

ARTICLE 27. To see if the Town will vote to amend the Code of Lunenburg, Section 250-4.9, which is a Section of the Protective Bylaw entitled "Water Supply Protection District," as shown on a document entitled "Section 250-4.9 Water Supply Protection District Updates 2022", with additions to the Bylaw underlined and deletions ~~stricken through~~ therein, the entire text of which is on file at the offices of the Town Clerk and Land Use Director and posted on the town website; or take any other action relative thereto. (Submitted by the Planning Board)

- A. Purpose. The purpose of the Water Supply Protection District is to promote the health, safety and general welfare of the community; to protect, preserve and maintain present and potential sources of water supply and watershed areas for the public health and safety; to protect, preserve and maintain the existing and potential groundwater supply and groundwater recharge areas within the Town for public health and safety; to preserve and protect the lakes, ponds, streams, brooks, rills, marshes, swamps, bogs and other water bodies and watercourses in Town; to protect the community from the detrimental use and development of land and water within the district; to conserve the natural resources of the Town; to preserve and maintain the groundwater table and water recharge areas within the Town; and to prevent blight and the pollution of the environment.
- B. District delineation.
- (1) The boundaries of the Water Supply Protection District shall be as follows: Zone I, Zone II, and Zone III for the Town of Lunenburg, approved by the Department of Environmental Protection (DEP) according to Map 1, entitled "Water Protection District, revised ~~October, 2009~~June 2020."
 - (2) Where the bounds as delineated are in doubt or in dispute, the burden of proof that the use is outside the Water Supply Protection District or does not impact the district shall be upon the owner(s) of the land in question. However, the Building Commissioner retains its authority to determine final location with regard to said Water Supply Protection District.
 - (3) At the written request of the owner(s) of the property in question, the Town may engage a professional geologist, a certified soil scientist or a registered professional engineer trained in hydrology to determine the location and extent of a protection area on the parcel in question and charge the owner(s) of said parcel for the cost of the investigation.
- C. Use regulations.
- (1) The Water Supply Protection District is established as an overlay district to all other districts. Land in the Water Supply Protection District shall be subject to the requirements of this section, as well as to all other requirements of this Zoning Bylaw which apply to the underlying zoning districts. Uses that are not permitted in the underlying district shall not be permitted in the Water Supply Protection Districts.
 - (2) Uses permissible in the Restricted Area Zone I by special permit granted by the Planning Board. Irrespective of the permitted uses in the underlying district, only the following uses are permitted within the Restricted Area Zone I of the Water Supply Protection District, subject to the granting of a special permit by the Planning Board, provided that all necessary permits, orders or approvals required by local,

state or federal law are also obtained, and except as limited by the Conservation Commission and/or Lunenburg Water District as outlined in Guidelines and Policies for Public Water Systems, Department of Environmental Quality Engineering, Division of Water Supply, Revised May 1, 1991, as amended:

- (a) Conservation of soil, water, plants and wildlife.
 - (b) Outdoor recreation, nature study with prior DEP approval, ~~boating and fishing~~.
 - (c) ~~Raised wooden walkways~~, foot, bicycle ~~and/or horse~~ paths with prior DEP approval ~~and bridges~~.
 - (d) Normal operation and maintenance of existing water bodies and dams, splash boards and other water control, supply and conservation devices.
 - (e) ~~Farming, gardening, nursery, conservation, forestry, harvesting and grazing as provided under MGL Chapter 40A, provided that fertilizers, herbicides, pesticides, manure, hazardous materials, liquid petroleum products, and other leachable materials are stored within an enclosed structure and used in a manner that will not permit groundwater contamination.~~
 - (f) ~~Uses accessory and subordinate to the above uses, if permitted in the underlying district and subject to the provision of the underlying district, provided that the use does not result in coverage of more than 15% of the lot with impervious surfaces.~~
- (3) Uses permissible in Zone II by special permit granted by the Planning Board. Irrespective of the permitted uses in the underlying district, only the following uses are permitted within Zone II of the Water Supply Protection District, subject to the granting of a special permit by the Planning Board, provided that all necessary permits, orders or approvals required by local, state or federal law are also obtained and except as limited by the Conservation Commission and/or Lunenburg Water District as outlined in Guidelines and Policies for Public Water Systems, Department of Environmental Quality Engineering, Division of Water Supply, Revised May 1, 1991:
- (a) Conservation of soil, water, plants and wildlife.
 - (b) Outdoor recreation, nature study, boating and fishing.
 - (c) Raised wooden walkway, foot, bicycle and/or horse paths and bridges.
 - (d) Normal operation and maintenance of existing water bodies and dams, splash boards and other water control, supply and conservation devices.
 - (e) Farming, gardening, nursery, conservation, forestry, harvesting and grazing as provided under MGL Chapter 40A, provided that fertilizers, herbicides, pesticides, manure, hazardous materials, liquid petroleum products and other leachable materials are stored within an enclosed structure and used in a manner that will not permit groundwater contamination.
 - (f) Uses accessory and subordinate to the above uses, if permitted in the underlying district and subject to the provision of the underlying district, provided that the use does not result in coverage of more than 20% of the lot with impervious surfaces.

