Vermont Shoreland Protection Act
Vermont Society of Land Surveyors
April 8, 2016
Outline

Shoreland Protection Act
- Jurisdiction
- Purpose
- Registrations/Permits
- Exemptions
- Standards

Vegetation Protection Standards
- Vegetative Cover
- Point & Grid System
- Management of Vegetation
- Forest Health

Lake Encroachment Permitting

Municipal Delegation
Shoreland Protection Act: Jurisdiction

Within the Protected Shoreland Area, the creation of cleared area and impervious surface is now regulated.

The Protected Shoreland Area (PSA) is the jurisdictional area established by the Shoreland Protection Act, which became effective July 1, 2014. This area surrounds lakes, ponds, and reservoirs greater than 10 acres in size.
Shoreland Protection Act:  
*Jurisdiction*

Identifying the mean water level (MWL)

**Established MWL**
- Lake Champlain 95.5'
- Memphremagog 682.0'
- Bomoseen 409.9'
- Burr 498.0'
- Carmi 435.5'
- Coles 2,191.9'
- Crystal 944.8'
- Eden N/A 14" below spillway crest
- Great Hosmer N/A No rules adopted, maintained at 1.1' below east abutment of dam since 1954.
- Groton, 1,077.1'
- Harveys 892.3' No rules adopted, trial period MWL.
- Hortonia 487.5' Water level not to exceed 2.5'.
- Keiser 94.0'
- Little Hosmer 1,065.7'
- Miles 98.5'
- Morey 415.7' No rules adopted, 32" above floor of main outlet.
- Parker 97.4'
- Perch 99.4'
- Sadawga 96.2'
- Silver 1,307.5' Top SE corner of drop inlet of principal spillway.
- Willoughby 1,168.7'
- Wolcott 100.0'
Shoreland Protection Act:  
**Jurisdiction**

Identifying the mean water level (MWL)

**Estimating MWL**

MWL may be estimated using observations along the lake edge between June 1 and September 15. Typically the extent of the terrestrial plant growth along the shoreline during the summer season marks the MWL.
Shoreland Protection Act:

**Purpose**

- Protect existing vegetated shores
- Reduce erosion and runoff
- Protect water quality, habitat, and bank stability

<table>
<thead>
<tr>
<th>Waterbody Size (acres)</th>
<th>Total Shoreline in VT (miles)</th>
<th>Total Undeveloped Shoreline in VT (miles)</th>
<th>Percent Undeveloped Shoreline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Lakes (all lakes except Lake Champlain)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-20</td>
<td>123</td>
<td>96</td>
<td>78%</td>
</tr>
<tr>
<td>20-200</td>
<td>494</td>
<td>328</td>
<td>66%</td>
</tr>
<tr>
<td>200+</td>
<td>421</td>
<td>215</td>
<td>51%</td>
</tr>
<tr>
<td>All Inland</td>
<td>1,038</td>
<td>639</td>
<td>62%</td>
</tr>
<tr>
<td>Lake Champlain</td>
<td>441</td>
<td>169</td>
<td>38%</td>
</tr>
<tr>
<td>All VT Lakes (10+ acres)</td>
<td>1,479</td>
<td>808</td>
<td>55%</td>
</tr>
</tbody>
</table>
Shoreland Protection Act: Registrations/Permits

Project involve new cleared area or impervious surface within the PSA?

Registrations:

- **A**: up to 100ft² of new cleared area or impervious surface between 25’ and 100’ from the mean water level
  - Cost: $100
  - Review Time: 15 days

- **B**: up to 500ft² of new cleared area or impervious surface between 100’ and 250’ from the mean water level
  - The parcel within the PSA must meet the Standards of the Act. If not, a permit is required.
  - Cost: $100

Permits:

- If your project exceeds what can be registered, a permit application may be filed
  - Standards of the Act must be met
  - Cost: $125
  - New Impervious Surface Fee: $0.50/square foot
  - Review Time: ~40 days
Shoreland Protection Act: Registrations/Permits

Guidance Materials

The Vermont Shoreland Protection Act Project Worksheet

This worksheet assists in determining whether or not a registration or permit is required for a shoreland project. Guidance materials to answer the questions below are available on Vermont Permitting's website: http://www.vdem.state.vt.us/OE/Flood/permits.htm/pm_shoreland.htm. Please contact Shoreland Permitting at pmpermits@vermont.gov with any questions.

You have a project involving the creation of new cleared area or impervious surface on a shoreland property.

1. Is your property on a lake greater than 10 acres in size and of lakes greater than 10 acres?
   - If yes, PROCEED to question 2.
   - If no, STOP. You do not need a shoreland permit.

2. Is your project located within 250 feet of the lake's mean water level (MWL)?
   - If yes, PROCEED to question 3.
   - If no, STOP. You do not need a shoreland permit.

