

616 Windham surface Water Watershed Protection Overlay District (WPOD)

616.1

Authority and Statement of Intent

616.1.1

Pursuant to RSA 674: 21, the Town of Windham adopts a WPOD and accompanying regulations to ensure the protection and preservation of significant surface water bodies within the Town of Windham and their watersheds from the effects of point and non-point source pollution or sedimentation. The establishment of the WPOD and the adoption of these regulations are intended:

616.1.1.1

To protect public health,

616.1.1.2

To protect aquifers, which serve as existing or potential water supplies, and the aquifer recharge system,

616.1.1.3

To protect surface waters and wetlands contiguous to surface waters,

616.1.1.4

To protect the natural areas and wildlife habitats within the Watershed Protection Overlay Zone by maintaining ecological balances,

616.1.1.5

To prevent the degradation of water quality through the regulation of land uses and development within the WPOD, and

616.1.1.6

To assure proper use of natural resources and other public requirements.

616.1.2

In the event of a conflict between the requirements of this section and other requirements of the Windham Zoning Ordinance or state law, the more stringent requirements shall govern.

616.2

Applicability

616.2.1

The special provisions established in this Watershed Protection Ordinance shall apply to all development proposals and to potential contaminating activities within the WPOD. The boundaries of the WPOD have been delineated by the NH DES using current location data for the following waterbodies:

616.2.1.1

Canobie Lake Watershed Overlay District Parcel Map dated 11/15/2011

616.2.1.2

Cobbetts Pond Watershed Overlay District Parcel Map dated 1/27/2010

616.2.1.3

Rock Pond Watershed Overlay District Parcel Map dated 11/24/2020

616.2.1.4

Moeckel Pond Watershed Overlay District Parcel Map dated 11/24/2020, but only as to Sub-district #4.

616.2.2

The boundaries of the WPOD are identified through drainage, groundwater and soils analyses and are considered to be essential to the protection of the watershed from the effects of point and non-point source pollution or sedimentation.

616.2.3

All development proposals occurring wholly or partly in an area within the WPOD shall be subject to the requirements of this Ordinance.

616.3

Administration

616.3.1

General: The Windham Planning Board shall have authority to create processes and procedures to administer the provisions of the Watershed Protection Ordinance.

616.3.2

Enforcement: The Code Enforcement Officer shall be responsible for enforcing the provisions and conditions of this Watershed Protection Ordinance, pursuant to the provisions of Section 1500 of Windham's Zoning Ordinance.

616.3.3

Conditional Approvals:

616.3.3.1

If/when the Planning Board approves a Major Watershed permit not associated with a Site Plan or Subdivision with conditions precedent to its final issuance, such conditions shall be satisfied within 120 days of the Board action.

616.3.3.2

The applicant may request an extension of time required to satisfy conditions precedent to final approval of such Major Watershed permit by written request (including the reasons therefore) with the Board no later than 14 days prior to the expiration of the 120-day period provided. The Planning Board shall vote on whether an extension is appropriate under the circumstances.

616.3.4

Expiration of Approvals: All Major and Minor Watershed Permits, not associated with a site plan or subdivision, expire one (1) year after the date of issuance if not exercised by the recipient.

616.4 Definitions

Artificial Pervious Surface:

Any modified surface which can effectively absorb or allow for the infiltration of water into the underling soil mass. Examples of Artificial Pervious Surfaces include: durable permeable pavements constructed of pervious concrete, porous asphalt, permeable pavers and a wide range of synthetic geotextile and geogrid type products which allow surfaces suitable for vehicular travel while allowing for unrestricted vertical passage of water to the underlying soil mass.

Automobile Service or Repair Station:

A retail establishment at which motor vehicles are refueled, serviced, and sometimes repaired.

Best Management Practices:

As defined in the New Hampshire Stormwater Manual, Volume 1, Volume II, and Volume III, prepared by NH DES as amended.

Buffer Zone:

The undisturbed natural area sufficient in size to mitigate runoff effects harmful to water quality.

Business Commercial Agricultural Activities:

The production of crops for sale, crops intended for widespread distribution to wholesalers or retail outlets. Business Commercial Agriculture includes livestock production and livestock grazing. Business Commercial Agriculture does not include crops grown for household consumption (e.g. backyard garden or from a vegetable garden or a few fruit trees).

Contamination:

Sedimentation, point and non-point source pollution, septage, or the discharge of hazardous materials.

