

The New Hampshire Lakes Association:



Partnering with the Lake Messer Pond Protective Association to Protect Messer Pond and its Watershed

**Andrea LaMoreaux, Education Director
New Hampshire Lakes Association**



NH LAKES: Background & Mission

- Established in 1992.
- Statewide, non-profit, member-supported organization representing over 26,000 lake enthusiasts and 150 lake associations.
- We are not a governmental agency.
- Mission: To protect NH's lakes and their watersheds.



What does NH LAKES do?

- Educates and advocates for greater understanding, appreciation and stewardship of lake resources.
- Supports and promotes policies based on sound science.
- Collaborates with legislators, state agencies, lake associations, universities, conservation groups, and individuals.



Statewide Lake and Pond Issues

NH LAKES **advocates** for:

- Appropriate public access
- Balanced use
- Improved safety
- Enhanced water quality
- Prevention of exotic aquatic species
- Shoreland and watershed protection
- Wildlife and habitat protection



Statewide Lake and Pond Issues

NH LAKES **educates** and informs through our:

- Website (www.nhlakes.org)
- Quarterly newsletter, *Lakeside*
- Monthly enewsletter, *Shorelines*
- Annual Lakes Congress meeting– [June 24, 2011, at Cobbetts Pond in Windham](#)
- Speakers Bureau
- Legislative Weekly emails
- Lake Host™ Program
- Lake Conservation CorpsSM Program
- Summer Youth Employment Program
- [Innovative Weed Control Program – new!](#)
- Articles in newspapers, publications, etc.



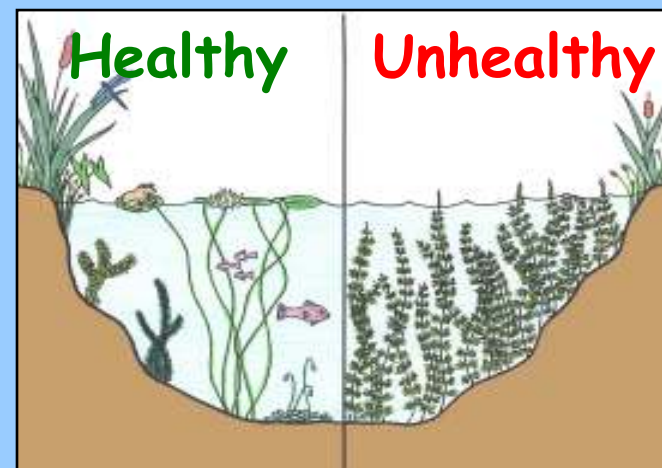
What is NH LAKES doing about one the biggest threats to NH's lakes?



Exotic Aquatic Species

Exotic Aquatic Plants

- Exotic aquatic plants are not native to NH.
- They have certain characteristics that allow them to grow more rapidly than native vegetation. (**invasiveness!**)
- Boat or trailer transport of plant fragments from lake to lake is the primary source of the spread.
- Once introduced into a waterbody, exotic plants can “take over” a waterbody.
- Exotic aquatic plant infestations...
 - make recreation in and on lakes dangerous and unpleasant.
 - disrupt the ecological balance of lakes.
 - reduce shoreline property values.
 - are difficult and expensive to control.



(Courtesy of the DES Exotic Species Program)

EXOTIC AQUATIC PLANT SITES IN NEW HAMPSHIRE

SPECIES

- ▲ Fanwort
- Curly-leaf Pondweed
- Eurasian Milfoil
- Brazilian Elodea
- Variable Milfoil
- Water Chestnut
- European Naiad
- Didymo ("rock snot")

83 Infestations on 72 Waterbodies

(Courtesy of NH Dept. of Environmental Services Exotic Species Program)

NH Exotic Infestations

- 63 variable milfoil
 - 3 Eurasian milfoil
 - 9 Fanwort
 - 3 European naiad
 - 4 Curly-leaf pondweed
 - 1 Brazilian elodea
 - 1(?) Water chestnut
 - (?) Didymo
- Some lakes have more than one offending plant!



