

## SECTION 8.0 OVERLAY DISTRICTS

### 8.1 WATER RESOURCE PROTECTION OVERLAY DISTRICT (WRPOD)

#### 8.1.1 Purpose

To promote and protect the health, safety and general welfare of the Community by preserving and protecting surface and groundwater resources of the Town. It is necessary to prevent contamination of these water supplies from any use of land or building which may reduce the quality and/or quantity of the water resources.

#### 8.1.2 Definitions

***Aquifer:*** Geological formation composed of rock, sand, and gravel that contains significant potable water to public or private wells.

***Discharge:*** The accidental or intentional spilling, leaking, pumping, emitting, emptying, or dumping of toxic or hazardous materials onto or into the waters or lands.

***Groundwater:*** The subsurface water present in aquifers and recharge areas.

***Impervious Surface:*** Materials or structures on or above the ground that do not allow precipitation to infiltrate the underlying soil.

***Maximum Groundwater Elevation:*** The height of the groundwater table when it is at its maximum level of elevation. This level is usually reached during the months of December through April and allowances should be made therefore at other times of the year.

***Mining of Land:*** The removal of geologic materials such as topsoil, sand and gravel, metallic ores, or bedrock to be crushed or used as building stone.

***Recharge Areas:*** The area encompassing land and water surfaces through which precipitation enters the groundwater supply, and from which groundwater flows naturally or is drawn by pumping into a water supply well. This area is usually, but not always, of porous, permeable geologic deposits.

**Zone I Area:** The protective radius required around a public water supply well or wellfield. For public water system wells with approved yields of 100,000 gpd or greater, the protective radius is 400 feet. Tubular wellfields require a 250-foot protective radius. For the purpose of this Bylaw, the Zone I area for the Vacuum Tubular Well Field on West Street (DEP Source ID #2077000-01G) is 250 feet, and the Zone I areas for the remaining three wells are 400 feet.

**Zone II Area:** The area of an aquifer that contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated (180 days of pumping at approved yield, with no recharge from precipitation).

**Toxic or hazardous materials:** material including but not limited to, any material, in whatever form, which, because of its quantity, concentration, chemical, corrosive, flammable, reactive, toxic, infectious, or radioactive characteristics, either separately or in combination with any substance or substances, constitutes a present or potential threat to human health, safety, welfare, or to the environment, when improperly stored, treated, transported, disposed of, used, or otherwise managed. Hazardous materials have been defined and designated under the Massachusetts Oil and Hazardous Material Release Prevention and Response Act, General Laws, Chapter 21H, as amended and regulations promulgated there under.

**Waste:** Including but not limited to the following:

**Leachable Wastes:** waste materials including solid wastes, sludge, pesticides, fertilizers, agricultural wastes capable of releasing water contaminants to the environment.

**Mining Waste:** Any water carried or liquid waste resulting from the development or recovery of natural resources.

**Process Wastewater:** All wastewaters disposed on site other than sanitary wastewater.

**Industrial Wastes:** Any water carried or liquid wastes resulting from any process in industry, manufacturing, trade or business.

**Septic Waste:** Wastewaters arising from ordinary domestic water use as from toilets, sinks and bathing facilities, etc. and containing such concentrations and types of pollutants as to be considered normal wastes.

**Solid Waste:** Any discarded solid material consisting of combustible and non-combustible solid material including but not limited to garbage or rubbish.

**Toxic or Hazardous Wastes:** Any substance or mixture of substances which because of quantity, concentration, or physical, chemical, or infectious characteristics pose a substantial actual or potential hazard to water supplies; to human health, safety, or welfare; to the environment when improperly treated, stored, transported, used, or disposed of, or otherwise managed. Hazardous wastes have been defined and designated under the Massachusetts Hazardous Waste Management Act, Massachusetts General Law (M.G.L.) Chapter 21C, as amended, and regulations promulgated there under.

