Vermont Shoreland Protection Act
(No. 172 of 2014)

Effective July 1, 2014
Presentation Outline

Part 1: Shoreland Standards
• Purpose
• Exemptions
• Shoreland standards overview

Part 2: Permit Process
• Registrations
• Permits
• Project worksheet and applications forms
• Related DEC permit programs

Part 3: Delegation
Part 1
Shoreland Standards
Jurisdictional Area:
Lakes, Ponds, & Reservoirs
Greater than 10 Acres

- Upland Zone: 150’
- Lakeside Zone: 100’
- Protected Shoreland Area: 250’ from mean water level

Vertically measured horizontally measured
Jurisdictional Area: Reservoirs on the Connecticut River

The Comerford & Moore Reservoir are currently the two bodies of water on the Connecticut River that have been included under the jurisdictional area.

Other impoundments on the river are considered to be “riverine impoundments” which currently are not included as part of the jurisdictional area. A Department procedure for addressing requests to alter the current list is currently being drafted in consultation with the Rivers Management Program. The Department however does not have current plans to alter the list, unless there are errors identified with regards to surface area or inadvertent omission. Any procedure developed would allow for public participation by community members and our regional partners in advance of any proposed change.
Purpose

- Protect existing wooded shores
- Promote lake-friendly development and redevelopment
- Reduce erosion and runoff
- Protect water quality, habitat, and bank stability
- *Exempt existing uses*
Exemptions

- Repair and maintenance
- Reconstruction in existing footprint
- Removal of dead, diseased or unsafe trees
- Six foot wide footpath to access the water
- Tree pruning and thinning
- 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)
Exemptions – Other Permits or Rules

- Wastewater/potable water supply
- Stormwater discharges and treatment facilities
- Designated downtowns, village centers, and urban and industrial redevelopment
- Act 250 and Section 248 (utility projects)
- Forestry in accordance with AMPs
- Existing agriculture in accordance with AAPs
Shoreland Standards

Standards Within the Protected Shoreland Area

The creation of **cleared area or impervious surface** must follow the following **standards**:

- Project site must be located on an area with a **slope less than 20%**
- **No more than 20%** of the parcel within the Protected Shoreland Area consists of **impervious surface**
- **No more than 40%** of the parcel within the Protected Shoreland Area consists of **cleared area**
- **New development** be setback **100’** from mean water level
- Vegetation is managed in accordance with the **Vegetation Protection Standards**
Shoreland Standards

Natural Lakeshore Vegetation:
- filters and cleans dirty runoff from uphill land uses
- provides shoreland and shallow-water habitat
- stabilizes banks
- increases lake aesthetics

Why Those Standards?
### Vermont in a Snapshot

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Percent of All Residences in Vermont</th>
<th>Residence Density (Number of houses per sq. mi.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All residences in Vermont set back more than 250 feet from a lakeshore (See Fig. 1)</td>
<td>86.8%</td>
<td>26</td>
</tr>
<tr>
<td>All residences in Vermont set back more than 100 feet from a lakeshore (See Fig. 1)</td>
<td>95.6%</td>
<td>28</td>
</tr>
<tr>
<td>Urban Areas (See Fig. 2)</td>
<td>26.3%</td>
<td>198</td>
</tr>
<tr>
<td>All residences in Vermont built within 250 feet of a lakeshore (Shoreland Area)</td>
<td>13.2%</td>
<td>484</td>
</tr>
<tr>
<td>All residences in Vermont built within 100 feet of a lakeshore (Lakefront Area)</td>
<td>4.4%</td>
<td>402</td>
</tr>
</tbody>
</table>

### Shoreland Standards

<table>
<thead>
<tr>
<th>Size (acres)</th>
<th>Total Shoreline in VT (miles)</th>
<th>Total Undeveloped Shoreline in VT (miles)</th>
<th>% Undeveloped Shoreline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Lakes (All lakes except 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>20+</td>
<td>916</td>
<td>543</td>
<td>59%</td>
</tr>
<tr>
<td>200+</td>
<td>421</td>
<td>215</td>
<td>51%</td>
</tr>
<tr>
<td>All VT Inland Lakes</td>
<td>1,039</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</td>
<td>1,480</td>
<td>808</td>
<td>55%</td>
</tr>
</tbody>
</table>
Shoreland Standards

Slope less than 20%

Steeper slopes are more prone to erosion and instability.

Development on a greater than 20% slope must demonstrate the slope will be stable with minimal erosion and impact to water quality.
No More Than 20% 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.
Greater than 20% Impervious Surface?

Best management practices can be used to counterbalance the effects of increased impervious surface such as:

- Infiltration (trench/basin)
- Dry well
- Drip line trench
- Waterbar
No More Than 40% 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.
Greater than 40% Cleared Area?

