TOWN OF WEATHERSFIELD

LAND USE ADMINISTRATOR'S OFFICE

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Planning Commission Agenda

Martin Memorial Hall – 5259 Route 5, Ascutney, Vermont 05030

Monday, 22 July 2019 - 7 PM

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1. Call to order
2. Executive session per 1 V.S.A. § 313(3) (personnel)
3. Agenda Review – 22 July 2019
4. Comments from Citizens
5. Approval of Meeting Minutes – 8 July 2019
6. Zoning Bylaw Updates
    (a) Conservation of Natural Resources bylaw
        - Agricultural zoning
        - Steep slopes and high elevation
        - Pond construction
        - Streambank conservation / Riparian buffers
    (b) Exemptions
7. Next meeting agenda
8. Adjourn

The next regularly scheduled meeting of the Planning Commission will be **Monday, 12 August 2019 - 7 PM**, Martin Memorial Hall

DRAFT
TOWN OF WEATHERSFIELD, VERMONT
MINUTES OF PLANNING COMMISSION MEETING
Monday, 8 July, 2019

I. Call to Order - Vice-Chair, Paul Tillman called the meeting to order at 7:05pm.
Planing Commission: Howard Beach, Sven Fedorow (Land Use Administrator), Tyler Harwell, Paul Tillman, Michael Todd, Julia Lloyd Wright (Energy Coordinator, ex-officio)
Visitors: Nikita Lenahan, Fred Kowalik, Geoff Wiswell Beech Hill Forestry, Reading

II. Agenda Review - 8 July, 2019

III. Comments from Citizens

Fred Kowalik, an abutting neighbor to the proposed transfer station town solar array, said he would support having one-half mile distance between solar installations. Bennington is supporting a distance of one-half mile and there was discussion as to whether the Public Utilities Commission (PUC) would defer to such a standard. Michael Todd suggested adding a paragraph lead-in to the Town Plan regarding the distance between solar installations.

Visitor Geoff Wiswell from Reading, VT owner of Beech Hill Vegetation forestry mulching and timbering cleanup made a presentation to the commission regarding bulldozing and brush-hogging the future site for the solar array at the town transfer station. The town will have no clearing or installation expenses and he was directed to Norwich Solar Technologies of White River Junction the developer for the site.

IV. Approval of Meeting Minutes - 24 June, 2019
A motion was made by Michael Todd to approve the Minutes of 24 June, 2019, seconded by Tyler Harwell. Voted: Unanimously.

V. Discussion of potential inventory of dams

Tyler Harwell said he asked for the item to be included on the agenda and that he studied and researched old dams in New Hampshire. Old dams get forgotten about, they can cause big problems for towns and a town needs to know what it's got. Following discussion about the health and safety of local dams it was agreed that Tyler Harwell and Howard Beach, who both serve on the town Conservation Commission, would take this up with their other members.

VI. Zoning Bylaw Updates

(a) Airport Overlay District Map - updated and corrected

The Commission reviewed the (SWCRPC) updated and corrected oval shaping of the Town of Weathersfield Draft Airport Approach Overlay District. Sven Fedorow explained that the elevation has been determined where the runway is located.
A motion was made by Michael Todd to approve the map and for the Planning Commission to set up a Public Hearing, seconded by Howard Beach. Voted: Unanimously.

(b) 3.2 Conservation of Natural Resources bylaw

3.2.1 Agricultural zoning

There is no agricultural district in the Town of Weathersfield and ag. soils are located throughout the town. Sven Fedorow said there have been substantive changes and there is a process within the zoning bylaws to evaluate the status of protection of prime ag. soils. There was a discussion on sub-division regulations and fragmentation and a need to check on definitions.
Sven Fedorow will edit the proposed bylaw and have copies available at the next meeting.

3.2.2 Places having unique ecological interest or value

Discussion covered whether or not to include the Elizabeth H. Thompson 1992 Biological Natural Areas of Weathersfield study in the bylaw as a reference. Should specific sites be identified and what type of mitigation should be made on impacts to scenic, cultural, historic, ecological or any important resources identified in the Town Plan.
Sven Fedorow will have an edited copy available for the next meeting.

3.2.3 Connecticut River

It was agreed to delete this bylaw

3.2.5 Pond Construction

Following discussion it was agreed to retain proposed Item (c) The creation of ponds and other impoundments less than 5,000 cubic feet is allowed as an accessory use upon application and receipt of a zoning permit. Subject to any size over 5,000 c.u. approval should be the responsibility of the Department of Environmental Conservation.

3.2.7 Steep Slopes and High Elevation

During discussion on height, and percentages greater than 25 percent, it was mentioned that percentages are no longer used but different types of soils were taken into consideration for stability where land is highly susceptible to erosion. Howard Beach suggested changing the language for 25 percent and to simplify measurements. It was also agreed that a topographical map of Weathersfield be located. Sven Fedorow will research examples where height is involved in other towns and defer to the State regarding erosion.

VII. Next meeting agenda

Zoning Bylaw Updates: Streambank conservation, Wetlands and Damaged structures
Updated Excel list of approved bylaws and those outstanding

VIII. Adjourn

A motion was made by Michael Todd to adjourn at 9:03pm, seconded by Howard Beach. Voted: Unanimously

Agricultural Soils bylaw research

Morristown

- Developments on 10 or more acres of Prime Agricultural Soils (see attached excerpt)

Hyde Park

- Requires subdivisions to go to PUD review in Conservation 10 and Conservation 27 districts, or where more than seventy-five percent (75) percent of the parcel to be developed is comprised of meadowlands, prime agricultural soils, and/or is located within the Core Forest and Wildlife Habitat Overlay

11.6 Protection of Farmland

Applicability: Where a subdivision includes twenty-five (25) acres or more of prime and statewide agricultural soils (farmland), the applicant must create subdivision boundaries configured to avoid adverse impacts on prime and statewide agricultural soils and other productive farmland. Methods for avoiding such adverse impacts include, but may not be limited, to the following:

a. Where marginal soils also exist on the site, the creation of a PUD where the developable lots are clustered away from the farmland. Lot lines shall be located at field and orchard edges or, in the event that no other land is practical for development, on the least fertile soil in order to minimize the loss of productive agricultural land, to minimize impacts of existing farm operations, and to minimize disruption to the scenic qualities of the site.

b. Contiguous patches of agricultural resources identified above shall not be fragmented. The resource should, wherever possible, remain in parcels of not less than twenty-five (25) acres.

c. Vegetated buffer areas may be required between agricultural and other uses to minimize land use conflicts.

d. To minimize the fragmentation of productive agricultural soils and to minimize visual impacts, access roads, driveways, and utility corridors shall be shared to the extent feasible, and where the sites include linear features such as existing roads, tree lines, stone walls, and/or fence lines, to the extent feasible, access roads, driveways, and utility corridors shall follow those linear features.

e. It is not the intent of these provisions to reduce the overall level of development but to require clustering (through the use of PUDs) or other design tools to limit or reduce the impact of the development on the soil resources.