**Water Resource District:** Regions that encompass Massachusetts Department of Environmental Protection (DEP)-approved Zone I and II areas; along with other areas deemed to be contributory to a potential future municipal wells as identified in the June 1986 report titled "Comprehensive Evaluation of Groundwater Resources Douglas,

Massachusetts” prepared by Geologic Services Corporation and Identified on “plate 5”, with the areas referenced therein amended by a further report issued by Fay Spofford & Thorndike, dated July 15, 2009.. The Water Resource District is outlined on the map entitled “*Map of Water Resource District, Douglas Massachusetts*” prepared by Cartographic Associates, Inc. and dated February 27, 2012 .

### **8.1.3 Authority**

The Water Resource District as established by this Bylaw is an overlay district superimposed over other Zoning Districts. All uses, dimensional requirements and other provisions of the land in this district shall be subject to restrictions of this Bylaw in addition to those of the underlying districts. When the Water Resource District imposes greater or additional restrictions and/or requirements, such restrictions and/or requirements shall prevail. Any uses not permitted in underlying districts shall remain prohibited.

### **8.1.4 Zoning Administrator**

The Board of Appeals is hereby authorized to appoint a Zoning Administrator, subject to confirmation by the Board of Selectmen to serve at the pleasure of the Board of Appeals pursuant to such qualifications as may be established by the Board of Selectmen.

### **8.1.5 Establishment**

The Water Resource District, as defined herein, is herein established to include all specified lands within the Town of Douglas.

1. Where the bounds delineated are in doubt or in dispute, the burden of proof shall be upon the owner(s) of the land in question to show where they should be properly located. In any situation where the owner(s) of land in question doubt or dispute the delineation of a Water Resource District of any portion thereof the following procedure shall be followed:

Owner(s)/applicant shall file an application for a building permit with the Building Commissioner for the proposed use. If the Building Commissioner determines the proposed use is not permitted in the Water Resource District or that a Special Permit is required then the owner(s)/applicant may appeal the determination of the Building Commissioner directly to the Zoning Board of Appeals as provided in M.G.L. Chapter 40A, §§8 and 15, as amended.

### **8.1.6 Use Restrictions**

Any uses permitted in portions of the Zoning Districts so overlaid shall be permitted subject to all provisions of the Water Resource District. All activities and uses within said Water Resource District shall be restricted to the following use provisions, provided that land uses within the Zone I of any public water supply well shall be further limited to those uses directly related to the public water system or will have no significant adverse impact on water quality. Use provisions are categorized as "A" - Permitted Uses, "B"

Prohibited Uses, and "C" - Special Permit uses. A listing of use provisions within each category is as follows:

#### A. PERMITTED USES

These uses are permitted provided that all necessary permits, orders, and approvals required by Local, State, and Federal Laws are also obtained.

1. Conservation of soil, water, flora, and fauna.
2. Outdoor recreation such as boating, fishing, hunting where permitted, hiking, biking, horse riding and the like.
3. Farming, gardening, nursery, conservation, forestry, harvesting, and grazing uses provided that fertilizers, pesticides, herbicides, manure, and other leachable substances are not stored improperly so as to result in groundwater contamination.
4. Residential development density within the Water Resource District shall be no more than one (1) single family dwelling unit or duplex dwelling with on-site septic system per lot. Dimensional requirements in this instance shall conform to those established for septic system construction under Massachusetts Title IV requirements, as may be amended.
5. Single family or duplex dwelling lot size less than those under the RA Zoning District allowed by the Zoning Bylaws shall continue to be allowed within the Water Resource District only if such residential development is connected to municipal sewerage. Dimensional requirements for said lots shall conform to those allowed by the Bylaw.
6. Multi-family dwelling use shall be allowed only if such development is connected to municipal sewerage and water.

#### B. PROHIBITED USES

These uses are prohibited regardless of principal uses to which they may be related.

1. Discharge of toxic or hazardous materials and wastes upon the ground or into surface and/or groundwater within the Town of Douglas is prohibited.
2. The usage, manufacturing, processing, treating, storage or disposal of liquid or solid toxic and hazardous materials are prohibited except for storage of heating fuel for on-site use, and the storage of materials for public water supply treatment for on-site use, unless such storage is done in accordance with the storage requirements outlined in 310 CMR 22.21(2)(b)(5).
3. On-site disposal by any means of any waste materials other than domestic sewage wastes is prohibited.