NH LAKES Lake Host™ Program

- NH LAKES Lake Host Program™:
 - First line of exotic aquatic plant **PREVENTION.**
 - Initiated in 2002.
 - Grant program implemented by NH LAKES in cooperation with local groups.
 - Funded in part by DES, federal government, lake associations and municipalities.



NH LAKES Lake Host™ Program

- Program successes since 2002:
 - 297,404 boats have been inspected.
 - 813 “saves” have been made of exotic species either entering or leaving a waterbody.
 - No new exotic plant infestations have been found in lakes being protected by the Lake Host™ Program and the DES Weed Watchers Program.
 - 2009 was a record-breaking year saves made. (297 saves!)



NH LAKES Lake Host™ Program 2010

- 2010 could be our biggest year yet!
 - 72 participating organizations
 - 90 ramp sites (87 in 2009)
 - Continued Lake Host coverage in the North Country! (Pittsburg Errol, Littleton).
 - Continued Lake Winnepesaukee coverage! (Meredith, Gilford, Wolfeboro, Tuftonboro)
 - Increased Winnepesaukee coverage (Moultonborough, Alton)



NH LAKES 2010 Innovative Exotic Weed Control Program

- New Program in 2010!
 - Received a federal appropriation and generous private foundation to support non-chemical control of exotic aquatic plants
 - Will provide funding for 16 groups.
 - Projects range from buying diving equipment for volunteer divers, to hiring certified weed control divers to remove plants, to groups purchasing Diver Assisted Suction Harvesting Machines to remove plants.



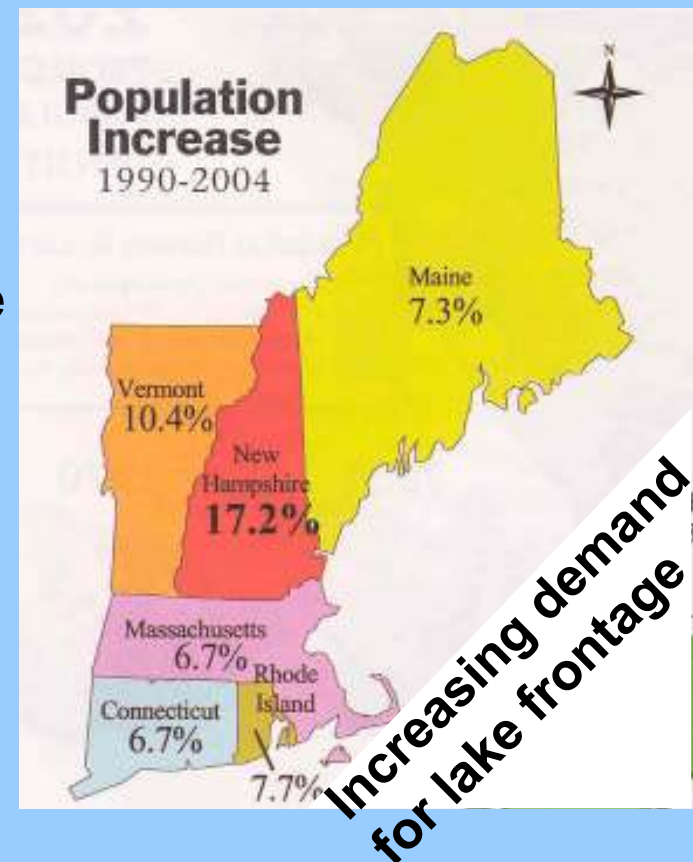
What is NH LAKES doing about one of the biggest threats to NH's lakes?



- **Stormwater runoff:** water from a precipitation event that does not sink into the ground and instead runs across the landscape picking up pollutants before flowing into a water body.