3. Are you conducting any of the following activities:
   - Monitoring existing buildings, gardens, and lawns without altering them.
   - Constructing a single six-foot wide pathway to access the lake.
   - Reconstructing existing impervious areas without increasing or changing the current footprint, such as widening a house, deck, or driveway in exactly the same location.
   - Removing 250 square feet of vegetation under three feet in height, 25 feet from the MWL, in accordance with the Vegetation Protection standards.
   - Pruning and/or removing trees within 100 feet of the MWL in accordance with the Vegetation Protection standards.
   - Installing or replacing a wastewater system or potable water supply.
   - Note: A wastewater/water supply permit may be required from the Drinking Water and Groundwater Protection Division. For licensed designers and installers, a checklist on the Shoreland Protection Program is available at: http://www.doen均价.state.vt.us/odf/permits/checklist.pdf
   - If yes, STOP. You do not need a shoreland permit.
   - If no, PROCEED to question 4.

4. Is your property intersected by a public highway?
   - If yes, PROCEED to question 5.
   - If no, SKIP to question 6.

5. Is your project located on the non-lake side of a public highway?
   - If yes, STOP. You do not need a shoreland permit.
   - If no, PROCEED to question 8.

6. Is your property at least 100 feet in depth from MWL?
   - If yes, SKIP to question 8.
   - If no, PROCEED to question 7.

7. Does your project involve the creation of more than 100 square feet of new cleared area or impervious surface within 100 feet, but at least 25 feet away from MWL, for the first time since July 1, 2014?
   - If yes, you need to apply for a shoreland permit (Application form). PROCEED to question 8.
   - If no, you need to register the project (Registration form), and PROCEED to question 8.

8. For questions, please contact Shoreland Permitting at pmpermits@vermont.gov

Found at: watershedmanagement.vt.gov/permits/htm/pm_shoreland.htm
Shoreland Protection Act: Exemptions

Activities exempt from Shoreland Permitting:

- Repair, maintenance, and reconstruction within existing footprint
- Removal of dead, diseased or unsafe trees
- Vegetation maintenance according to Vegetation Protection Standards
- Creation of a footpath to access the water (6’ maximum width)
- Parcels intersected by a public highway (projects on the portion of the parcel on the side of the highway away from the mean water level)
- Wastewater/potable water supply systems installation/repair
- Act 250 and Section 248 projects
- Forestry with an approved forest management plan in and in accordance with AMPs
- Existing agriculture in accordance with AAPs
Shoreland Protection Act: Standards – 20, 20, 40, 100, VPS

Standards within the Protected Shoreland Area:

• Project site must be located on an area with a **slope less than 20%**

• **No more than 20%** of the parcel within the PSA consists of **impervious surface**

• **No more than 40%** of the parcel within the PSA consists of **cleared area**

• **100’ new development setback** from mean water level (MWL)

• **Vegetation Protection Standards** apply to all non-cleared areas
Shoreland Protection Act: Standards – 20, 20, 40, 100, VPS

Project site must be located on an area with a slope less than 20%

Steeper slopes are more prone to erosion and instability
Shoreland Protection Act:
Standards – 20, 20, 40, 100, VPS

**No more than 20%** of the parcel within the Protected Shoreland Area shall consist of **impervious surface**

Hard surfaces (roofs, driveways, decks, etc.) result in increased runoff during storms events which can result in erosion and reduce the absorption and filtration functions of natural vegetation.
Shoreland Protection Act:
Standards – 20, 20, 40, 100, VPS

**No more than 40%** of the parcel within the Protected Shoreland Area shall consist of **cleared area**

Clearing the shoreland of its natural vegetation increases stormwater runoff and reduces the lake’s natural defense in protecting itself from pollution and eroding banks.
Shoreland Protection Act: Standards – 20, 20, 40, 100, VPS

Conforming Development

Required 100’ setback from mean water level for new development.

Parcel in existence before July 1, 2014 and is too small to meet the setback? Already developed within 100’?
Shoreland Protection Act: Standards – 20, 20, 40, **100**, VPS

**Nonconforming Development – Development within 100’**

For undeveloped small parcels (*in existence prior to July 1, 2014*):
- New cleared area and impervious surface must be as far from MWL as possible and no closer than 25’ from MWL

Redevelopment within 100’:
- No expansion closer to the water allowed
- May rebuild within a footprint that was in existence prior to July 1, 2014

20, 20, 40 still apply for both
Shoreland Protection Act: 
*Standards – 20, 20, 40, 100, VPS*

Exceed a 20, 20, 40 standard? A best management practice (BMPs) is required.