- (g) Detached one-family dwellings, if permitted in the underlying district and subject to the provisions of the underlying district, provided that no more than 20% of the required lot area is covered with impervious surfaces.
- (h) New detached two-family dwellings, if permitted in the underlying district and if located on a lot having an area at least 1 1/2 times that required by § 250-5.1, and provided that no more than 20% 15% or 2,500 square feet of any lot or parcel, whichever is greater of the required lot area is covered with impervious surfaces, unless a system for artificial recharge of precipitation is provided that will not result in the degradation of groundwater quality.
- (i) Maintenance and repair of an existing structure, provided that there is not an increase in impervious surfaces.
- (j) Public utilities and facilities, provided that no adverse impact on surface water or groundwater will occur.
- (4) Permitted uses: Zone III. The following uses are permitted within Zone III of the Water Supply Protection District, provided that all necessary permits, orders or approvals required by local, state or federal law are also obtained and except as limited by the Conservation Commission and/or Lunenburg Water District as outlined in Guidelines and Policies for Public Water Systems, Department of Environmental Quality Engineering, Division of Water Supply, Revised May I, 1991, as amended:
 - (a) Conservation of soil, water, plants and wildlife.
 - (b) Outdoor recreation, nature study, boating and fishing.
 - (c) Raised wooden walkways, foot, bicycle and/or horse paths and bridges.
 - (d) Normal operation and maintenance of existing water bodies and dams, splash boards and other water control, supply and conservation devices.
 - (e) Farming, gardening, nursery, conservation, forestry, harvesting and grazing provided under MGL Chapter 40A, provided that fertilizers, herbicides, pesticides, manure and other leachable materials are stored within an enclosed structure and used in a manner that will not permit groundwater contamination.
 - (f) Uses accessory and subordinate to the above uses, if permitted in the underlying district and subject to the provisions of the underlying district, provided that the use does not result in coverage of more than 20% of the lot with impervious surfaces.
 - (g) Detached one-family dwellings, if permitted in the underlying district and subject to the provisions of the underlying district.
 - (h) New detached two-family dwellings, if permitted in the underlying district.
 - (i) Maintenance and repair of an existing structure, provided that there is no increase in impervious surfaces.

- (j) Public utilities and facilities, provided that no adverse impact on surface water or groundwater will occur.
- (k) The application of pesticides for nondomestic or agricultural uses, provided that all necessary precautions shall be taken to prevent hazardous concentrations of pesticides in the water and on the land within the Water Supply Protection District as a result of such application. Such precautions include, but are not limited to, erosion control techniques, the control of runoff water or the use of pesticides having low solubility in water, the prevention of volatilization and redeposition of pesticides and the lateral displacement of pesticides.
- (l) The application of fertilizers for nondomestic or agricultural uses, provided that such application shall be made in such a manner as to minimize adverse impacts on surface water and groundwater due to nutrient transport and deposition and sedimentation.
- (m) Planned residential development, subject to development plan approval and provided that no more than 15% of the required lot area is covered with impervious surfaces.
- (n) Those commercial and industrial activities permitted in the underlying district, subject to development plan approval to prevent adverse impact on the environment.
- (5) Uses prohibited in the Water Supply Protection District:
 - (a) Storage of road salt or deicing chemicals;
 - (b) Chemical and bacteriological laboratories;
 - (c) Industrial uses which discharge process water, including any commercial or service uses discharging wastewater;
 - (d) Storage of petroleum or other refined petroleum product except within buildings which will be heated by the petroleum or other refined petroleum product; however, nothing in this section shall prevent the owner of a tank or tanks existing at the time of adoption of this section to replace said tanks, provided there is no increase in capacity;
 - (e) Any other use which involves the manufacture, use, storage, transportation or disposal of toxic or hazardous materials or generates, treats, stores or disposes of hazardous materials as defined in Article **II** in quantity exceeding ~~250-220~~ total gallons of liquid material(s) or 2,000 total pounds of solid material(s) at any one time per month.
- (6) Uses prohibited in Zone I and Zone II. The following uses are prohibited in Zone I and Zone II:
 - (a) Public or private sanitary landfills, including the deposition of any foreign or nonindigenous material upon the land except for normal and accepted agricultural;
 - (b) Junkyards or recycling facilities;
 - (c) Sewage treatment facilities or sludge and septage storage;