Shoreland Protection

- Population growth is putting an increasing demand on shoreland development.
- NH has been the fastest growing state in the Northeast for the past 40 years!
- Seasonal “camps” around NH lakes and ponds are being converted to year-round residences.
- Marginal waterfront land is being developed.
- **Causing:**
 - Changing shoreline “character.”
 - Loss of wildlife habitat.
 - **STORMWATER RUNOFF and degraded water quality!**



Stormwater Runoff: The Problem

- As **vegetated land** is replaced with **impervious surfaces...**
 - Amount of stormwater runoff volume **increases!**
 - Quality of stormwater runoff **decreases** (becomes more polluted)!
 - Frequency and magnitude of flooding **increases!**



Warner River Flooding at Breezy Hill Road, Bradford – May 2006

The Solution: NH LAKES Lake Conservation CorpsSM Program

- Education and water quality restoration program.
- **Goal: Actively involve teenagers in shoreline and watershed land restoration projects to:**
 - Improve surface water quality!
 - Foster a lifelong interest in the responsible stewardship of natural resources!
 - Showcase lake-friendly landscaping projects to the community to encourage wise lake stewardship.
- **How it works:**
 - Involves partnerships on many levels.
 - NH LAKES provides as-needed technical, administrative, & educational instruction, and assistance with securing funding.
 - If students/teacher are hired for summer work, NH LAKES is official employer and provides insurance.
 - NH LAKES has implemented the LCC in five communities and program structure has been different.



Bristol – Summer 2007



Polluted stormwater runoff from parking lot and roof tops flowed into a **storm drain** which flows to the Newfound River



Students constructed a rain garden to collect and filter runoff to minimize pollution to river.

Partners:

- NH LAKES
- Acton Wakefield Watersheds Alliance
- Belknap Landscape
- Casey Kuplin Landscaping
- Newfound Lake Region Association
- Newfound High School
- Simple by Nature
- UNH Cooperative Extension



Bradford – Summer 2008



Polluted stormwater runoff from steep dirt road and parking lot eroded town beach and polluted Lake Massasecum.



Students constructed a Infiltration steps to Collect and filter runoff to minimize pollution to the lake.

Partners:

- NH LAKES
- Acton Wakefield Watersheds Association
- Found Well Farms
- Kearsarge Regional High School
- Lake Massasecum Improvement Association
- Moose Plate Grant
- Town of Bradford
- UNH Cooperative Extension



Bradford – Summer 2008



Interpretive signs educate visitors, promote the program and recognize partners.

Meredith - Summer 2009



Wind and wave action from Lake Waukewan was eroding the shoreline and dead trees were hazardous.



The Town of Meredith stabilized the shoreline and students planted vegetated buffers and a rain garden.

Partners:

- NH LAKES
- UNH
- Town of Meredith
- NH Dept. of Environmental Services
- Interlakes High School, Laconia High School
- Belknap Landscape Company, Inc.
- Real Green
- Cackleberries



Meredith - Summer 2009

You are invited...



Learn how to fix shoreline erosion problems like this...

...and this!

Community Open House and Planting Party!
Saturday & Sunday, September 26 and 27, 2009, 9:00 a.m. - 2:00 pm
Waukewan Park, Lake Waukewan, Meredith

Please join local students and New Hampshire Lakes Association to see how the Lake Conservation Corps is helping protect Lake Waukewan from pollution!

- Help plant a vegetative buffer and rain garden to prevent pollution from flowing into Lake Waukewan!
- Learn how to protect the rivers, streams, lakes and ponds on and near your property from polluted runoff water from NH LAKES Staff and Lake Conservation Corps Crew.

Drinks and snacks will be provided.

For more information:
Contact Andrea LaMoreaux, NH LAKES Education Director, at 226-0299 or alamoreaux@nhlakes.org

To find Lake Waukewan Park: From Route 3 in downtown Meredith, follow Main Street south to Lake Waukewan St. Take Lake Waukewan St. west. The park will be on the right, just past Avery St.

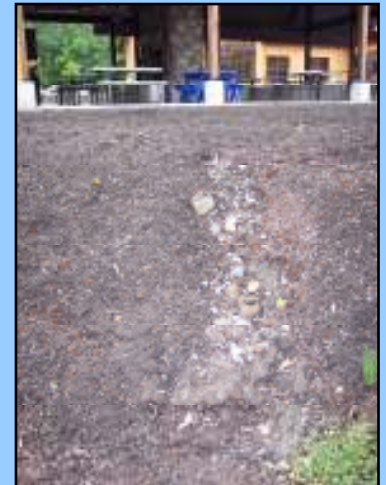


Bring your shovel and rake – meet new friends and learn something new!