Development:

Any activity resulting in a change in the physical character of any parcel of land, such as may be caused by, but not limited to: subdivisions, change in use, the construction or expansion of a building, deck, or shed; installation of a well or septic tank; land disturbing activity such as Business Commercial Agriculture or commercial forestry; paving of a previously permeable area; grading, and road building. Lot line adjustments are exempt.

Hazardous Materials:

As defined in Superfund Amendment and Reauthorization Act of 1986 and Identification and Listing of Hazardous Wastes, 40 C.F.R. §261 (1987).

Hydrology:

The study of the earth's waters, their distribution and the cycle involving precipitation, infiltration into the soil and evaporation.

Impervious Surface:

Shall have the meaning as set forth in Section 200, provided, that for the purposes of calculations required under this Section (e.g. Section 616.6.1.2), a maximum of one hundred fifty square feet (150 SF) of retaining wall may be excluded from the calculation of impervious area, provided the wall has a footprint of 12 inches or less in width.

Infiltration Rate:

The volume of surface water that filters into the soil per unit of time.

Low-Impact Development (LID):

An approach to site development and design that provides increased opportunities for storm water infiltration and increased hydrologic function within a watershed as defined in NH DES Fact Sheet WD-WMB-17, "Low-Impact Development and Stormwater Management," 2010 or any updated versions thereof.

Non-point Source Pollution:

Non-point source pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, seepage or hydrological modification. Non-point source (NPS) pollution, unlike pollution from industrial and sewage treatment plants, comes from many diffuse sources. NPS pollution is caused by rainfall or snow melt moving over and through the ground. As the

runoff moves, it picks up and carries away natural and human-made pollutants, finally depositing them into lakes, rivers, wetlands, coastal waters and ground waters; Contaminants including, but not limited to pesticides, fertilizers, animal wastes, sediments, nutrients and heavy metals that are deposited on the ground surface and flow into and pollute nearby surface waters.

Point Source Pollution:

Point pollution comes from a single source such as the discharge from a drainage pipe.

Potential Contaminating Activity:

Activities that have the potential to create a new discharge of contaminants or to increase the discharge of contaminants to surface or ground-waters.

Public Water Body:

All water bodies with a surface area of 10 acres or more.

Runoff Volume:

The volume of surface water that runs off during a storm event.

Sedimentation:

The deposition of sand, silt, soil or other matter into a watercourse or wetland, including that resulting from post-development surface runoff.

Stabilized:

When the soil erosion rate approaches that of undisturbed soils. Soils which are disturbed will be considered stabilized when covered with a healthy, mature growth of grass, or good covering of straw mulch or other equivalent (seedless) mulch (a ton of not less than two [2] tons/acre). Mulch is only a temporary measure; ultimately, the site needs vegetation.

Storm Event:

A period of sustained rainfall with a minimum total accumulation of 0.25 inches of precipitation over a 24 hour period.

Storm Water:

Surface water run-off from a non point source caused by a storm event.

Tributary Stream:

Any perennial, ~~or~~ intermittent, or ephemeral stream, or other flow of concentrated flow of surface water (i.e not sheet flow or runoff) caused by geographic contours (either natural or human-made) or conveyance of water flowing either directly or indirectly into a public water body as defined herein. This shall include any ~~tributary stream~~ section or concentrated water flow of water water conveyance section contained within a stream bed, pipe system, ditch, or other modified channel.

Watershed:

The area lying within the drainage basins of public water bodies.

616.5 Use Regulations

616.5.1

Allowed uses established by the underlying zoning district shall apply, except as modified below:

616.5.2

The following uses shall be specifically prohibited within the WPOD:

616.5.2.1

Storage or production of hazardous materials as defined in either or both of the following:

616.5.2.1.1

Superfund Amendment and Reauthorization Act of 1986.

616.5.2.1.2

Identification and Listing of Hazardous Wastes, 40 C.F.R. §261 (1987)

616.5.2.2

Disposal of hazardous materials or solid wastes.

616.5.2.3

Treatment of hazardous material, except rehabilitation programs authorized by a government agency to treat hazardous material present at a site prior to the adoption of this ordinance.

616.5.2.4

Any business that stores, uses or disposes of hazardous material, unless all facilities and equipment are designed and operated to prevent the release or discharge of hazardous materials and have undergone an inspection by the Town of Windham Building Inspector and Fire Inspector to certify they are in compliance with hazardous material regulations.