Proposed new bylaw:

3.2.1 Agricultural Soils

(1) Conditional use approval is required for any development or use on "prime" or "statewide significant" as defined by the US Department of Agriculture, unless one of the following exemptions applies:

(a) The development or use is within the Village, Hamlet, Highway Commercial or Industrial district; or

(b) The development will not result in impermeable surfaces covering greater than 10% of the portion of "prime" or "statewide significant" soils existing on the parcel; or

(c) The parcel is 3 acres or less in size; or

(d) The Farmland Conversion Impact Rating score is less than 160 points (see Appendix to calculate).

Subdivision regs: Current language:

"Contiguous prime agricultural soils of state-wide significance on any property that is greater than the three acre exemption shall not be further subdivided to achieve the exemption status."

Morristown

Resources, the Lamoille County Planning Commission and any other parties with technical expertise which the Development Review Board may require to make an informed decision. To allow a conditional use, the Development Review Board must issue written findings of fact based upon evidence which demonstrates that such use, including the construction necessary for such use, will have no impact upon any of the following:

a. Functional integrity of a wetland, deer wintering area, or fragile natural area;
b. Quality of ground or surface waters either on-site or off-site;
c. Drainage patterns on the site or its adjoining properties;
d. Stability of soils on the site and adjoining properties.

345. **Protection of Prime Agricultural Soils (PAS) within the Sewer Service Market Area (SSMA) and Airport Business Zoning District (AB).**

345.1 **Purpose.** The purpose of this regulation is to promote compact, high density development in the sewer service market area (SSMA) and the Airport Business District (AB).

345.2 **Applicability.** This regulation only applies to lots and developments in the SSMA and AB (as are depicted on the associated maps attached).

346. **Requirement for Lots Containing 10.0 or more acres of Primary Agricultural Soils within the SSMA and AB.**

346.1 **Purpose**. The purpose of this section is to preserve large tracts of primary agricultural soils (PAS) by requiring that developments on lots containing 10.0 or more acres of PAS are only allowed to apply 50% of the area of PAS in the lot to their total developable area for the purposes of calculating family densities and lot size. These developments are required to go through a planned unit development (PUD) process in order to optimize the preservation of PAS.

346.2 **Applicability.** The provisions of §346 and its subsections shall apply to development of any lot containing 10.0 or more acres of primary agricultural soils (PAS) within the SSMA and AB where said development is not subject to "Act 250" 10 V.S.A. Chapter 151.

346.3 **Removal of developable area.** Notwithstanding the provisions of any other currently adopted zoning and subdivision bylaws, only 50% of the area of PAS in a lot covered by §346 may be allotted to the total developable area of the lot for the purposes of calculating family densities and lot size. All other existing limitations on the total developable area shall apply and shall supersede these standards if more restrictive.

Example
For a 20 acre lot containing 12 acres of PAS, only 50% (6 acres) of that 12 acres of PAS shall be available for the total developable area of the lot. Thus only 14 acres of that lot could be used to calculate the number of lots available to subdivide or the number of families allowed within the area.

346.4 **Waiver of developable density restriction.** The PAS developable area allotment restriction of §346.3 shall be waived for any development for which 75% or more of the area of PAS in the lot are preserved through the PUD process, as outlined in §346.5.

Example
Taking the lot described in the example above: If through clustering and mitigation in PUD proceedings, 75% (9 acres) of the PAS in the lot could be protected from development, than all 20 acres of the total area of the lot could be used to calculate the number of lots available to subdivide or the number of families allowed within the area. However none of those subdivisions or families could be located in the 9 protected PAS acres. The clustering provisions of the PUD process would facilitate this.

346.5 **Planned unit development requirement.** Notwithstanding the provisions of any other currently adopted zoning and subdivision bylaws, any development on a lot covered by §346 must go through a planned unit development (PUD) procedure. This procedure shall follow the PUD provisions of currently adopted zoning and subdivision bylaws, as well as the following standards:

a. Lots and structures shall be clustered in order to preserve the largest contiguous amount of primary agricultural soils.

b. Where marginal soils also exist on the site, structures and developable lots shall be clustered away from the primary agricultural soils. Lot lines shall be located at field and orchard edges. In the event that no other land is practical for development, lots and structures shall be clustered on the least fertile soil in order to minimize the loss of productive agricultural soils and impacts of existing farm operations.

c. Lots and structures may be clustered on primary agricultural soils if those areas, by their nature, are not reasonably viable for farming. Such features could include agricultural soils that are distributed in a long narrow band. Other areas in the development are still required to protect areas with agricultural soils or potential for agricultural use.

d. Contiguous patches of primary agricultural soils should not be fragmented. The portion with the contiguous patch should remain in a parcel or designated open space.

e. Vegetated buffer areas may be required between agricultural and other uses to minimize land use conflicts.

f. Access roads, driveways, and utility corridors shall be shared to the extent feasible and shall follow linear features such as existing roads, tree lines, stone walls, and/or fence lines to minimize the fragmentation of agricultural soils.

346.6 **Other effects of existing bylaws.** The PUD procedure of §346.5 shall be subject to any provisions of existing zoning and subdivision bylaws not superseded by the provisions of this ordinance.

347. **Addition of protection of PAS to current PUD standards.** Notwithstanding the provisions of existing bylaws and ordinances, the protection of primary agricultural soils shall be included in the purpose and standards for review for any planned unit development in Morristown (see §510, 512 and 515 of Morristown zoning and subdivision bylaws).

348. **Provision of notice to the Morristown Conservation Commission.** Within 15 days of receiving an application that triggers a review under §345-§347, the Zoning Administrator shall notice the Morristown Conservation Commission that the application has been received and shall invite the Commission to review the project and participate in the proceedings if the Commission so desires. Regardless of whether or not the Commission participates in the review of the project, the Zoning Administrator shall copy the Commission Chair on all significant correspondences regarding the proposed project and its pending review, including but not limited to the warning of Development Review Board hearings related to the project.

Steep slopes bylaw research

Weathersfield: Exemptions: 9.22(11): Outdoor recreational trails (e.g., walking, hiking, cross-country skiing and snow mobile trails) which do not require the installation of structures or parking areas.

Waterbury: Ridgeline/Hillside/Steep Slope Overlay District

- All lands above 1200 feet
- Major development: Must submit a "Grading Plan" showing existing and proposed contours of land to be cleared
- Development between 1200 feet – 1500 feet is considered "minor development"
- Residential additions, accessory structures, camps whose combined footprint is less than or equal to 800 square feet exempt from requirements
- Zoning administrator can request determination from DRB whether project is "minor" or "major"
- Stormwater drainage/Erosion control plan required for all projects on slopes exceeding 15%
- Buildings not to be placed on slopes exceeding 25%
- "The proposed clearcutting and all harvesting activities associated with it shall comply with "Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont," as published by the Vermont Department of Forests, Parks and Recreation, effective August 15, 1987, (as may be amended from time to time) and all other applicable regulations."