BMP examples:
- Infiltration trench
- Vegetated swale
- Waterbar
- Drywell
- No mow zone
- Planting vegetation
Shoreland Protection Act:
*Standards – 20, 20, 40, 100, VPS*

**Vegetation Protection Standards**

Establishes vegetation benchmarks to maintain vegetative cover in order to promote:

- Bank stability
- Shallow water shading
- Intact duff layer
- Improved habitat
- Improved water quality
Vegetation Protection Standards:
Vegetative Cover

Vegetative cover consists of a mix of naturally occurring:

- Trees (DBH ≥ 2”)
- Saplings (DBH < 2”)
- Groundcover (vegetation 3’ tall and lower)
- Duff (leaf litter forest floor layer)

Areas of vegetative cover are not counted towards a parcel’s cleared area.
Vegetation Protection Standards: Point & Grid System

Want to manage vegetative cover? Under the VPS, the following must be present in an area 25’ x 25’:

- A minimum of 12 points worth of trees
- A minimum of 5 saplings (< 2”DBH)
- All vegetation 3’ and below must remain
- The duff and soil layer must not be disturbed

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 2”</td>
<td>0</td>
</tr>
<tr>
<td>2” to &lt; 4”</td>
<td>1</td>
</tr>
<tr>
<td>4” to &lt; 8”</td>
<td>2</td>
</tr>
<tr>
<td>8” to &lt; 12”</td>
<td>4</td>
</tr>
<tr>
<td>12” or greater</td>
<td>8</td>
</tr>
</tbody>
</table>

Any trees or saplings must remain if the minimum point or sapling values are not met.
Vegetation Protection Standards: 
Point & Grid System

Mean Water Level
Vegetation Protection Standards: 
Point & Grid System
Vegetation Protection Standards:
Point & Grid System

Key:
4 – DBH Point Value
Vegetation Protection Standards:
Point & Grid System

Key:
4 – DBH Point Value
12 – Total Point Value

Mean Water Level
Vegetation Protection Standards: 
Point & Grid System

Key:
4 – DBH Point Value
12 – Total Point Value

Mean Water Level
Vegetation Protection Standards: Point & Grid System

Key:
4 – DBH Point Value
12 – Total Point Value

Mean Water Level
Vegetation Protection Standards:
Point & Grid System

Key:
4 – DBH Point Value
12 – Total Point Value

Mean Water Level
Vegetation Protection Standards:
Point & Grid System

Key:
4 – DBH Point Value
12 – Total Point Value

- No permit is required to remove trees under the point & grid system.
- Removing trees to a value below 12 would be considered an act of clearing and is jurisdictional.
- Selectively removing trees under the point & grid system may take place within the entire PSA.
Vegetation Protection Standards: Management of Vegetation

In addition to the point and grid system, the following vegetation management may occur without requiring a permit:

- Removal of up to 250ft$^2$ of vegetation under 3’ between 25’ and 100’ from MWL so long as the duff layer is not removed
- Pruning of tree branches on the bottom third of a tree’s height
Vegetation Protection Standards: Management of Vegetation

Dead, Diseased, or Unsafe Trees

Regardless of points or the location of a tree, removal of a dead, diseased, or unsafe trees does not require a permit.

Only the removal of the target tree is allowed. This is not an exemption to create cleared area.

This is the landowners decision and may proceed without approval from Shoreland Permitting.
Vegetation Protection Standards: Management of Vegetation

Noxious & Nuisance Species

Regardless of points or the location of a noxious or nuisance plant, removal of that plant does not require a permit.

Only the removal of the target plant is allowed. This is not an exemption to create cleared area.

This is the landowner's decision and may proceed without approval from Shoreland Permitting.
Vegetation Protection Standards: Management of Vegetation

Silvicultural Activities

No Shoreland Permit is required for a silvicultural activity so long as:

- The parcel is enrolled in the UVA (Current Use) Program; OR
- The activity has a Forestry Management Plan approved by VT Dept. of Forests, Parks & Recreation.

Contact a county forester for question regarding UVA, AMPs, or a forestry management plan.
Vegetation Protection Standards: 
Forest Health

Managing and controlling forests pests:

In the event of a forest pest outbreak or the potential for one, the VT Dept. of Forests, Parks & Recreation has the authority to implement an activity managing the situation within the Protected Shoreland Area.
Lake Encroachment Permitting:

Activities that occur beyond mean water level on **all lakes that are public waters**, including lake and ponds < 10 acres

- Docks
- Shoreline stabilization beyond mean water level
- Dredge/Fill activity
- Utility infrastructure
- Marina infrastructure, including docks
- **Private docks not involving concrete, sheet piling or fill may be exempt**
Municipal Delegation:

Municipalities may seek delegation so long as they:

- Adopt a functionally equivalent bylaw or ordinance
- Have adequate resources to administer and enforce upon the adopted bylaw or ordinance

Delegated Municipalities:
- Colchester
- Greensboro
- Burlington
- Elmore
Voluntary Natural Shoreland Erosion Control Certification:

Workshops offered by the VTDEC:
• To demonstrate lake friendly landscaping techniques for erosion control and habitat protection.
• To connect landscapers, site workers, and contractors with the tools and techniques needed to manage lakeshores in ways that protect water quality and habitat.
• To communicate development rules under shoreland permitting programs.
• To foster partnerships for re-naturalizing shorelands.

Contact:
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