

Table 2.12
Groundwater Protection Overlay (GPO) District

A. **Purpose:** The Town of Waitsfield recognizes that many residents rely on groundwater for their safe drinking water supply, and that certain land uses have the potential to contaminate groundwater, particularly in shallow/surficial aquifers, or when contaminants can get into a bedrock aquifer. To ensure the protection of these drinking water supplies, this bylaw establishes a zoning overlay district to be known as the Groundwater Protection Overlay District (“GPOD”).

The purpose of the GPOD is to protect public health, safety and welfare by minimizing the potential for contamination of vulnerable aquifers and source protection areas as authorized under 24 V.S.A. §4414(2), as well as preserving and protecting existing and potential sources of drinking water supplies. It is the intent of the Town of Waitsfield to accomplish this through the adoption of this GPOD, which provides standards to regulate particular uses of land and land development with the foregoing purpose in mind, in addition to those standards currently imposed by existing provisions in the Zoning Bylaws for the applicable zoning districts or other state and federal regulations. It is intended that public education and cooperation will complement this effort.

The GPOD is superimposed on the Agricultural-Residential District, the Forest Reserve District, and other zoning districts within the area of the mapped GPOD and shall apply to all land development within the GPOD.

Land development authorized or allowed in a portion of one of the underlying zoning districts that falls within the GPOD must additionally comply with the requirements of the GPOD. Uses or structures prohibited in the underlying zoning districts shall not be allowed in the GPOD.

B. ZONES WITHIN THE GROUNDWATER PROTECTION OVERLAY DISTRICT

1. Establishment of District Boundaries

The Groundwater Protection Overlay District (“GPOD”) is defined as being the areas shown on the Waitsfield Water Supply SPA Map as within wellhead/aquifer protection areas. The Groundwater Protection Overlay District consists of the wellhead/aquifer protection locations from the Vermont Agency of Natural Resources Water Supply Division digital data. The Groundwater Protection Overlay District is an overlay district, which imposes additional requirements and restrictions to those in the underlying zoning district. In all cases, the more restrictive requirement(s) shall apply.

2. Lots Divided by the Overlay District

Where the boundary of the Groundwater Protection Overlay District divides a lot of record such that part of the lot falls within the Groundwater Protection Overlay District and part of the lot is outside of it, the provisions of this Article shall only apply to that portion of the lot within the boundary of the Groundwater Protection Overlay District.

3. Zones 1 and 2: Drinking Water Critical Impact Zones

Zone 1 is the protective isolation zone, a 200 feet radius circle centered on the public water source. Zone 2 is the primary recharge area contributing water to the source.

- a. **Permitted Uses:** Zone 1 is restricted to the following permitted uses alone (there are no conditional uses). Permitted land uses in Zone 1 will be restricted to:
 - i. source operation and maintenance
 - ii. outdoor recreation facilities, except no structures, including accessory structures, constructed for or associated with such regulation may be located within Zone 1.
 - iii. agricultural and forestry uses, provided that fertilizers, pesticides, manure and other leachable wastes are used according to the Accepted Agricultural Practices as prescribed by Vermont Agency of Agriculture, Food and Markets as applicable and are not applied within 200 feet of the water source. All said leachable wastes must be stored under shelter away from precipitation and should be designed and used with secondary containment measures, as applicable.

- b. **Conditional Uses:** All proposed development in Zone 2 of the GPOD is subject to Conditional Use review by the Development Review Board. Development is restricted to the Permitted or Conditional uses as allowed in the underlying Zoning District except for prohibited uses in subsection (B)(3)(c), below. All uses must:
 - i. Meet the Performance Standards as outlined for the GPOD in subsection (B)(5)
 - ii. If new wastewater is required, satisfy the standards of subsection (B)(3)(d), below, with regard to Two-Year Time-of-Travel Distance

- c. **Prohibited Uses:** Uses prohibited in the underlying zoning districts shall not be allowed in the GPOD. To the extent allowed in the underlying districts, the following uses are prohibited in the GPOD:
 - i. On-site disposal, bulk storage, processing or recycling of toxic or hazardous materials or wastes
 - ii. Underground storage tanks, except septic tanks as regulated and approved by the Vermont Department of Environmental Conservation, Wastewater Management Division that meet the standards of subsection (B)(3)(d) (Two-Year Time-of-Travel)
 - iii. Industrial uses which discharge contact-type process waters on-site
 - iv. Unenclosed storage of road salt
 - v. Dumping of snow carried from off-site
 - vi. Automotive-related uses: Automobile Repair, Automobile Repair Service, automobile service stations, repair garages, carwashes, junkyards, and truck stops
 - vii. The siting or operation of a wastewater lagoon
 - viii. Automobile Sales, and storage, lease or rental of used and new cars, all-terrain vehicles or other motorized vehicles, including but not limited to

lawnmowers, snowmobiles or sidewalk plow vehicles, motorcycles, and dirt bikes

- ix. Laundry and dry-cleaning establishments
- x. Salvage yards, landfills, recycling depots
- xi. Cemetery
- xii. Commercial Water Extraction for purposes other than supplying the public water system associated with the protection area, including geothermal systems.
- xiii. Extraction of Earth Resources
- xiv. Battery storage systems

- d. **Two-Year Time-of-Travel:** Approval of land development proposing use of in-ground wastewater disposal system within the two-year time-of-travel boundary is prohibited unless it can be certified by a licensed hydrologist with experience in wastewater system design that the discharge from the wastewater disposal site is not hydraulically connected to the drinking water aquifer below the GPOD, or that additional information is presented to document that a two-year time-of-travel is met or exceeded to the existing or potential water supply source within the GPOD.