Woodstock

- Development on steep slopes equal to or in excess of 15%, or which results in such slopes, shall be subject to Conditional Use Review.
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  Standard 2: Development on Steep Slopes
  Development on steep slopes equal to or in excess of 15% shall be sited and constructed, and slopes stablized, to minimize risks to surface and ground waters and to protect neighboring properties from damage.

  Guideline 2.1. Prohibit development, re-grading and clearing of vegetation on land where the slope is greater than 25%.

  Guideline 2.2. Locate house sites, subsurface sewage systems and parking areas on the flattest portion of the site.

  Guideline 2.3. Minimize crossing steep slopes with roads and driveways and lay them out to follow topographic contours in order to minimize soil and vegetation disturbance.
- Avoid long driveways.

Stowe

- Guideline 12.1: Where possible, development should take place on the portions of the lot where the slopes are less than fifteen (15%) percent. No development should occur on land where the slope is greater than twenty (20%) percent (with the exception of facilities and site improvements associated with the development and operation of a ski area).

Charlotte

(A) **Steep Slopes**. Development impacting an area of 200 square feet or greater which has a slope with an existing grade equal to or in excess of 15% (prior to any site improvement, excavation or blasting), or which results in such slopes over such an area, if not being reviewed as a subdivision or Planned Residential or Unit Development under the provisions of Chapters 6, 7 and 8, shall be subject to conditional use review by the Board of Adjustment under Section 5.4 and the following provisions:

(1) The site development plan submitted under Section 5.2 shall include contour intervals of five (5) feet or less, slope profiles showing existing gradients and proposed cut and fill sections, and a stormwater management and erosion control plan, prepared by a professional licensed by the state, that covers all phases of development (site preparation, construction, post construction).

(2) Development shall be sited and constructed, and slopes stabilized in accordance with accepted engineering and best management practices for stormwater management and erosion control to:

(a) prevent runoff, erosion, slumps, and other down slope movements of material, and

(b) to minimize associated risks to surface and ground waters, public facilities and roads, and neighboring properties.

(3) Development, including road and utility corridors, on slopes equal to or in excess of 15% shall be sited and designed to minimize visual impacts from public vantage points. The use of landscaping and natural screening materials is encouraged, and may be required to lessen the visual impact of such development.

(B) **Very Steep Slopes**. Development is specifically prohibited on slopes equal to or in excess of 25%, with the exception of stairways to the shoreline within the Shoreland District and the Shoreland Seasonal Home Management District, which are subject to conditional use review under Section 5.4

Fairfax

- Development on slopes in excess of 25% prohibited

Windsor

- No limit specified, but in calculating maximum permitted parcels for a PRD/PUD based on minimum lot size, areas with slopes exceeding 25% are to be excluded.

Springfield

- Reclamation plan for mineral/resource extraction to restore land to maximum slope of 1:2

- All development on slopes exceeding 20% subject to DRB review
- Same language as Windsor above re: PRD/PUDs

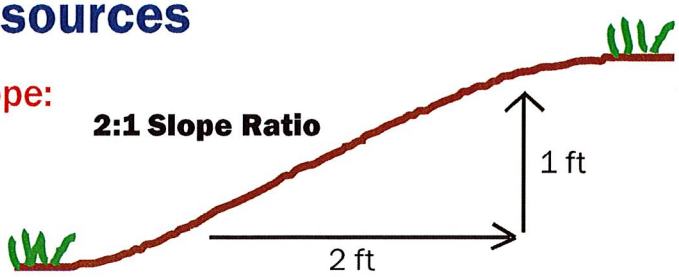
Brattleboro

Figure 3-31. **Erosion Control Plan Required**

SLOPE	THRESHOLD FOR ENGINEERED PLAN
<15%	An erosion control plan is required for development disturbing 20,000 sf or more of soil in this slope category.
15% to <20%	An erosion control plan is required for development disturbing 10,000 sf or more of soil in this slope category.
20% to <25%	An erosion control plan is required for development disturbing 5,000 sf or more of soil in this slope category.
25% or more	An erosion control plan is required for development disturbing 2,500 sf or more of soil in this slope category.

Section 3
Additional Resources

How to calculate slope:



Approximate Slope Conversions			
Steepness	**Percent**	**Slope ratio (ft/ft)**	**Degrees**
Very steep	100%	1:1	45°
	50%	2:1	27°
Moderate	33%	3:1	18°
	25%	4:1	14°
Slight	10%	10:1	6°
	5%	20:1	3°

How to estimate disturbance area:

1 acre = 43,560 square feet = 4,840 square yards

Area in acres (width in feet x length in feet)						
(w) **x** *(l)*	100	150	200	300	400	500
100	0.2	0.3	0.5	0.7	0.9	1.1
150	0.3	0.5	0.7	1.0	1.4	1.7
200	0.5	0.7	0.9	1.4	1.8	2.3
300	0.7	1.0	1.4	2.1	2.8	3.4
400	0.9	1.4	1.8	2.8	3.7	4.6
500	1.1	1.7	2.3	3.4	4.6	5.7

Soil Type and Parameters	Slope%		
	0-5%	5-15%	>15%
Gravelly/Coarse Sand	Low	Low	Medium
Sandy (Fine)	Medium	High	High
Silty	Medium	High	Very High
Clay	Low	Medium	High
Dispersive Clay	High	Very High	Extreme

Figure 2.2 Erosion Risk Based on Soils and Slopes

impact. It protects soil in two general ways: by improving soil strength and by reducing the amount and velocity of water reaching the soil (Figure 2.3). Establishing and maintaining vegetative cover is often the simplest and most effective means of preventing erosion on a construction site.

Vegetation and duff protect against raindrop erosion by shielding the soil. Grasses and other dense vegetation near the ground also serve to slow the velocity of sheet flow, reducing erosivity of runoff and filtering out suspended sediment.

Plant root systems bolster soil strength by holding soil particles directly in place. Roots also promote soil structure and generally improve the infiltrative capacity of the soil. This resulting reduction in runoff volume and velocity reduces the risk of erosion.

Factors that Influence Erosion
-Climate-

Climate is also an important influence on erosion on construction sites. Rainfall characteristics for an area, including the intensity, duration, and frequency of storm events, help to determine the velocity of runoff that might be expected during a particular season. Such seasonal variations are particularly important in Vermont, as thunderstorms tend to cause large, short-duration amounts of runoff in the summer, whereas, in spring, rain combined with melting snow can lead to long periods of flow on saturated, erodible, soils. The seasonal changes in vegetative cover are an indirect influence of climate on erosion.

Sediment Transport

Once sediment has been dislodged from the surface of the soil, it is available for transport by runoff or wind. The susceptibility of sediment to transport depends on the energy of the runoff (as indicated by the velocity) and on the mass of the particles. Heavier particles, such as sand and gravel fall quickly out of suspension when flows slow, and are therefore not readily transported. Silt and fine sand are more easily transported, while clay, though more difficult to erode, can stay in suspension for long periods of time. Because of this, EPSC Plans that rely heavily on sediment control by settling of particles out of stormwater flows, are often unsuccessful.