- (d) Commercial car washes;
- (e) Dry-cleaning establishments;
- (f) Metal plating or metal finishing;
- (g) Use of chemicals for deicing unless deemed necessary for public safety by the Board of Selectmen;
- (h) The use of septic system cleaners which contain toxic organic chemicals;
- (i) The rendering impervious of more than 15% of a required lot area;
- (j) The disposal of liquid or leachable wastes, except subsurface domestic waste disposal systems;
- (k) Dumping of snow brought in from outside the district;
- (l) The alteration of any natural site features or topography, including but not limited to the cutting or removal of trees or other natural vegetation or the dumping, filling, excavation, grading, transferring or removing of any gravel, sand, loam or other soft material, rock or ledge prior to obtaining all permits and approvals for final development plans required by this bylaw;
- (m) Any use determined by the Planning Board to be detrimental to the purposes of this section of the bylaw;
- (n) Mining of land except as incidental to a permitted use, subject to a special permit granted by the Board of Selectmen. [In no case shall earth removal extend to a depth within 4-feet of groundwater table.](#)

D. Conditions for use.

- (1) Each application for a special permit in the Water Supply Protection District shall conform to the Planning Board Rules and Regulations for Site Plan Approval and Special Permits, as amended. In addition to the submission requirements of the Planning Board Rules and Regulations for Site Plan Approval and Special Permits the following items shall also be included:
 - (a) A plot plan showing:
 - [1] Location of wetlands, streams, water bodies and floodplain;
 - [2] Existing drainage patterns, including direction of surface flow and, if required, subsurface flow;
 - [3] Existing soils;
 - [4] Soil boring locations and results;
 - [5] Existing woodlands;
 - [6] Areas having slopes exceeding 15%;

- [7] Areas to be disturbed by construction;
 - [8] Areas where earth and other material subject to erosion will be temporarily stockpiled;
 - [9] Areas to be used for disposal or storage of construction debris, stones, stumps, etc. if within the district;
 - [10] Temporary and permanent erosion control measures planned, such as sediment basins, storm waste basins, diversions, rip-rap, stabilization seedings, etc.;
 - [11] Temporary work roads to be used during projects;
 - [12] Locations and size of septic systems;
 - [13] Method to contain spillage in fuel filling areas;
- (b) A storm drainage plan showing:
- [1] Locations of drains and culverts and names of streams, rivers, ponds or reservoirs in the Town into which they flow;
 - [2] Discharge peaks and expected velocities at drain or culvert outlets;
 - [3] Conditions above and below outlets and expected flow velocities;
 - [4] Supporting computation for the above;
- (c) A grading plan showing existing topography and planned grade along existing and/or proposed street or highway profiles;
- (d) A siltation and sedimentation control plan, including:
- [1] Sedimentation and erosion control structures such as diversions, waterways, slope stabilization structures and sediment basins, in sufficient detail to implement their installation together with referred standards for soil erosion and sedimentation as appropriate and design calculations as required for each structure;
 - [2] Seeding and/or sodding requirements for all exposed areas, including seedbed preparation, seed mixtures, lime, fertilizer and mulching requirements with referenced standards;
 - [3] Schedule or sequence of operation with starting dates for clearing and/or grading, timing for storm drain and culvert installations, both temporary and permanent, indicated dates when critical area stabilization, paving, seeding, mulching and/or sodding is to be completed;
 - [4] General notes for sediment control that spell out the procedures for implementing the plan.
- (e) A complete list of all chemicals, pesticides, fuels and other potentially toxic or hazardous materials to be used or stored on the premises in quantities greater than those associated with normal household use, accompanied by description of measures proposed to protect such materials from vandalism, corrosion

and leakage and to provide for control of spills;

