



# The Lake Wise Program

***It's Time To Use Lakeshore Better Management Practices!***

**Help protect Vermont lakes by earning the Lake Wise Award**

## Today's Condition of Vermont Lakes

- Vermont has over 800 lakes, with 292 of them greater than 20 acres.
- In Vermont, **16% of lakes are in poor condition because of degraded lakeshore habitat.**<sup>1</sup>
- **Vermont lakes rank worse than both the northeast region and the national average for percent of shoreland that is either in fair or poor condition as measured by the extent of clearing and lawns near the shoreline.**<sup>2</sup>

## Poor Development on Lakeshores Harms the Lake

- Of 510 Vermonters surveyed, **83.7% said lakeshore development was a problem!**<sup>3</sup>
- **Degraded natural lakeshore and shallow water habitat comes from clearing native vegetation, increasing impervious surfaces such as driveways, and planting lawns.** In-lake habitat is degraded by these cumulative changes occurring along the shore and in the watershed.<sup>4</sup>
- **The winterization of lakeshore homes can also degrade water quality** if accompanied by house additions, and construction of larger lawns and driveways.<sup>5</sup> This winterization of lakeshore homes was perceived as becoming a problem in the future according to 97 Vermonters who were surveyed in 1992.<sup>6</sup>



## Good Development on Lakeshores Protects the Lake

- Using Shoreland Best Management Practices allows the natural vegetation to filter run-off, protect and stabilize banks, and provide wildlife habitat.
- **Naturally vegetated shores protect water quality, ecology, and bank stability.**<sup>7, 8</sup>



## Economic Impacts

- **Thirty-five of the 53 Vermont State Parks are located on Vermont lakes**, including all the most popular parks.
- In Maine, New Hampshire, and Vermont, **studies on the impact of water quality on lakefront property values demonstrate a significant loss in property value as water quality degrades.**<sup>9</sup> Lower property values represent a loss in town tax revenue.

Activity	Annual Visitor Expenditures/ Revenue Generated
Visiting Lake-Based State Parks	\$976,870 (Gilbert & Manning, 2002)
Fishing	\$131,223,000 (VTFWD, 2009 and USFWS, 2011)
Wildlife Watching	\$288,507,000 (USFWS, 2011)
Lakeshore Property Values	\$11 - \$200 per foot lakefront property (Boyle and Bouchard, 2003)

***When we list a lakefront property, that's one of the main questions because it does have a significant impact on the value. When people are looking, buyers want water they can swim in and use. You don't want to pay for something you can't use, because it's not cheap.***<sup>10</sup>

1. EPA, National Lake Assessment

2. Kellie Merrill, Eric Howe and Susan Warren, "Examining Shorelines, Littorally," *Lakeline* 29:1 (2009): 8-13.

3. J. Vaske, R.R. Zwick, and M.P. Donnelly, "Lakes and Ponds Recreation Management: A Statewide Application of the Visitor Impact Management Process," in Gail A. Vander Stoep, ed. *Proceedings of the 1991 Northeastern Recreation Research Symposium*; 1991 April 7-9; Saratoga Springs, NY. Gen. Tech. Rep. NE-160. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 72-78.

4. Martin J. Jennings, Edward E. Emmons, Gene R. Hatzenbeler, Clayton Edwards, and Michael A. Bozek, "Is Littoral Habitat Affected by Residential Development and Land Use in Watersheds of Wisconsin Lakes?," *Lake and Reservoir Management* 19 (2003) 272-279.

5. C. Harper, L.L. Falk, and E.W. Rankin, *The Northern Forest Lands Study of New England and New York: A Report to the Congress of the United States on the Recent Changes in Landownership and Land Use in the Northern Forest of Maine, New Hampshire, New York and Vermont*, Rutland, Vermont: Forest Service, US Department of Agriculture, 1990, 19.

6. University of Vermont Center for Rural Studies, *2002 Vermont Outdoor Recreation Survey Report and an Analysis of Change since 1992, 2003*.

7. Kellie Merrill, Eric Howe and Susan Warren, "Examining Shorelines, Littorally," *Lakeline* 29:1 (2009): 8-13.

8. Roy Bouchard, Jeremy Deeds, Mark Mitchell and Kellie Merrill, *Determining if Maine's Mandatory Shoreland Zoning Act Standards are Effective at Protecting Aquatic Habitat*, Vermont Department of Environmental Conservation, 2012.

9. Kevin Boyle and Roy Bouchard, "Water Quality Effects on Property Prices in Northern New England," *Lakeline*, 23:3 (2003): 24-27.

10. John Dillon, "Realtors Say Algae Blooms Hurt Waterfront Prices," Vermont Public Radio, 18, August, 2009, [http://www.vpr.net/news\\_detail/85597/realtors-say-algae-blooms-hurt-waterfront-prices/](http://www.vpr.net/news_detail/85597/realtors-say-algae-blooms-hurt-waterfront-prices/), (accessed October 24, 2012).

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