Summer 2010 Projects



- **Eastman Community Association, Grantham**
 - South Cove Activity Center
 - Volunteer program
 - 6 youth volunteering
 - Volunteer team leaders from Eastman Lakes & Streams Committee
 - Grant funding from Eastman Charitable Foundation
 - NH LAKES providing technical guidance and outreach
 - Projects (3 or 4)
 - Infiltration trench for roof runoff
 - Water bars to infiltrate runoff on walking path
 - Vegetated buffer
 - Rain garden



- **Additional projects in Pittsburg, Colebrook, Laconia, Canaan**

Summer 2010, Eastman South Cove Activity Center



Before



Proposed improvements



A Shoreland Homeowner's Guide to Stormwater Management

~ protecting your home & environment ~

NH Department of Environmental Services
29 Hayes Drive, Concord, NH 03301 • 603.271.3503 • www.des.nh.gov

Introduction

The recently revised Comprehensive Shoreland Protection Act (CSPA), which was enacted to help protect the state's surface waters, includes limits on development that contribute to stormwater runoff. If you are a shoreland homeowner, your property may produce stormwater runoff that directly impacts the quality of our public waters. However, you can reduce or prevent polluted stormwater runoff. This guide provides several simple and cost-effective practices that shoreland homeowners can install to address stormwater runoff from roofs, patios, lawns and driveways. These practices can be used to meet the provisions of the CSPA. The guide also includes general information about what state environmental permits, if any, are necessary for incorporating these practices.

What is Stormwater Runoff?

Stormwater runoff describes the flow of rainwater or meltwater from snow or ice over the land's surface.

On undisturbed sites, much of the stormwater is intercepted by natural ground cover or is absorbed into the ground. Land clearing and development reduces the capacity of the land to absorb rainwater and snowmelt, which leads to more water flowing over the land and into surface waters.



Polluted stormwater runoff flowing into a storm drain.

As water flows over the land, it picks up exposed soil as well as any chemicals, fertilizers or pollutants that are present. Stormwater carries these polluting substances over impervious surfaces and through storm drains and drainage ditches. Impervious surfaces are surfaces that cannot effectively absorb and infiltrate water. Examples of impervious surfaces include, but are not limited to, roofs, decks, patios and paved, gravel or crushed stone driveways, parking areas and walkways unless designed to effectively absorb and infiltrate water. This flow of stormwater eventually reaches a body of water, where the sediments, nutrients and pollutants are deposited.

10 in One!

Please note that this document is actually 10 articles in one: an introductory document and nine guidelines sheets, which may be printed out altogether or separately. They are:

- | | |
|--------------------------------------|----------------------------|
| Introductory Document, 4 pg. | Infiltration Trench, 1 pg. |
| Drip Line Trench, 1 pg. | Paths & Walkways, 1 pg. |
| Drywells, 1 pg. | Rain Barrels, 1 pg. |
| Infiltration Steps - New, 2 pg. | Rain Gardens, 1 pg. |
| Infiltration Steps - Retrofit, 1 pg. | Water Bars, 2 pg. |

<http://des.nh.gov/organization/commissioner/pip/publications/wd/documents/nhdes-wd-10-8.pdf>

Let's initiate a LCC in your watershed!

- Next steps:
 - Letter of support from your association to NH LAKES
 - A few letters of support from residents willing to make their watershed property available for the project
 - Include a few photos of stormwater problems NH LAKES will look for funding opportunities
 - NH LAKES will contact Kearsarge Regional High School
 - NH LAKES will apply to funding sources
 - Do you know of any funding sources?



*Together we can protect and improve the
quality of Messer Pond!*



Please consider becoming
an individual member of
NH LAKES.

For more information, visit:
www.nhlakes.org
or contact us at:
info@nhlakes.org or (603) 226-0299.