Sediment control measures described in this volume are generally designed with the goal of slowing the velocity of runoff and allowing sediment to fall out of suspension. Alternatively, chemical treatments target the sediment itself, with the goal of increasing the particle size and weight to encourage settling.

Slope → ↓Erodibility	Low (<5%)	Medium (5-15%)	High (>15 %)
Low (K<0.18)	Low	Low	Medium
Medium (0.17<K<0.37)	Low	Medium	High
High (K>0.36)	Medium	High	High

Table 3.2 Erosion Risk Based on Slope and Soil Erodibility

Erosion Risk → Disturbance Area (acres) ↓	Low	Medium	High
<1	A	A	AB
1-2	A	AB	ABC
2-5	AB	ABC	ABC
>5	ABC	ABC	ABC

A= Limit Disturbed Soil, Temporary Stabilization and Vegetation Establishment, Small Area Sediment Control
B= Slope Protection, Runoff Control, Flow Protection
C = Large Area Sediment Control (Basins, Traps, Dams etc.)

Table 3.3 General Requirements for EPSC Plan Development

DIRECTIONS FOR USING TABLES 3.2 and 3.3

For a given disturbed drainage area, identify the area-weighted K-value and the average slope to determine risk of soil erodibility from Table 3.2. For disturbed area, use the greatest disturbed area planned at any one time. Then determine the expected range of practices to be specified on the EPSC Plan, based upon the erosion risk and the size of the disturbance within the drainage area.

EXAMPLE: A 7 acre drainage area includes 6 acres of planned disturbance, broken into two phases of 3 acres each. The plans include specific directions for the consecutive construction of the phases. The erosion risk for phase 1 (Table 3.2) is Medium, and phase 2 is Low. Using Table 3.3, these correspond to the use of standards in categories AB and ABC, respectively.

Pond Bylaw Research

Newfane: 800 sq. ft.

Morristown: 5000 sq. ft. (approximately 1/8th of an acre)

Stowe:

4.10 Pond Construction

(1) The construction of a pond may be allowed as a permitted use in any district according to the following provisions:

A. Ponds shall be set back at least ten (10') feet from all property lines, unless the abutting property owner agrees to less. A pond that crosses a property line may be permitted as a joint application signed by each property owner.

B. Any pond that will impound, or be capable of impounding in excess of 500,000 cubic feet of water must receive a permit from the Vermont Department of Environmental Conservation in accordance with the requirements of 10 V.S.A., Chapter 41.

C. Any pond involving the alteration of a stream may require a stream alteration permit from the Vermont Department of Environmental Conservation in accordance with the requirements of 10 V.S.A., Chapter 41.

D. Any pond located within the RHOD that requires site clearing shall require review by the DRB under Section 9 of these regulations.

Bolton:

Section 3.13 Ponds [Constructed]

(A) **Intent.** The construction of any pond that impounds more than 100,000 cubic feet of water, other than a fire pond, snowmaking pond, or detention or retention pond constructed as part of a stormwater management, water or wastewater treatment system approved in accordance with these regulations, shall require a zoning permit. The intent of regulating pond construction is to protect the lives and property of Bolton residents, the infrastructure of the community, and the natural environment by:

(1) reducing the possibility of impoundment failure resulting from improper design or construction,
(2) minimizing the potential for flood damage to upstream properties by the storage of flood waters; and
(3) minimizing damage caused by the sudden release of stored water from impoundment failure or intentional rapid draining of the impoundment.

(B) **Requirements**. Prior to issuance of a zoning permit, the applicant shall submit copies of the following issued by the Vermont Department of Environmental Conservation and/or the U.S. Army Corps of Engineers, as applicable to a particular project:

(1) a dam permit for any pond that will impound, or be capable of impounding 500,000 cubic feet or more of water;

(2) a stream alteration permit for any pond that necessitates work in a stream that drains an area of 10 square miles or more;

(3) approval of the Fish and Wildlife Commissioner for the placement of obstructions in streams that block the passage of fish;

(4) a wetlands permit for any pond located in or near a wetland (see also Section 3.17); and

(5) approval from the US Army Corps of Engineers where required (e.g., if dredge or fill material is to placed in a wetland or water body, or a wetland will be impacted by pond construction).

(C) **Excavated Ponds**. Excavated (dug) ponds which do not require the construction of embankments, may be issued a permit by the Zoning Administrator in accordance with the following requirements:

(1) All earth work shall be conducted between June 1st and October 1st.

(2) Clearing limits shall be confined to the immediate construction area to avoid unnecessary disturbance.

(3) During the excavation process, soil will be disposed of in an upland site at least 50 feet from the edge of surface waters and wetlands.

(4) Pond banks shall not exceed a 3:1 slope (three feet horizontally to one foot vertically).

(5) All areas stripped of vegetation, except the ponded area, shall be seeded and mulched immediately following the completion of excavation.

(D) **Embankment Ponds**. Embankment ponds that require the construction, reconstruction or installation of water control structures such as earthen dikes, concrete dams, and/or spillways may be allowed as a conditional use subject to conditional use review by the Development Review Board under Section 5.4, and the following requirements:

(1) The pond shall be designed by a professional engineer, licensed by the state, with expertise in pond design and construction.

(2) The design of all water control structures shall be based on the size of the watershed area that drains into the pond and, at minimum, a 25-year storm event.

(3) It shall be demonstrated to the satisfaction of the Board that the pond and associated spillway areas will not adversely affect municipal facilities, adjoining properties, or downstream drainage. Easements from adjoining landowners shall be submitted for impoundment and/or spillway areas that will extend on to or have the potential to flood adjoining properties.

(4) An erosion control plan that incorporates appropriate erosion control methods from the *Vermont Handbook for Soil Erosion and Sediment Control* as most recently amended shall be submitted for review and approval.

(5) All earth work shall be conducted between June 1st and October 1st.

(6) The pond shall be maintained on a regular basis. As a condition of approval, the Board may require periodic safety inspections by a professional engineer, and the submission of safety reports.

(E) **Flood Hazard Areas**. For any pond constructed within a Flood Hazard Area Overlay District (Special Flood Hazard Area), conditional use review and approval under Section 5.5 is required prior to the issuance of a zoning permit. [Amended effective 8/9/2010.]

(F) **Warning and Disclaimer.** Any zoning permit issued for pond construction shall clearly state that the applicant and his or her successors and assigns is responsible for the pond's safety and retains liability for its failure if the pond is not constructed, maintained, operated, or repaired in a safe and proper manner. The municipality, in approving pond construction, assumes no liability in the event of failure.