4. **Zone 3: Drinking Water Potential Impact Zone**

Zone 3 is established as the remainder of the GPOD not included in Zones 1 and 2 as identified in the Waitsfield Water Supply SPA as mapped by the Vermont Agency of Natural Resources Department of Environmental Conservation, but deemed necessary to ensure adequate protection of public drinking water supplies.

- a. **Permitted Uses:** All uses allowed in the underlying zoning districts provided that they can meet the Performance Standards as outlined in subsection (B)(5), below, for the GPOD.
- b. **Conditional uses:** All conditional uses permitted in underlying districts provided they can meet performance standards outlined in subsection (B)(5), below, for the GPOD.

5. **Performance Standards**

The following permitting standards shall apply to all uses and land development in Zones 1, 2 and 3 of the GPOD:

- a. Any conditionally permitted facility involving the collection, handling, manufacture, use, storage, transfer or disposal of hazardous material or hazardous wastes must have a secondary containment system that is easily inspected and maintained, whose purpose is to intercept any leak or release from the primary containment vessel or structure. At a minimum, the secondary containment system must be designed and constructed so it is capable of handling at least 110% of the primary containment vessel or structure. Underground tanks or buried pipes carrying such materials must at a minimum have double walls, cathodic protection and inspectable sumps.

- b. Open liquid waste ponds containing hazardous material or hazardous wastes will not be allowed without a secondary containment system and shall not be located within Zone 1.
- c. Storage of petroleum products in quantities exceeding 300 gallons at one locality in one tank or series of tanks must be in elevated or above-ground tanks; such tanks must have a secondary containment system as noted in subsection (B)(5)(a), above. Storage of petroleum products in any quantity is prohibited within Zone 1.
- d. All permitted facilities must adhere to appropriate federal and state standards for storage, handling and disposal of any hazardous material or hazardous waste.
 - i. All conditionally permitted facilities must be designed to include, and operate pursuant to, an acceptable contingency plan for preventing hazardous materials and/or hazardous wastes from contaminating the shallow/surficial aquifer should floods, fire, or other natural catastrophes, equipment failure, or releases occur:
 - (a) All conditionally permitted underground facilities shall include, but not be limited to a monitoring system and secondary standpipe above the 100-year flood control level, for monitoring and recovery. For above-ground conditionally permitted facilities, an impervious dike, above the 100-year flood level and capable of containing 110 percent of the largest volume of storage, will be provided with an overflow recovery catchment area (sump).
 - (b) All conditionally permitted facilities shall include firefighting plans and procedures, a fire retarding system, and provide for dealing safely with any other health and technical hazards that may be encountered by disaster control personnel in combating fire. Hazards to be considered are pipes, hazardous materials, hazardous wastes, or open flames in the immediate vicinity.
 - (c) For equipment failures, plans for conditionally permitted facilities that use, maintain, store, process or produce hazardous materials and/or hazardous wastes shall include, but not be limited to, below-ground level, removal and replacement of leaking parts, a leak detection system with monitoring, and an overfill protection system; and above-ground level, liquid and leaching monitoring of primary containment systems, the replacement or repair and cleanup and/or repair of the impervious surface.
 - (d) For any other release occurring, the owner and/or operator shall report all incidents involving liquid or chemical material to the Waste Management Division of the Vermont Agency of Natural

Resources in accordance with applicable laws and shall simultaneously notify the Town of Waitsfield Zoning Administrator, Town Administrator, or Selectboard Chair immediately, and no later than two hours, after notice is given to the Vermont Agency of Natural Resources.

- ii. Since it is known that improperly abandoned water wells can become a direct conduit for contamination of groundwater by surface water, all abandoned wells within the GPOD shall be properly plugged according to State regulations.

Section 7.04 Groundwater Protection Area Regulation Definitions

AQUIFER. A geological formation, group of formations or part of a formation either composed of unconsolidated rock, sand, gravel, or other unconsolidated soils, or composed of bedrock, with an interconnected series of crevasses, fractures, joints, faults, cleavages, bedding planes, porosity, or other geologic features that allows groundwater to move in the subsurface environment and is capable of storing and yielding groundwater to wells and springs.

CONTAMINATION. An impairment of water quality by chemicals, biologic organisms, or other impurity or extraneous matter regardless of whether it affects the potential or intended beneficial use of drinking water.

FACILITY. All contiguous land, structures, other appurtenances, and improvements on the land that is built, installed, or established for a particular purpose. A Facility may consist of several operational units.

GRAY WATER. All domestic wastewater except water discharged from a toilet or similar facility for excrement of human waste.