4. Outdoor or underground storage of leachable wastes, hazardous or toxic materials, including but not limited to sludge, septage, chemicals, fertilizers, pesticides, herbicides, manure, road salt, de-icing compounds, etc., except for:
  - a. Installation or enlargement of subsurface waste disposal systems for residential dwellings;
  - b. Normal agricultural operations provided that agriculture-related materials, including but not limited to commercial fertilizers and animal manures, are stored within a structure(s) designed to prevent the generation and escape of contaminated runoff or leachate; and
  - c. Business or industrial uses involving on-site disposal systems for personal hygiene and for food preparation for residents, patrons, and employees.
5. Trucking or bus terminals, motor vehicle gasoline sales, motor vehicle service and repair shops, auto body and paint shops, car washes, boat service, and repair.
6. Commercial wood preserving and/or furniture stripping.
7. Solid waste landfills, dumps, junk and salvage yards. Disposal of demolition materials, brush, and stumps is also prohibited except as authorized and regulated by the Douglas Board of Health.
8. Dry cleaning establishments, metal plating, chemical and bacteriological laboratories, or any use involving the manufacture, storage, use, treatment, transport, or disposal of toxic or hazardous wastes, except for the following:
  - a. Very small quantity generators, as defined by 310 CMR 30.00;
  - b. Household hazardous waste collection centers or events operated pursuant to 310 CMR 30.390;
  - c. Waste oil retention facilities required by MGL Chapter 21, Section 52A; and
  - d. Treatment works approved by the Massachusetts Department of Environmental Protection designed in accordance with 314 CMR 5.00 for the treatment of contaminated ground or surface waters.
9. Commercial animal feedlots, unless said feed lots are equipped with best management practices to prevent the contamination of surface or groundwater by stormwater run-off.

10. Underground or above-ground storage and/or transmission of oil, gasoline or other liquid petroleum products, excluding liquified petroleum gasses and chemicals, except those uses incidental to:

a. Normal household use and outdoor maintenance or the heating of a structure;

b. Waste oil retention facilities required by MGL Chapter 21, Section 52A;

c. Emergency generators required by statute, rule or regulation; or

d. Treatment works approved by the Massachusetts Department of Environmental Protection designed in accordance with 314 CMR 5.00 for the treatment of contaminated ground or surface waters, provided that such storage listed in a-d of this subsection is either in a free standing container within a building or in a free standing container above-ground level with protection adequate to contain a spill the size of the container's total storage capacity; however, replacement of existing tanks or systems for the keeping, dispensing or storing of gasoline is allowed consistent with State and Local requirements.

11. Treatment or disposal works for non-sanitary wastewaters that are subject to 314 CMR 5.00, except the following:

a. The replacement or repair of an existing system(s) that will not result in a design capacity greater than the design capacity of the existing system(s); and

b. Treatment works approved by the Department designed for the treatment of contaminated ground or surface waters.

12. Stockpiling and/or disposal of snow or ice that contains sodium chloride, chemically-treated abrasives, or other chemicals used for snow or ice removal.

13. The removal of soil, loam, sand, gravel or any other mineral substances within four feet of the historical high groundwater table elevation (as determined from monitoring wells and historical water table fluctuation data compiled by the United States Geological Survey), unless the substances removed are redeposited within 45 days of removal on site to achieve a final grading greater than four feet above the historical high water mark, and except for excavations for the construction of building foundations or the installation of utility works, or wetland restoration work conducted in accordance with a valid Order of Condition issued pursuant to M.G.L. c. 131, § 40;