- (f) A description of potentially toxic or hazardous wastes to be generated, indicating storage and disposal methods;
 - (g) Evidence of approval by the Massachusetts Department of Environmental Quality Engineering (DEQE) of any industrial water treatment or disposal systems;
 - (h) For underground storage of toxic or hazardous materials, evidence of qualified professional supervision of system design, installation and operation;
 - (i) Analysis by a professional engineer in sanitary or civil engineering registered in the Commonwealth of Massachusetts certifying compliance with Subsection **E** below.
- (2) The Planning Board shall transmit one copy of the plan to the Board of Health and one copy to the Conservation Commission, one copy to the Fire Department and one copy to the local water purveyor for review and comment. The Board of Health and the Conservation Commission shall submit a written report to the Planning Board within 14 days.
- (3) Said plan submission shall be submitted to the Planning Board at a regularly scheduled meeting of the Planning Board.
- (a) In case of a use not requiring a special permit, the Planning Board, within 45 days of the receipt thereof, shall submit a report to the Building Commissioner. Said report shall summarize the Board's findings with regard to the compliance of the plan with the provisions of the Zoning Bylaw and any recommendations of the Board to ensure that:
- [1] The proposed use shall comply in all respects with the provisions of the underlying district and will promote the purposes of the Water Supply Protection District; and
 - [2] The proposed use is appropriate to the natural topography, soils and other characteristics of the site to be developed; and
 - [3] The proposed use will not, during construction or thereafter, have an adverse environmental impact on the aquifer or recharge area; and
 - [4] The proposed use will not result in the deterioration of existing groundwater or surface water quality, whether or not such water meets established state or federal standards; and
 - [5] The proposed use complies with the provisions of § **250-8.3C(2)**.
- (b) The Board may specify such additional requirements and conditions it finds necessary to protect the health, safety and welfare of the public and the occupants of the proposed use.
- (c) The Building Commissioner shall not issue a permit until the report of the Planning Board, or more than 45 days shall have elapsed from the time of submittal to the Planning Board without receipt of such report, has been submitted to the Building Commissioner.

- E. Limitations upon uses. In addition to the limitations set forth in Article V of this bylaw, all uses within the Water Supply Protection District, except for single-family dwelling lots on plans not requiring Planning Board approval, shall be subject to the following limitations:
- (1) Safeguards. Provision shall be made to protect against toxic or hazardous materials discharged or lost through corrosion, accidental damage, spillage or vandalism through such measures as provision for spill control in the vicinity of chemical or fuel delivery points, secure storage areas for toxic or hazardous materials and indoor storage provisions for corrosive or dissolvable materials.
 - (2) Location. Where the premises are partially outside of the Water Supply Protection District, such potential pollution sources as on-site waste disposal systems shall, to the degree feasible, be located outside the district.
 - (3) Disposal. For any toxic or hazardous waste to be produced in quantities greater than those associated with normal household use, the applicant must demonstrate the availability and feasibility of disposal methods which are in conformance with Chapter 21C of the Massachusetts General Laws and all other applicable laws and regulations.
 - (4) Drainage. All runoff from impervious surfaces shall be recharged on the site, diverted towards areas covered with vegetation for surface infiltration to the extent possible. Dry wells shall be used only where other methods are infeasible and shall be preceded by oil, grease and sediment traps to facilitate removal of contamination.
 - (5) Monitor test wells. Where fertilizers, pesticides, herbicides or other potential contaminants are to be applied, utilized or stored and in the opinion of the Planning Board are a matter of concern, a groundwater monitoring program shall be established before the special permit is granted. Such a program shall adequately monitor the quality of the groundwater leaving the site through the use of monitor wells and/or appropriate groundwater sample analyses.
 - (6) Natural vegetation. No more than 30% of existing natural vegetation on any lot may be disturbed in an underlying residential district, nor more than 50% of existing natural vegetation on any lot may be disturbed in an underlying nonresidential district.
 - (7) Technical reference. The technical reference to be used to prepare and review plans is "Guidelines for Soil and Water Conservation in Urbanizing Areas of Massachusetts," 1977, U.S.D.A. Soil Conservation Service, Amherst, Massachusetts. Specific guidelines to use include, but are not limited to:
 - (a) Limit grading to only those areas actively undergoing current construction;
 - (b) The smallest practical area of land should be exposed at one time during development;
 - (c) Limit the length of time graded areas are exposed;
 - (d) Provide temporary or permanent stabilization of disturbed areas at the earliest opportunity. Limit exposure to less than 60 days;
 - (e) Retain and protect as much of the natural vegetation as possible;

- (f) Permanent improvements such as streets, utilities, storm sewer, vegetated waterways and other features of the development should be scheduled for installation to the greatest extent possible before removing the vegetative cover from an area scheduled for building construction;
 - (g) Protect all fill slopes and cut slopes exceeding five feet in height from storm run-off through the use of diversion berms, drop chutes or other acceptable means;
 - (h) Rough-graded rights-of-way awaiting installation of utilities and/or pavement should be protected by the installation of interceptor berms across the right-of-way so as to reduce the length of slope between berms to not more than 250 feet;
 - (i) On sites where the above procedures are impractical or not acceptable, where the topography permits, install sediment basins, desilting basins or silt traps to remove sediment from runoff waters.
- (8) Non-point source pesticide contamination. All pesticide use in Zone II shall comply with the provisions 333 CMR 12.00.