616.5.2.5

Disposal of septage or septic sludge, as defined by New Hampshire Solid Waste Rules Env-Wm101-300 & 2100 - 3700.

616.5.2.6

Automobile service and repair stations.

616.5.2.7

Junkyards and Salvage Yards as defined by RSA 236:112.

616.5.2.8

[Fertilizer may not be applied within 200 feet of the prevailing high water mark of any public water body. In all other areas within the District, only low phosphate, slow release nitrogen fertilizers are permissible for application. ~~Fertilizer may not be applied within 200 feet of the shoreline. Beyond 200 feet, only low phosphate, slow release nitrogen fertilizers should be applied.~~](#)

616.6

Review Requirements for Development in the WPOD

616.6.1

Development within the WPOD requires the submittal and approval of one of the following applications: Site Plan/Subdivision Watershed Application, Major Watershed Application, or Minor Watershed Application. [All plans submitted for any ~~either~~ permit must show the location of tributaries, tributary buffers, wetlands, and wetland \(WWPD\) setbacks within 100-feet of the subject property except where access to such adjoining properties has been requested, but not granted.](#)

616.6.1.1

Applications for Subdivisions and Site Plans shall be accompanied by a Site Plan/Subdivision Watershed Application inclusive of a hydrologic study as outlined in Section 616.7. The Hydrological study must document, in a manner acceptable to the Planning Board, that the proposed land development would provide the same or greater degree of water quality protection as existed on the site(s) at the time the application was made. Change of Use Applications that do not propose any new construction, paving, alterations to grading, or other alteration to the terrain are exempt from the requirements of the hydrological study.

616.6.1.2

For any development that will result in post development impervious surface constituting more than 20% of the entire lot (or that portion of a lot to which the Ordinance applies under Sections 616.2.3) a storm water management and erosion control plan, consistent with the New Hampshire Stormwater Manual (latest edition) prepared by NH DES, shall be prepared and submitted for review and approval as part of a Major Watershed application unless previous approval has been granted through the Site Plan/Subdivision Watershed Application process. Major Watershed applications are reviewed and approved by the Planning Board.

616.6.1.3

For any development that increases impervious surface, and that does not meet the requirements under Section 616.6.1.2, a Minor Watershed Application shall be submitted for review and approval. Minor Watershed Applications are reviewed and approved by the Code Enforcement Administrator and Building Inspector. Notice of Approval of such applications shall be given in the same fashion as issued Building Permits.

616.6.2

Residential Building Permit Applications for new home construction, additions and reconstruction of existing homes must include an erosion and sedimentation control plan developed with Best Management Practices. The erosion and sedimentation control plan shall be prepared by an engineer licensed in the State of New Hampshire or a qualified professional who is familiar with erosion control measures and procedures and acceptable to the Town Engineer. The erosion and sedimentation control plan shall be submitted as part of the Major or Minor Watershed Application. [The Planning Board may require additional erosion control measures if deemed necessary.](#)

616.6.3

Development shall not begin until all required application, submittal and permit approvals have been obtained unless an emergency determination has been made in accordance with Section 616.12. No building permit for development within the Watershed will be issued without an approved Watershed Application on file.

616.6.3.1

Appeals of Watershed Permits issued by the Planning Board shall be governed by the provisions of RSA 677:15.

616.6.3.2

Appeals of Watershed Permits issued by the Code Enforcement Administrator and Building Inspector shall be filed within thirty (30) days and governed by RSA 676:5(I).

616.6.4

All development within the WPOD shall be evaluated to ensure that:

616.6.4.1

No new impervious driveways are allowed within 75 feet of any surface water or wetland area. Accessory structures are allowed when permitted by the NH DES.

616.6.4.2

The impervious surface of any lot is limited to 30%. For lots that currently exceed 30% impervious surface, development must decrease the percent of impervious surface.

Replacement in-kind of existing development does not require this reduction of impervious surface.

616.6.4.3

Non-point source pollution is prevented to the maximum extent possible, taking into account site conditions such as slope, soil type and erosivity and vegetative cover.

616.6.4.4

Best Management Practices (BMPs) are in place and are sufficient to remove or neutralize those pollutants that present a potential impact to the water body. The use or creation of detention ponds is not allowed for runoff control, except in those cases where an extended detention pond may be necessary to develop a site.

