



ORLEANS COUNTY NATURAL RESOURCES CONSERVATION DISTRICT

Lake Shoreland Restoration Work

EXCAVATORS, LANDSCAPERS & BUILDERS

OVERVIEW

Orleans County Conservation District (OCNRCD) works with the State and other conservation organizations to identify water quality projects in our county. After extensive field assessments, we have generated a list of potential restoration projects. For example, in the Lake Willoughby subwatershed alone, we've created a list of 70 potential projects, including stream, wetland, and lake shoreland restoration opportunities. Grant funding is available for the design and implementation of these renaturalization efforts.

YOUR ROLE

Along with our partners, OCNRCD seeks to build relationships with excavators, landscapers, designers, and builders who are interested increasing their knowledge and skills in lake-friendly techniques that protect water quality and wildlife habitat. We are developing a list of certified contractors to hire for restoration projects and to share with lake associations, property owners, and other land stewards. You can become certified by the State by taking the *Natural Shoreline Erosion Control Certification Course* (see reverse for more details).

If you are moving dirt near our shorelines, it is important that you are informed about the *Shoreland Protection Act* and the best management practices for protecting water quality. The intent of the act -- which creates regulations for development within 250 feet of a lake shoreline -- is for property owners, contractors, and the State to work together to make the best choices during construction and landscaping on properties close to water bodies. It's possible that you might need a permit when renovating structures, clearing land, or removing trees. **Learn more here: www.dec.vermont.gov/watershed/lakes-ponds/permit/shoreland**



Here are examples of lakeshore restoration work in action! Above is a photo of the removal of a concrete block retaining wall. The photo below shows the stabilization of the shoreline using encapsulated soil lifts and stone toes. In a couple years, the soil lifts will be nicely vegetated with an assortment of plants (see photo on reverse), recreating a natural shoreline that can infiltrate storm water and absorb wave action and withstand ice push.



Take the Course!

Natural Shoreline Erosion Control Certification

Upcoming course date is TBD

This certification course covers shoreland Best Management Practices, including techniques for erosion control, stormwater management, and bioengineering.

*All people certified through this course can choose to be listed on the Agency of Natural Resources web site. The list is shared with lakeshore property owners.

For questions & registration, contact:

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The course is hosted by the VT Dept of Environmental Conservation, Agency of Natural Resources

Why We Do This Work

Benefits of Preventing Shoreline Erosion

Recent flooding in Vermont is a sign that we are experiencing increased precipitation and extreme weather events. We need to prepare our lands to deal with stormwater runoff by following best management practices (BMPs).

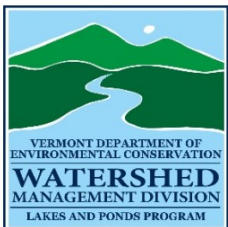
- BMPs for landscaping and structures are solutions and modifications that help to direct, absorb, and infiltrate water to prevent erosion and keep sedimentation out of our lakes.
- Sedimentation carries phosphorus, and high phosphorus levels lead to excessive plant growth and algae blooms.
- Conventional development often disturbs the landscape by clearing vegetation, compacting soils, and grading natural topography.
- BMPs include practices such as:
 - Bioengineering to renaturalize shorelines
 - Landscaping that maximizes permeable surfaces
 - Creating natural catchments for runoff

To learn more about best shoreline practices:

www.dec.vermont.gov/watershed/lakes-ponds/lakeshores-lake-wise/bmpBMPs



Funded by:



Please contact us to learn more about our lake shoreland work:

Orleans County Natural Resources Conservation District
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