Hyde Park

8.7 Ponds

Purpose. To protect the lives and property of citizens; the infrastructure of the community; and the health of the natural environment, the construction of ponds shall require a zoning permit, and/or conditional use review by the Development Review Board. The purpose of regulating said construction is to reduce the possibility of failure from improper design or construction; to minimize potential flood damages incurred to upstream properties by the storage of flood waters; and to minimize the damages caused by the sudden release of stored waters from a failure of the dam or intentional rapid draining of the impoundment.

Administrative approval. Dug ponds must meet district setback requirements and do not utilize a berm, dam or other impoundment. Dug ponds require a Zoning Permit approved by the Administrative Officer according to the requirements of this Bylaw. All such ponds shall meet the General Requirements outlined below. All other ponds shall require Conditional Use Review by the DRB.

Conditional Use Review. Ponds with a berm, dam or raised impoundment above the natural grade are subject to conditional use review. In granting approval, the Development Review Board shall find that the proposed pond is located where failure of the embankment, berm, or other structure would not cause:

- Loss of life;
- Injury to persons or livestock;
- Damage to residences, commercial building, or industrial buildings;
- Damage to roads, bridges, culverts, railroads, or other infrastructure; or
- Interruptions of the use of public utilities.

General Requirements; all ponds. In addition to other application requirements, the applicant must provide:

- Any pond that will impound or will be capable of impounding in excess of 500,000 cubic feet of water must receive a permit from the Vermont Department of Environmental Conservation in accordance with 10 V.S.A. Chapter 43.
- If the project necessitates any work in a stream and if a stream alteration permit or other approval is required from the Vermont Department of Environmental Conservation in accordance with 10 V.S.A. Chapter 41, or other state permit requirements, the applicant must present evidence that such permit or approval has been received.
- If the project requires a permit or approval due to impacts on wetlands; rare, threatened, or endangered species; or the passage of fish; or if the project requires a permit or approval from the US Army Corps of Engineers, the Act 250 District Commission, or any state or federal authority, the applicant must present evidence that such permit or approval has been received.
- Any pond involving the impoundment of water through the creation of an embankment, berm, or other structure which exceeds the natural grade must provide documentation from a licensed engineer of the likely results of catastrophic failure of the impoundment. This exercise is not to evaluate the likelihood of failure but to examine worst case scenarios (terrorism, major accident, extreme negligence, etc.).
- All impoundments must have an emergency spillway, designed by a Vermont licensed engineer, capable of passing flows that exceed what the control structure is capable of handling. All drainage shall flow into established watercourses.

Conditions of approval. Upon issuance of conditional use approval, the Development Review Board shall duly note that the owner of the property is responsible for the pond's safety and is liable for its failure if he or she does not maintain, repair, or operate the pond in a safe and proper manner.

Woodstock – Pond Worksheet

LANDSCAPING/GRADING/POND

(the main intent is to prevent erosion onto neighboring properties)

TOWN LANDSCAPING

A conditional use permit is required for the addition, removal or redistribution of soil in excess of 5,000 sq. ft. No permit is required for less than 5,000 sq. ft.

Please provide the following for your application:

1. Application form
2. Conditional use form
3. A Before and After plan **(profile)** showing the changes in the grade and the area affected.

VILLAGE LANDSCAPING

An administrative permit is required for the addition, removal or redistribution of soil in excess of 1,000 sq. ft. or a substantial change in grade.

Please provide the following for your application:

1. Application form
2. A Before and After plan **(profile)** showing the changes in the grade and the area affected.

TOWN AND VILLAGE POND

An administrative permit is required for a pond. A pond larger than 100,000 cubic feet requires a certified site plan by a licensed engineer or architect.

Please provide the following for your application:

1. Application form
2. Determine the setbacks for your parcel: (setbacks must be measured from the toe of the pond, not the pond water edge).
   front _____ side _____ rear _____
3. Provide site plan showing pond location and size.
4. Provide a profile (drawing) of pond showing depth and dam.
5. If pond is in or within 50' of hydric soil area, a conditional use permit is required for wetland determination.
6. Optional: if pond is close to your residence, talk to Fire Chief about installing a dry hydrant for fire fighting.

Streambank Conservation / Riparian Buffer research

Fairfax

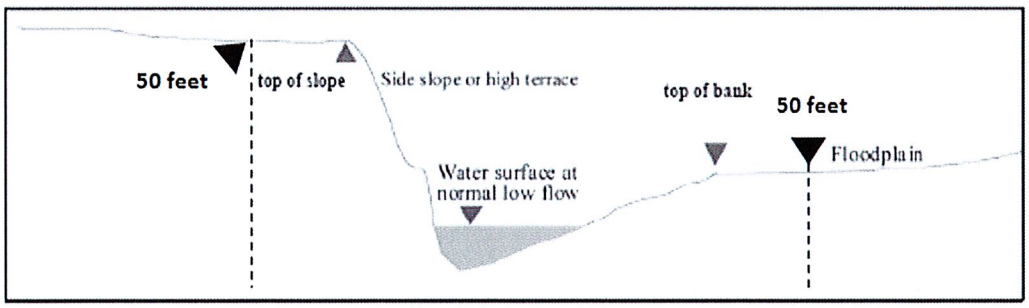
Stream Corridor Protection.

A naturally vegetated **50.0 foot wide** riparian buffer on each side of streams will help control soil erosion and protect water quality.

To enable adequate space for a riparian buffer, all structures that require a Zoning Permit under these Regulations shall be setback at least **50.0 feet** from each side of all named streams according to the Vermont Hydrography Dataset RF 5,000 scale, published by the Vermont Center for Geographic Information.The Zoning Administrator shall assist applicants in determining whether any named streams are located within or near their proposed development; however, it shall be the burden of the applicant to submit accurate information.

1) Stream buffers shall be measured inland perpendicular from either the top of bank or the top of slope, depending on the stream channel characteristics. Stream buffers measured from the top of bank are those with a flat, wide floodplain onto which the stream overflows during periods of high water flow. The top of bank begins at the streamside edge of the adjacent floodplain. If there is a wetland present adjacent to the floodplain, the top of bank begins at the upland edge of the contiguous wetland. In some cases the buffer will be entirely located within the floodplain. All land development within the Flood Hazard Overlay District shall comply with the Fairfax Flood Hazard Area Regulation Ordinance. Stream buffers measured from the top of slope are those with steep valley side slopes or high terraces. Figure 5.10 below illustrates where the top of bank and top of slope are in relation to a stream.

Figure 5.10
Finding Top of Slope and Top of Bank for Measuring Stream Setbacks



Sunderland

A **200 foot** greenbelt buffer measured perpendicular from the banks of the Batten Kill, Tanner Brook, and Fayville Branch is hereby designated. Where a brook forms the boundary of the RC District, the setback shall be no less than **100 feet**. This area is intended to be kept in a natural condition without buildings, structures, or site development.

Windsor

All buildings, equipment and storage areas shall be set back at least **100 feet** from all streams, surface waters and wetlands. The setback area shall be maintained as an undisturbed, vegetated buffer strip. The required setback may be increased as appropriate to protect water quality, based on local site and drainage conditions.