GROUNDWATER. Water below the land surface in a zone of saturation.

GROUNDWATER PROTECTION OVERLAY DISTRICT. A zoning district that is superimposed on all underlying zoning districts in the Town of Waitsfield. It includes all lands that are included in the definitions of Zones 1, 2 and 3 of the GPOD, and is included in the Official Map of the Town of Waitsfield. This district may include specifically designated recharge areas that collect precipitation or surface water and carry it to aquifers.

HAZARDOUS MATERIAL means all petroleum and toxic, corrosive or other chemicals and related sludge included in any of the following:

- (A) any substance defined in section 101(14) of the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980;
- (B) petroleum, including crude oil or any fraction thereof; or
- (C) "Hazardous Waste," as defined below, by 10 V.S.A. § 6602(4) or any Vermont Agency of Natural Resources regulation governing the use of hazardous wastes, and including but not limited to nuclear, source, or by-product material as defined by the Atomic Energy Act of 1954 as subsequently amended and codified in 42 U.S.C. § 2014;
- (D) "Hazardous material" does not include herbicides and pesticides when applied consistent with good practice and conducted in conformity with federal, state and local laws and regulations and according to manufacturer's instructions.
- (E) "Hazardous material" does not include livestock wastes.

HAZARDOUS WASTE. Any waste or combination of wastes of a solid, liquid, contained gaseous, or semi-solid form, including, but not limited to those which are toxic, corrosive, ignitable, reactive, strong sensitizers, or which generate pressure through decomposition, heat or other means, which in the judgment of the Secretary of the Vermont Agency of Natural Resources may cause, or contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness, taking into account the toxicity of such waste, its persistence and degradability in nature, and its potential for assimilation, or concentration in tissue, and other factors that may otherwise cause or contribute to adverse acute or chronic effects on the health of persons or other living organisms, or any matter which

may have an unusually destructive effect on water quality if discharged to ground or surface waters of the state. The storage and handling of livestock wastes and by-products are specifically excluded from this definition. Propane and/or heating fuel/oil for residential heating purposes are also specifically excluded from this definition.

LAND DEVELOPMENT. The construction, reconstruction, expansion, conversion, structural alteration, relocation or enlargement of any building or other structure, or of any mining, excavation or landfill, and any change in the use of any building or other structure, or land, or extension of use of land. The subdivision of land, including the division of a parcel into two or more parcels, is included in the definition of “Land Development” for the purposes of these Zoning Bylaws, although the subdivision of land is regulated under the Town of Waitsfield Subdivision Regulations, as most recently amended.

PRIMARY CONTAINMENT FACILITY. A tank, pit, container, pipe or vessel of first containment of a liquid or chemical, excluding the storage and handling of livestock wastes and by-products.

PUBLIC WATER SUPPLY. Any system(s) or combination of systems owned or controlled by a person, that provides drinking water through pipes or other constructed conveyances to the public and that has at least 15 service connections or serves an average of at least 25 individuals daily for at least 60 days out of the year. Such term includes all collection, treatment, storage and distribution facilities under the control of the water supplier and used primarily in connection with such system, and any collection or pretreatment storage facilities not under such control that are used primarily in connection with such system. In addition, this includes any water supply system with ten or more residential connections. Public Water System shall also mean any part of a system which does not provide drinking water, if use of such part could affect the quality or quantity of the drinking water supplied by such system.

RELEASE. Any intentional or unintentional action or omission resulting in the discharge, leak, pumping, pouring, emitting, emptying, dumping, disposal or spill of a potential contaminant including a hazardous material and/or hazardous waste, excluding the storage and handling of livestock wastes and by-products, onto the lands of the Town or into waters within the boundaries of the Town.

SECONDARY CONTAINMENT FACILITY. A second tank, catchment pit, pipe, or vessel that limits and contains a hazardous material or hazardous waste leaking or leaching from a primary containment area; monitoring and recovery are required excluding the storage and handling of livestock wastes and by-products.

SPILL RESPONSE PLANS. Detailed plans for control, re-containment, recovery and clean up of hazardous material and/or hazardous waste releases, such as during fires or equipment failures.

STORMWATER TREATMENT PRACTICE (STP). A man-made drainage structure, conveyance, catch basin, and any other appurtenant device or structure where stormwater is collected, transported, pumped, treated, or disposed of.

STORMWATER RUNOFF. Excess water from rainfall and snow melt that does not evaporate or penetrate into the ground, which flows overland and is collected and transported to the waters of the State of Vermont or the United States, including material dissolved or suspended in it, but does not include discharges from undisturbed natural terrain or wastes from combined sewer overflows.

TIME-OF-TRAVEL DISTANCE. The distance that groundwater will travel in a specified time. This distance is generally a function of the permeability and/or slope of the aquifer.

Waitsfield Water Supply SPA

Legend

- Road
- Town Boundary
- 100 FT Contour
- 20 FT Contour
- Zone 1
- Zone 2
- Zone 3



Waitsfield

Northfield

**Zone 1:
VT0020997
WL001**

Zone 2

Zone 3

Zone 2

Zone 3