616.6.4.5

Grading and removal of vegetation at a development site is minimized and erosion and sedimentation control measures are in place and properly installed. Development sites shall have a maximum disturbance (which includes, but is not limited to clearing, grading, excavation, removing stumps and other activities that expose soil) of one acre at a time. Only after the prior stage is stabilized can the developer clear the next one acre. Drainage measures shall be installed prior to any other earth moving operations. If a development site is over five-three (3) acres, the Planning Board may allow more than one acre to be disturbed at a time.

616.6.4.6

If two or more dwelling units share a common sewage treatment system a perpetual maintenance agreement from the building's owner is required.

616.6.4.7

Uses that may potentially cause contamination within the WPOD, must submit a spill prevention control and countermeasures plan for approval. This plan shall include the following elements:

616.6.4.7.1

Disclosure statements describing the types, quantities, and storage locations of all contaminants that will be part of the proposed project.

616.6.4.7.2

Contaminant handling and spill prevention techniques.

616.6.4.7.3

Spill reporting procedures, including a list of affected agencies to be contacted in the event of a spill.

616.6.4.7.4

Spill recovery plans, including a list of available equipment.

616.6.4.7.5

Spill cleanup and disposal plans.

616.7

Hydrologic Study and Plan

616.7.1

A hydrologic study shall be done by a professional engineer or hydrologist licensed in the State of New Hampshire and shall include the following information:

616.7.1.1

Description of the proposed project including location and extent of impervious surfaces; on-site processes or storage of materials; the anticipated use of the land and buildings; description of the site including topographic, hydrologic and vegetative features.

616.7.1.2

Characteristics of natural runoff on the site and projected runoff with the proposed project, including its rate and chemical and/or biological characteristics deemed necessary to make an adequate assessment of water quality.

616.7.1.3

Measures proposed to be employed to reduce the rate of runoff and pollutant loading of runoff from the project area, both during construction and after.

616.7.1.4

Proposed runoff control and watershed protection measures for the site. These measures shall be designed with the goal of ensuring that the rate of surface water runoff from the site does not exceed pre-development conditions and that the quality of such runoff will not be less than pre-development conditions. Special emphasis shall be placed on the impacts of proposed encroachments into the required buffer.

616.7.1.5

Where the developer of property subject to the terms of this Watershed Protection Ordinance seeks to utilize existing or planned off-site storm-water quality management facilities, the developer shall provide a written certification that the owner of the off-site facilities will accept the runoff and be responsible for its adequate treatment and that the arrangement will run with the land in a manner that will be acceptable to the Planning Board.

616.7.2

The study shall make use of existing water quality historical data of the protected water body to the maximum extent possible. If new data is to be relied upon, the Town reserves the right to have the data reviewed by an independent expert at the expense of the developer, before the study is deemed complete and ready for review.

616.7.3

The study shall be submitted to the Planning Board for review and approval concurrently with the submission of applications for review as required by this Ordinance.

616.8

Buffer Requirements

616.8.1

A 100-foot wide buffer zone shall be maintained along the edge of any tributary ~~stream~~ discharging into the protected water body and along the edge of any wetlands associated with those ~~tributary-tributariesstreams~~. The required setback distance shall be measured from the centerline of such tributary ~~stream~~ and from the delineated edge of a wetland. Streams shall be delineated from their mean high-~~water~~ mark. The buffer zone shall be maintained in its natural state to the maximum extent possible.

616.8.2

Any reduction in the required buffer zone width may be granted by the Planning Board upon presentation of a hydrologic or other study that provides documentation and justification, acceptable to the Planning Board, that even with the reduction, the same or a greater degree of water quality protection would be afforded as would be with the full-width buffer zone. In granting such a reduction, the Planning Board may require certain conditions of approval which may include, but are not limited to, restrictions on use, type of construction, and erosion, runoff or sedimentation control measures as deemed necessary to protect water quality. No reduction granted shall be greater than 60% of the original full-width buffer. Further reduction past 60% can only be granted by Planning Board if the tributary is offered the same protection of the full buffer zone. No reduction granted shall be greater than 75% of the original buffer. Further reduction past 75% can only be granted by Planning Board if the tributary is in a pipe or other medium that will offer the same protection of the full buffer zone.

616.8.3

All development shall be located outside of the required buffer zone.