From: *Riparian Buffer Zones: Functions and Recommended Widths* (Hawes and Smith, 2005):

Minimum Buffer Width Needed

The minimum width needed for an effective riparian buffer depends on the function you want the buffer to serve. For example, sediment can be physically filtered out of stormwater faster than dissolved nitrogen, which requires bacterial transformation to remove it. Thus, a narrower buffer would be needed to remove sediment than that needed to remove dissolved nitrogen. Scientific studies have shown that efficient buffer widths range from **10 feet** for bank stabilization and stream shading to over **300 feet** for wildlife habitat. (Hawes & Smith, 2005). Necessary widths will also vary depending on site conditions, such as soil type, slope and adjacent land use and other factors. (Hawes & Smith, 2005)

In *Riparian Buffer Zones: Functions and Recommended Widths* (Hawes and Smith, 2005), the authors summarize the results of scientific studies, identifying the buffer widths needed for a buffer to effectively serve particular functions; they report the following ranges:

Erosion/sediment control **30 feet to 98 feet**

Water quality:

Nutrients **49 feet to 164 feet**

Pesticides **49 feet to 328 feet**

Biocontaminants **30 feet or more** (e.g. fecal matter)

Aquatic habitat:

Wildlife **33 feet to 164 feet**

Litter/debris **50 feet to 100 feet**

Temperature **30 feet to 230 feet**

State of Vermont Wetlands Rules

4.2 Buffer Zones The purpose of a buffer zone is to protect those functions that make a wetland significant. The Secretary may designate a buffer zone contiguous to any Class I wetland and the Secretary may designate a buffer zone contiguous to any Class II wetland. Until otherwise designated by the Secretary, a **one hundred (100) foot** buffer zone is established contiguous to the boundaries of a Class I wetland. Until otherwise designated by the Secretary, a **fifty (50) foot** buffer zone is established contiguous to the boundaries of a Class II wetland

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Waterfront Buffer Zones

Riparian buffers are vegetated zones of land adjacent to water sources. Preservation and reestablishment of these zones can have many environmental benefits. The most important function of these zones is to act as a filter for water flowing into the water source, and studies show that they greatly reduce water pollution. The vegetation and soil absorb runoff water that is often laden with pollutants, sediments and nutrients that are harmful to the water supply, especially if the buffer zone is over 30 feet wide.[1] The absorption of runoff water has other benefits: it recharges the ground water supply, and can regulate water flow in rivers and therefore reduce and prevent flooding. Having vegetation immediately adjacent to a water source also helps control erosion, as the roots of the plants help hold soil in place. Zones of land adjacent to water sources are often flourishing wildlife habitats, with many species depending on them for survival.[2] Buffer zones could also theoretically reduce the amount of public spending on storm water management and pollution removal.[3]

Many levels of government in the U.S. have mandated the creation/maintenance buffer zones in which construction and other environmental disturbances are prohibited. The difficulty in legislating the creation or preservation of these zones lies in balancing the interests of landowners with the interests of those seeking to improve water-quality.

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[1] Belt, G.H., J. O'Laughlin, and T. Merrill, "Design of forest riparian buffer strips for the protection of water quality: analysis of scientific literature" *Idaho Forest, Wildlife, and Range Policy Group Report No. 8*, University of Idaho, Moscow, ID, 1992; Johnson, A.W., and D.M. Ryba, "Literature review of recommended buffer widths to maintain various functions of stream riparian areas" Water and Land Resources Division, King County Department of Natural Resources, Seattle, WA, 1992; Castelle, A.J., A.W. Johnson, and C. Conolly, "Wetland and stream buffer size requirements – a review" *Journal of Environmental Quality* (1994) 23:878-882; Fennessy, M.S., and J.K. Cronk, "The effectiveness and restoration potential of riparian ecotones for the management of nonpoint source pollution, particularly nitrates" *Critical Reviews in Environmental Science and Technology* (1997) 27:285-317; Christensen, D. "Protection of riparian ecosystems: a review of the best available science" Jefferson County Natural Resources Division, Port Townsend, WA, 2000; For more information see: Canfield, Timothy J., Mayer, Paul M. McCutchen, Marshall D. Reynolds, Steven K. Jr., "Riparian Buffer Width, Vegetative Cover and Nitrogen Removal Effectiveness: Review of Current Science and Regulations" U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Ada, Oklahoma, 2005, Retrieved April 9, 2008 from www.epa.gov/nrmrl/pubs/600R05118/600R05118.pdf.

[2] Hawes, Ellen, Smith, Markelle, "Riparian Buffer Zones: Functions and Recommended Width" Yale School of Forestry and Environmental Studies, Prepared for the Eightmile River Wild and Scenic Study Committee, April, 2005, retrieved March 31, 2008 from http://64.233.169.104/search?q=cache:5OqTzrid3tsJ:www.eightmileriver.org/resources/digital_library/appendicies/09c3_Riparian%2520Buffer%2520Science_YALE.pdf+riparian+buffers,+new+england&hl=en&ct=clnk&cd=6&gl=us&client=safari .

[3] Presler, Henrietta H., "Successful Implementation of Riparian Buffer Zones," *Stormwater*, December 2005, retrieved March 31, 2008 from http://www.gradingandexcavation.com/sw_0611_successful.html.

Buffer Width

Scientists disagree over the optimal width for riparian buffer zones, but it seems clear that different water sources have different needs. Three factors influence ideal buffer widths: slope, soil type, and vegetation mix. A buffer with a steep slope needs to be wider because the water will rush over it faster, giving it less time to be absorbed. The type and density of soil also affects the speed of absorption. The type of vegetation in the buffer is perhaps most important--buffers with a wide variety of vegetation types (trees, grasses, bushes, etc.) will absorb more nutrients than buffers with just one type of vegetation.[4]

It is impossible to generalize ideal buffer zone widths due to the individual needs of specific streams, but the following are some guidelines from various scientific studies. Most studies find that buffers between 30 and 150 feet are highly effective.[5] Several studies found that narrower buffer zones of around 15 feet still reduced subsurface nitrate flows by up to 80%, but were less effective in reducing surface nitrogen and other pollutants.[6] Another review of the scientific literature found that most studies demonstrate significant nutrient removal in buffers more than 90 feet wide, but that "these buffers are much wider than what land managers can typically expect farmers to remove from active production".[7]

H. 549 in the Vermont House during the 2007-2008 Legislative Session sought to establish a minimum statewide riparian buffer zone. The bill would require the establishment of a 50 foot buffer zone along the lakes and streams of the state.[8] The bill would allow for some exceptions, and local governments would be free to create wider buffers for specific water sources.

Other States' Laws

Georgia

Georgia's Conservation and Natural Resources Act of 2007 mandates that "a natural vegetative buffer area shall be maintained for a distance of 100 feet on both sides of the stream as measured from the stream banks." The act requires local governments to map the areas surrounding rivers

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[4] Hawes and Smith, "Riparian Buffer Zones: Functions and Recommended Width."