Best management practices can be used to counterbalance the effects of increased cleared area such as:

- Re-vegetation
- No-mow zone
100’ New Development Setback

Vegetation Protection Standards apply to this entire 100’ to promote:

- Bank stability
- Shallow water shading
- Intact duff layer
- Variable vertical habitat structure
Vegetation Protection Standards

17 points in 25' x 25' area:
- Meets vegetation protection standards for DBH points

10 points in 25' x 25' area:
- Does Not Meet vegetation protection standards for DBH points

\[4 = \text{Trees, with DBH Scores}\]

**Diameter** | **Points**
---|---
Under 2” | 0
2” to < 4” | 1
4” to < 8” | 2
8” to < 12” | 4
12” or greater | 8

**Retain:**
- At least 5 saplings per plot
- Undergrowth < 3 feet
Redevelopment Example: The Mayor’s Camp

Existing conditions:
• Lot size: 20,000 sq ft
• Impervious area: 1980 sq ft (6%)
• Cleared area: 9200 sq ft (46%)

Proposal
• Addition of 1600 sq ft

New conditions
• Impervious 2800 sq ft (14%)
• Cleared area no change

Permit required. No BMPs required.
Redevelopment Example: The Mayor’s Camp

Existing conditions
• Lot size: 20,000 sq ft
• Impervious area: 1980 sq ft (10%)
• Cleared area: 9200 sq ft (46%)

Proposal
• Add a 600 sq ft garage in wooded area

New conditions
• Impervious area: 2580 sq ft (13%)
• Cleared area: 9800 sq ft (49%)

Permit required. BMPs required.
Part 2
Permit Process
Registrations

**Lakeside Zone:** Up to 100 square feet of cleared/impervious area  
– At least 25 feet from MWL

**Upland Zone:** Up to 500 square feet of cleared/impervious area

**Fee:** $100
**Review time:** 15 days
Permits

Unless an exemption applies or the project may be registered:

A permit is needed for the creation of new cleared or impervious area and...

...must meet the shoreland standards: 20, 20, 40, and Vegetation Protection Standards.

**Fee**: $125 plus $0.50 per square foot of proposed impervious surface

**Review time**: ~40 days
Permit Process

Application Tools

Estimating Mean Water Level

Mean Water Level
Some large lakes, like Lake Champlain and Lake Memphremagog, have established summer water level elevations that are considered their mean water level (MWL). Other lakes have operational permits for their dams, often related to hydropower generation or dam safety permits, that also establish MWL. In other cases, water level readings, taken over many years by the VT DEC Lakes and Ponds Program at set locations, have been used to establish MWL. Measurements by the Lakes and Ponds Program are taken in accordance with the Rules for Determining Mean Water Levels. Taken with established MWL, are listed on the back of this sheet.

Estimating Mean Water Level
For the purposes of applying for a shoreland permit or registration and in cases where actual water levels are not recorded, or where the reference point can no longer be located, shoreland homeowners can estimate the MWL 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. The red arrows on the photos to the right indicate the point on the shore that can be considered the MWL.

Shoreland Permit Program
The jurisdiction of the Shoreland Permit Program starts at MWL and extends 250 feet away from the lakeshore (measured on a horizontal plane). The jurisdiction of the Lake Enshacement Permit Program starts at MWL and extends towards the lake, including above and below the lake surface. For more information regarding the Shoreland Permit Program or for questions regarding MWL, visit the Shoreland Permit Program webpage, or contact the VT DEC Lakes and Ponds Shoreland Permit Program via email: ABR.WSMPShorelandInfo@state.vt.us, or phone: 802-490-6196.

The Vermont Shoreland Protection Act
A Handbook for Shoreland Development
Version 1.1, June 2014
Shoreland Permit Program
Regional Contacts

<table>
<thead>
<tr>
<th>County</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addison</td>
<td>Region 1</td>
</tr>
<tr>
<td>Bennington</td>
<td>Misha Cetner</td>
</tr>
<tr>
<td>Rutland</td>
<td><a href="mailto:misha.cetner@state.vt.us">misha.cetner@state.vt.us</a></td>
</tr>
<tr>
<td>Windham</td>
<td>802-490-6199</td>
</tr>
<tr>
<td>Windsor</td>
<td></td>
</tr>
<tr>
<td>Chittenden</td>
<td>Region 2</td>
</tr>
<tr>
<td>Franklin</td>
<td>Kevin Burke</td>
</tr>
<tr>
<td>Grand Isle</td>
<td><a href="mailto:kevin.burke@state.vt.us">kevin.burke@state.vt.us</a></td>
</tr>
<tr>
<td>Lamoille</td>
<td>802-490-6165</td>
</tr>
<tr>
<td>Washington</td>
<td></td>
</tr>
<tr>
<td>Caledonia</td>
<td>Region 3</td>
</tr>
<tr>
<td>Essex</td>
<td>Dan Homeier</td>
</tr>
<tr>
<td>Orange</td>
<td><a href="mailto:dan.homeier@state.vt.us">dan.homeier@state.vt.us</a></td>
</tr>
<tr>
<td>Orleans</td>
<td>802-490-6200</td>
</tr>
</tbody>
</table>

Lakes and Ponds Program website:
www.watershedmanagement.vt.gov/lakes.htm
Related DEC Permits

District DEC Permit Specialist
http://www.anr.state.vt.us/dec/permits.htm

Wetlands
802.490.6100
ANR.WSMDWetlands@state.vt.us

Lake Encroachment
Same contact information as Shoreland Permit Program
Lake Wise

Amy Picotte - 802.490.6128 - Amy.Picotte@state.vt.us
Part 3
Delegation
Shoreland Permit Program must delegate permit authority to municipalities, as long as the municipality has:

- Requested delegation.
- Adopted a bylaw or ordinance functionally equivalent to the shoreland standards.
- Has adequate resources for administration and enforcement of the bylaw or ordinance.
With delegation questions, contact:

Susan Warren (DEC)
802.490.6134
Susan.Warren@state.vt.us

Your local Regional Planning Commission
Vermont Shoreland Permit Program

ANR.WSMDShoreland@state.vt.us