616.8.4

The following uses shall not be permitted within the buffer zone:

616.8.4.1

Septic tanks and drain-fields

616.8.4.2

Feed lots or other livestock impoundments

616.8.4.3

Trash containers and dumpsters which are not under roof or which are located so that leachate from the receptacle could escape unfiltered and untreated

616.8.4.4

Fuel storage in excess of fifty (50) gallons [200L]

616.8.4.5

Sanitary landfills

616.8.4.6

Activities involving the manufacture, bulk storage or any type of distribution of materials hazardous to the protected water body as defined in the Hazardous Materials Spills Emergency Handbook, American Waterworks Association, 1975, as revised, including specifically the following general classes of materials;

616.8.4.6.1

Oil and oil products

616.8.4.6.2

Radioactive materials

616.8.4.6.3

Any material transported in large commercial quantities that is a very soluble acid or base, highly biodegradable, or can create a severe oxygen demand

616.8.4.6.4

Biologically accumulative poisons

616.8.4.6.5

The active ingredients of poisons that are or were ever registered in accordance with the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 USC 135 et seq.)

616.8.4.6.6

Substances lethal to mammalian or aquatic life

616.8.4.6.7

Road salt or any other chlorides.

616.8.4.6.8

Lawn fertilizers

616.8.4.7

Bulk Storage of plowed snow except for onsite storage of plowed snow from pre-existing driveways and parking areas.

616.9

Septic Systems

616.9.1

For any new construction, an Effluent Disposal System (EDS) shall be installed in accordance to NH DES regulations requiring a 75 foot setback from Hydric-A soils and a 50 foot setback from Hydric-B soils from any surface water or wetland area.

616.9.2

For any expansion of an existing structure, or the seasonal conversion of an existing structure, the owner shall conform to RSA 485-A: 38 and the associated Code of Administrative Rules for Subdivision and ISDS Design Rules, as amended.

616.9.3

For a new subdivision development for which EDS's are proposed, if the lots are less than 5 acres, then all plans and permit application shall conform to all relevant NH DES rules and regulations. For lots that are greater than 5 acres, all plans and permit applications shall show an area of 4000 sq. ft., within which the EDS may be located, with test pit and percolation test data to verify the site's suitability for a septic system.

616.9.4

If any septic assessment or an on-site inspection indicates that the existing system is in failure, a plan for a replacement system shall be submitted to NH DES within 30 days from the date of the onsite inspection.

616.10

Commercial Agriculture Activities

616.10.1

Livestock are not allowed direct access to the protected water body or their tributaries.

616.10.2

Application of fertilizers or pesticides is not allowed within 200 feet from the protected water body or their tributaries or wetlands.

616.10.3

All livestock grazing and feeding areas shall be a minimum of 200 feet away from the protected water body or their tributaries.

616.10.4

All runoff from livestock feeding areas shall be directed away from the protected water body or their tributaries or wetland area.

616.10.5

The storage and use of all animal manure for fertilization purposes must be conducted in accordance with the Best Management Practices for the Handling of Compost, Fertilizer, and Manure in New Hampshire, NH Department of Agriculture, Markets and Food.

616.10.6

Unless stricter setbacks or operational requirements are outlined above, all agricultural operations shall be conducted in accordance with the Manual of Best Management Practices for Agriculture in New Hampshire, NH Dept. of Agriculture, June 1993, as amended, and in accordance with all appropriate sections of the Comprehensive Shore land Protection Act, NH RSA 483-B.

616.11

Commercial Forestry Activities

616.11.1

A minimum 75-foot undisturbed natural vegetated buffer shall be maintained adjacent to all surface waters or wetland areas.

616.11.2

Unless stricter setbacks or operational requirements are outlined above, all forestry operations shall be conducted in accordance with the Best Management Practices for Erosion Controls on Timber Harvesting Operations in New Hampshire, NH Division of Forests and Lands, February 2004, as amended, and in accordance with all appropriate sections of the Comprehensive Shore land Protection Act, as detailed in RSA 485-A: 17.

616.12

Emergency Exceptions

616.12.1

Emergency situations relating to public health, safety, and welfare will be temporarily relieved of the provisions of this ordinance in order to correct the emergency and restore the property to its previous condition as soon as possible.

616.12.2

The determination as to whether or not a situation is classified as an emergency shall be made by the Code Enforcement Officer and Building Inspector.

616.12.3

Within ten (10) business days of the determination being made, an application must be submitted as required by the provisions of this ordinance.