[5] Belt et al., "Design of forest riparian buffer strips for the protection of water quality: analysis of scientific literature"; Johnson and Ryba "Literature review of recommended buffer widths to maintain various functions of stream riparian areas"; Castelle et al., "Wetland and stream buffer size requirements – a review"; Fennessy and Cronk, The effectiveness and restoration potential of riparian ecotones for the management of nonpoint source pollution, particularly nitrates"; Christensen "Protection of riparian ecosystems: a review of the best available science"; See Canfield et al., "Riparian Buffer Width, Vegetative Cover and Nitrogen Removal Effectiveness: Review of Current Science and Regulations"

[6] Muscutt, A.D., G.L. Harris, S.W. Bailey, and D.B. Davies "Buffer zones to improve water quality. A review of their potential use in UK agriculture" *Agriculture, Ecosystems, and Environment,* (1993) 45:59-77; Parkyn, S., "Review of riparian buffer zone effectiveness" Ministry of Agriculture and Forestry Technical Paper No. 2004/05, Wellington, New Zealand ; See Canfield et al., "Riparian Buffer Width, Vegetative Cover and Nitrogen Removal Effectiveness: Review of Current Science and Regulations"

[7] Hickey, MBC. Doran, B.,"A review of the efficiency of buffer strips for the maintenance and enhancement of riparian ecosystems" *Water Quality Research Journal of Canada*, (2004) Vol. 39, No. 3. Pgs. 311-317.

[8] See bill as amended http://www.leg.state.vt.us/WorkGroups/FishWild/229633.pdf, accessed May 20, 2008.

and streams and create zoning laws in accordance with the act. There is a significant exception to the act, which is that it cannot prohibit the building of a single-family home on a property of at least two acres.[9]

Maine

In 1971 the Maine state legislature implemented the Shoreland Zoning Act. The law as currently on the books requires municipalities to adopt shoreland zoning maps and ordinances in order to protect the state's water resources. The law considers shorelands to be all areas 250 feet from the high water lines of great ponds, rivers, saltwater bodies, and coastal wetlands, and 75 feet from a stream. The municipalities are required to have zoning ordinances for all land that this law considers shoreland. The state publishes guidelines for municipalities, but does not necessarily require that they abide by the guidelines. There are also additional state laws that designate specific waterways as "significant river segments" that deserve additional protection.[10]

Massachusetts

The Massachusetts Legislature adopted the Rivers Protection Act in 1996. The law creates a protected area extending 200 feet on both sides of most rivers and streams in the Commonwealth. The designated area is only 25 feet in certain urban areas. The state defines a river as "any natural flowing body of water that empties into any ocean, lake, or other river and that flows throughout the year." Structures existing before the implementation of the act are exempted.[11]

Virginia

In 2000, the Virginia General Assembly created the "Riparian Buffer Tax Credit" for landowners who preserve riparian forest buffers along land on which they harvest timber. The credit requires that the preserved buffer be between 35 and 300 feet wide and that it remain for 15 years.[12] The credit may only be claimed in the first year of this fifteen year period, after which the land is again eligible for the credit.[13] Additionally, the tract of land (timber harvesting area and buffers together) must be at least ten acres in size.[14]

The credit is worth 25% of the value of the timber retained as a buffer, up to a maximum value of $17,500, and must be claimed in the year in which timber on the adjacent land was harvested.

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[9] Georgia Code, "§ 12-2-8" 2007, Retrieved April 7, 2008 from the George State Code: http://www.lexis-nexis.com/hottopics/gacode/default.asp (search needed).
[10] Maine Revised Statutes, "Statute 435." 2008, Retrieved April 2, 2008, from the Maine State Legislature Website: http://janus.state.me.us/legis/statutes/38/title38sec435.html.
[11] Massachusetts Department of Environmental Protection. "Massachusetts Rivers Protection Act." Retrieved April 2, 2008 from http://www.mass.gov/dep/water/laws/rpa01.htm.
[12] Virginia Department of Forestry. "Riparian Buffer Tax Credit: Introduction." Retrieved April 2, 2008 from http://www.dof.virginia.gov/rfb/rbtc-index.shtml.
[13] Virginia General Assembly Legislative Information System. "§ 58.1-339.10. Riparian forest buffer protection for waterways tax credit." Retrieved April 2, 2008 from http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+58.1-339.10.
[14] Virginia Department of Forestry. "Riparian Buffer Tax Credit: How to Apply." Retrieved April 2, 2008 from http://www.dof.virginia.gov/rfb/rbtc-apply.shtml.

If the value of the credit exceeds the amount of tax due that year, the remainder of the credit may be applied to future tax liabilities, for up to five years, until the tax credit has been expended.[15]

The law gives the State Forester responsibility for determining many of the technical requirements that determine eligibility for the credit.[16] Currently, the amount of buffer area eligible for the credit is equal to the amount of adjacent land area on which timber is harvested (e.g., five acres of buffer are eligible for credit if five acres of timber have been harvested adjacent to that area).[17] An application, including a $100 to $175 fee, buffer stewardship plan, proof of land ownership, proof of value of buffer timber, and a map of the buffer must be submitted for each tract of land on which a credit is sought.[18] Individuals, Corporations, and Partnerships are eligible for the credit; Estates and Trusts are not.[19]

The credit is not available to landowners who do not harvest timber, nor to those, such as farmers, who use their land for other income-generating activities.

This report prepared by Sarah Palma, Travis Morrison and Daniel Woodward under the supervision of Professor Anthony Gierzynski on April 2, 2008.

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[15] Virginia General Assembly Legislative Information System. "§ 58.1-339.10. Riparian forest buffer protection for waterways tax credit." Retrieved April 2, 2008 from http://leg1.state.va.us/cgi-bin/legp504.exe?000+cod+58.1-339.10.

[16] Virginia General Assembly Legislative Information System. "§ 58.1-339.10. Riparian forest buffer protection for waterways tax credit."

[17] Virginia Department of Forestry. "Riparian Buffer Tax Credit: Frequently Asked Questions." Retrieved April 2, 2008 from http://www.dof.virginia.gov/rfb/rbtc-faq.shtml.

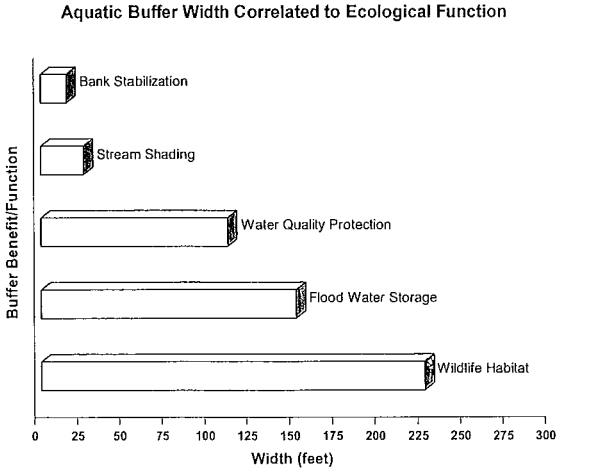
[18] Virginia Department of Forestry. "Riparian Buffer Tax Credit: How to Apply." Retrieved April 2, 2008 from http://www.dof.virginia.gov/rfb/rbtc-apply.shtml.