14. The rendering impervious of greater than fifteen percent (15%) or two

thousand five hundred (2,500) square feet of any lot or parcel, whichever is greater, unless a system of storm water management and artificial recharge of precipitation is developed which is designed to prevent untreated discharges to wetland and surface water; preserve hydrologic conditions that closely resemble pre-development conditions; reduce or prevent flooding by managing peak discharges and volumes of runoff; minimize erosion and sedimentation; not result in significant degradation of groundwater; reduce suspended solids and other pollutants to improve water quality and provide increased protection of sensitive natural resources. These standards may be met using the following or similar best management practices:

a. For lots or parcels occupied, or proposed to be occupied, by single or two family residences recharge shall be attained through site design that incorporates natural drainage patterns and vegetation in order to reasonably maintain pre-construction stormwater patterns and water quality to the extent practicable. Stormwater runoff from rooftops, driveways and other impervious surfaces shall be routed over lawn areas via sheet flow for no less than eight feet before discharging to a wetland, surface water, or impervious surface that lead to a street drain system. Dry Well leaching pits can be used in lieu of eight feet of lawn for rooftop runoff. The site design must direct only the added impervious surface run off. No site design is needed, if the street drain system has water quality and recharge installed at the outfall.

b. For lots occupied, or proposed to be occupied by other uses, a Special Permit from the Planning Board to ensure that an adequate system of storm water management and artificial recharge of precipitation is developed.

### C. SPECIAL PERMIT USES

Within the Water Resource Districts the following uses shall be allowed by Special Permit only.

1. Any use involving the retention of less than thirty percent (30%) of lot area in its natural state with no more than minor removal of existing trees and ground vegetation.
2. On-site wastewater disposal of more than fifteen thousand (15,000) gallons per day regardless of lot area.
3. Expansion of on-site wastewater disposal.
4. Removal of soil, loam, sand, gravel or other earthen materials and/or mining of land except for uses incidental to permitted uses including but not limited to installation or maintenance of structural foundations, utility conduits or on-site sewage disposal systems. Any such removal requiring a Special Permit shall leave not less than ten (10) feet of material from the maximum high groundwater

elevation as determined on a site-by-site basis by a qualified hydrogeologist. The cost of such determination shall be the responsibility of the applicant.

5. Campgrounds, picnic areas and commercial recreation areas.

### **8.1.7 Drainage**

All runoff from impervious surfaces shall be recharged on the site by being diverted toward areas covered with vegetation for surface infiltration to the maximum extent possible and practicable. Stormwater infiltration basins must be designed to handle a twenty-five (25) year storm. 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. Any and all retention areas and structures shall be permanently maintained in full working order by the owner.

### **8.1.8 Special Permit Granting Authority (SPGA)**

The Special Permit Granting Authority shall be the Planning Board. A permit shall be granted if the SPGA determines that the intent of this regulation and its specific criteria are met.

### **8.1.9 Procedures for Issuance of Special Permits**

1. This Special Permit procedure must precede the granting of any other required permit by the Town of Douglas.

2. Each application for a Special Permit shall be filed with the Town Clerk for transmittal to the Planning Board and shall be accompanied by nine (9) copies of the plan. The plan shall be prepared to scale by a professional architect, professional engineer, or registered land surveyor, and shall show among other things all property boundaries; all existing and proposed placement of buildings, structures, parking spaces, loading areas, driveway openings, driveways, service areas, and all facilities for surface and ground drainage and erosion controls; all landscape features denoting vegetated, nonvegetated, pervious and impervious areas and adequate information to clearly show existing and proposed topography. Such Special Permit shall be granted if the Planning Board determines that the intent of this Bylaw as well as its specific criteria are met. In making such determination, the Planning Board shall give consideration to the simplicity, reliability and feasibility of the control measures proposed and the degree of threat to water quality that would result if the control measures failed, and shall also give consideration to the recommendation of the Board of Health, Board of Selectmen, Building Inspector(s), Conservation Commission, Water Commissioners, and Highway Department.

