management plan shall be prepared and filed with the Hazardous Materials Coordinator, Fire Chief, and Board of Health. The plan shall include:
    - provisions to protect against the discharge of hazardous materials or wastes to the environment due to spillage, accidental damage, corrosion, leakage, or vandalism, including spill containment and clean-up procedures;
    - provisions for indoor, secured storage of hazardous materials and wastes with impervious floor surfaces;
    - evidence of compliance with the Regulations of the Massachusetts Hazardous
       Waste Management Act 310 CMR 30, including obtaining an EPA
       identification number from the Massachusetts Department of Environmental
       Protection.
  - c. proposed down-gradient location(s) for groundwater monitoring well(s), should the SPGA deem the activity a potential groundwater threat.
- 10.G.6. The SPGA shall hold a hearing, in conformity with the provision of MGL Chapter 40A, Section 9, within 65 days after the filing of the application and after the review by the Town Boards, Departments, and Commissions.

Notice of the public hearing shall be given by publication and posting and by first-class mailings to "parties of interest" as defined in MGL Chapter 40A, §11. The decision of the SPGA and any extension, modification, or renewal thereof shall be filed with the SPGA and Town Clerk within 90 days following the date of the public hearing, as provided in MGL Ch.40A, §9. Failure of the SPGA to act within 90 days shall be deemed as a granting of the permit. However, no work shall commence until a certification is recorded as required by MGL Chapter 40A, §11.

- 10.G.7. Written notice of any <u>violations</u> of this Bylaw shall be given by the Zoning Enforcement
  Authority to the responsible person within a week after detection of a violation or a continuing violation.
  Notice to the assessed owner of the property shall be deemed notice to the responsible person. Such notice shall specify the requirement or restriction violated and the nature of the violation, and may also identify the actions necessary to remove or remedy the violations and preventive measures required for avoiding future violations and a schedule of compliance. A copy of such notice shall be submitted to the Planning Board, Building Inspector, Board of Health, Conservation Commission, and Water Department. The cost of containment, clean-up, or other action of compliance shall be borne by the owner and operator of the premises.
- 10.G.8. A determination that any portion or provision of this Groundwater Protection Overlay District Bylaw is invalid shall not invalidate any other portion or provision thereof, nor shall it invalidate any special permit previously issued thereunder.