[19] Virginia Department of Forestry. "Riparian Buffer Tax Credit: How to Qualify." Retrieved April 2, 2008 from http://www.dof.virginia.gov/rfb/rbtc-qualify.shtml.

Table 2 Buffer Widths Recommended by USEPA for Various Wetland Functions

Function	Special Features	Recommended Minimum Width (feet)
Sediment reduction	Steep slopes (5-15%) and/or functionally valuable wetland	100
	Shallow slopes (<5%) or low quality wetland	50
	Slopes over 15%	Consider buffer width additions with each 1% increase of slope (e.g., 10 feet for each 1% of slope greater than 15%)
Phosphorus reduction	Steep slope	100
	Shallow slope	50
Nitrogen (nitrate) reduction	Focus on shallow groundwater flow	100
Biological contaminant and pesticide reduction	N/A	50
Wildlife habitat and corridor protection	Unthreatened species	100
	Rare, threatened, and endangered species	200-300
	Maintenance of species diversity	50 in rural area 100 in urban area
Flood control	N/A	Variable, depending on elevation of flood waters and potential damages
Source: Center for Watershed Protection and United States Environmental Protection Agency. 2005. *Wetlands and Watersheds: Adapting Watershed Tools to Protect Wetlands.*		

Figure 10



Adapted from USDA Natural Resources Conservation Service. *Where the Land and Water Meet: A Guide for Protection and Restoration of Riparian Areas First Edition.* USDA NRCS, September 2003.

Exemptions research

Waterbury

Structures And Activities Which Do Not Require A Permit

1. Any alteration that does not change the dimensions, location, or use of an existing building or structure;
2. Landscaping of a lot or premises, including ponds, provided such does not materially alter a landscaping plan approved under this ordinance;
3. Trails, including hiking, recreation, snowmobile, and bicycle trails;
4. Removal of surplus material that results from a bona fide construction, landscaping or agricultural operation;
5. Fences or walls of 6 or less feet in height in any side or rear yard, or 4 or less feet in height in any front yard, which do not interfere with corner visibility;
6. Utility poles and connection boxes, water well casings, and propane gas tanks not used for commercial storage;
7. Sheds, dog houses, tree houses, residential swing and play structures, satellite dishes, and similar structures with a floor area not more than 80 square feet and a height of not more than 8 feet, which may be lawfully located within any required yard except the front yard, but not closer than 10 feet from any property line.
8. Public utility power-generating plants and transmission facilities regulated under 30 V.S.A. §248;
9. Hunting, fishing, trapping, and other activities specified under 24 V.S.A. §2295; and
10. Farm structures or farming, as those terms are defined in 6 V.S.A. §4810 and 10 V.S.A. §§1021(f), 1259(f) & 6001(22). For purposes of this section, "farm structure" means a building, enclosure, or fence for housing livestock, raising horticultural or agronomic plants, or carrying out other practices associated with accepted agricultural or farming practices, including a silo, but excludes a dwelling for human habitation. A person shall notify a municipality of the intent to build a farm structure and shall abide by setbacks approved by the secretary of agriculture, food, and markets. No municipal permit for a farm structure shall be required.

Rutland

§ 31-203 **Exemptions**
No zoning permit is required for the following, unless otherwise required by APPENDIX C OF THESE BYLAWS - Rutland City Flood Hazard Area Regulations; ***[Amended September 10, 2008]***

(A) Fences ten feet or less in height or walls six feet or less in height.

(B) Terraces and steps which are not covered.

(C) Doghouses, swing sets, driveways, flagpoles and other such structures.

(D) All signs (*see City of Rutland Sign Ordinance – separate permits required*)

(E) A detached structure of not more than sixty-four square feet with a longest dimension of no greater than sixteen feet and located five or more feet from the side or rear lot line. Said structure may be located on the boundary line of the immediately adjacent property owner if the adjacent affected owner agrees in writing, in advance. Notice of placement of the detached accessory structure together with a copy of the written consent of the abutting property owner shall be filed with the zoning administrator's office.

(F) Landscaping/fill.

(G) Minor structural modifications/repairs.

(H) Any repair, structural alteration or alteration of any building or other structure which does not change the use or footprint or increase the square footage of said structure.

(I) Fire escapes.

(J) Utility boxes.

(K) Demolition of a structure except as provided in § 31-210 herein.

(L) Satellite dish up to five feet in diameter and antennas up to twenty feet beyond the height of the building.

(M) Temporary structure if removed within 10 days after the primary project is to be completed.

Middlebury (next page)

business, institutional or recreational purposes.

- erection of any sign, awning, outside displays, change of structure exterior to franchise commercial colors/materials or other outdoor advertising changes.
- changes to previously approved projects, in reference to findings or conditions of any DRB or prior Planning Commission or Zoning Board approval.

Exemptions - No zoning permit is required nor are setbacks applicable for the following: (Note: exemptions do not apply in the Special Flood Hazard Area. See Section 670).

a. A residential fence or wall or landscaping which does not interfere with corner visibility (see Section 710 V). *[However, changes to PC or Zoning Board or DRB-required landscaping shall require a permit approval].*

b. A residential terrace or patio, steps or handicap ramp, unroofed porch or deck at the ground floor or main floor level (commercial steps or ramps or decks which are over three (3) feet above the level of the ground, or having roofed storage underneath, do require a permit).

c. Roof mounted residential solar panels, customary residential firewood sheds or racks, bay windows, dormers and awnings (for changes to historic houses, a permit is required. (See Section 690).

d. A dog house, or child's play house or tree house, or a shed or similar structure with a floor area of not more than 100 square feet and a height of not more than 10 feet which may be located within any required yard, except the front yard, but not closer than 5 feet from any property line. Only one such shed per property shall be deemed exempt.

e. An accessory building in the Agricultural/Rural (AR) district not exceeding four hundred (400) square feet in floor area, not over fifteen (15) feet high, and not within seventy-five (75) feet of a property line. Barns, silos and certain other farm structures may be exempt from permit requirements, but notification to the Zoning Office is required pursuant to 24 VSA § 4413(d). (see Section 780).

f. Accepted agricultural and silvicultural practices are not subject to these regulations, pursuant to 24 VSA § 4413(d). (see Section 780.)

g. Any sign erected by the State of Vermont or the Town of Middlebury for directional, information or traffic control purposes.

h. A pond, provided that the pond does not affect drainage on other properties.

i. Small residential swimming pools, above or below ground that contain less than three feet of water at the deepest.