3. All information necessary to demonstrate compliance with this Bylaw must be submitted, including but not limited to the following and such other information as may be required by the Special Permit Granting Authority:

a. A complete list of all chemicals, pesticides, fuels and other toxic or hazardous materials to be used or stored on the premises in quantities greater than those

associated with normal household use, accompanied by a description of measures to protect from vandalism, corrosion and leakage, and to provide for control of spills.

b. A description of toxic and hazardous wastes to be generated, indicating storage and disposal method.

c. Evidence of application to the Massachusetts Department of Environmental Protection of any industrial waste treatment or disposal system, or any wastewater treatment system over 15,000 gallons per day capacity, accompanied by analysis by a Professional Engineer in Sanitary or Civil Engineering registered in the Commonwealth of Massachusetts certifying Compliance consistent with this Bylaw.

4. Upon receipt of the Special Permit application, the Town Clerk shall transmit one (1) copy each to the Board of Health, Board of Selectmen, Building Inspector, Conservation Commission, Water Commissioner, and Highway Department for their written recommendations. Failure to respond in writing to the Planning Board within thirty-five (35) days shall indicate approval by said Agency or Board. Further, the Planning Board shall forthwith upon receipt transmit copies of any such recommendations to the applicant prior to the Public Hearing.

5. After Notice and Public Hearing, which shall be held within sixty-five (65) days after the filing of an application, and after coordinating, clarifying, and weighing the comments and recommendations of the Agencies and Boards mentioned above, the Planning Board may within ninety (90) days of receipt of the application grant, by a two thirds (2/3) vote of its members, such a Special Permit provided that it finds that the proposed use:

a. Is in harmony with the purpose and intent of this Bylaw and will not materially adversely affect the purpose of the Water Resource District;

b. Will not, during construction or thereafter, have an adverse environmental impact on any aquifer or recharge area in the town;

c. Is appropriate to natural topography, soils, and other characteristics of the site to be developed.

6. Failure of the SPGA to act within ninety (90) days shall be deemed as a granting of the Special Permit. In the granting of any Special Permit the Planning Board may attach such conditions as they deem reasonable and appropriate in maintaining and enforcing the purpose and intent of this Bylaw.

7. The Town Building Inspector shall certify in writing to the Planning Board that any and all Special Permit conditions and/or requirements of such a Special Permit have been fully complied with prior to the granting of an occupancy permit to the applicant and/or

owner(s).

### **8.1.10 Nonconforming Uses**

Nonconforming uses which are lawfully existing, begun or in receipt of a Building or Special Permit prior to first publication of Notice of Public Hearing for this Bylaw may be continued. Such nonconforming uses may be extended or altered, as specified in M.G.L. Chapter 40A, Section 6, as amended, and the Douglas Zoning Bylaws, provided that there is a finding that such change does not increase the danger of groundwater pollution from such use. Applicants shall follow procedures specified in Section 8.09 of this Bylaw.

### **8.1.11 Violation**

Written notice of any violation shall be provided by the Building Inspector or its Agent(s) to the owner of the premises, specifying the nature of the violation(s) and a schedule of compliance, including cleanup of any spilled materials (which is reasonable in relation to the public health hazard involved). In no event shall more than thirty (30) days be allowed for either compliance or finalization of a plan for longer term compliance.

### **8.1.12 Enforcement**

Evidence of non-compliance shall be reported to the Building Inspector in writing or its Agent(s) for enforcement action. The Building Inspector or its Agent(s) may enter upon the premises at any reasonable time to inspect for compliance with the provisions of this Bylaw. Evidence for compliance with approved waste treatment or disposal plans may be required by the Enforcing Agent. Upon refusal for admission to inspect premises, the Building Inspector or its Agent(s) may apply to the District Court for a search warrant based on probable cause to inspect said premises.

### **8.1.13 Penalty**

Penalty for failure to comply with the provisions of this Bylaw shall be \$200 per day of violation.

### **8.1.14 Conflict with Other By-laws**

This Bylaw shall not repeal, annul, or in any way impair or remove the necessity of compliance with any other Bylaw, Ordinance, Law or Regulation. Where this Bylaw and another impose differing standards for the promotion and protection of health, safety and welfare, the provisions of the more stringent Bylaw shall prevail.