## Stormwater Best Management Practices (BMPs)

Stormwater BMPs help protect water quality by preventing or reducing the delivery of pollutants to our streams and lakes. Simple BMPs, such as dripline trenches and rain gardens, are easy to design and install, and go a long way to protecting Crescent Lake.













Dripline Trench Infiltration Steps

**Rain Barrels** 



**Rain Gardens** 







Waterbars



Vegetated Swales



We all have a role to play in Lake Protection...10 Easy Steps you can take to improve water quality:

- Dispose of chemicals and wastes 1. properly.
- 2. Respect "No Wake" zones (200 ft. from the shore).
- Pick up after your pets. 3.
- Reduce your use of pesticides and 4. chemical fertilizers.
- 5. Reduce impervious surfaces on your property.
- Patch bare soil areas with native 6. vegetation or mulch.
- Maintain a natural vegetated buffer 7. zone around your property.
- Check your boat for invasive plants 8. before entering Crescent Lake.
- Join the Crescent Lake Watershed 9. Association.
- 10. Spread the word and stay informed!

Protecting water quality doesn't have to be hard! There are simple things that any renter or homeowner can do to help keep **Crescent Lake beautiful.** 



Lake-Friendly Living In the CRESCENT LAKE WATERSHED



# Information & Tips for Lakeside **Renters & Homeowners**

Funding for this project was provided by a Watershed Assistance Grant from the Maine Departm ntal Protection with Clean Water Act Section 319 funds from the U.S. Environmental Protection

This Brochure was created by FB Environmental for the Crescent Lake Watershed NPS Improvement Project in cooperation with the Town of Raymond. Crescent Lake Watershed Association, Raymond Waterways Protective Association, and Cumberland County Soil & Water Conservation District.



### CRESCENT LAKE WATERSHED Improvement Project – Phase I and II

In 2011 the Maine Department of Environmental Protection (Maine DEP) awarded the Town of Raymond its first of now TWO grants to protect water quality in the Crescent Lake Watershed. In 2013, The Town applied for a second grant, and was awarded additional funds through 2016.

The project is designed to increase education and awareness about water quality issues, and fix erosion problems on residential properties, youth summer camps, and public & private roads.

During Phase I of the grant project, there were a number of landowners and road associations that took advantage of the technical assistance and grant funds available to complete projects on their property. We need more projects to work on in 2014-2015! The two ways that projects receive funding through the grant are:

#### Stormwater Abatement Projects

These projects are aimed at fixing large scale erosion problems on town roads, private camp roads, and residential properties. The grant provides **free technical assistance**, plans, and will cover up to **50% of the project cost!** 

#### **Residential Matching Grants**

These projects are aimed at fixing smaller scale erosion problems located on residential properties around Crescent Lake. Landowners receive **free technical assistance**, site plans, and be reimbursed for up to \$300 worth of materials.

For more information or to schedule a site visit to your property please contact:

Whitney Baker, Project Coordinator (207) 206-5510 whitneyb@fbenvironmental.com

## What is Polluted Runoff??

**Polluted Runoff** is also known as **stormwater runoff** or **Nonpoint source** (NPS) **pollution**. Stormwater runoff from rain and snowmelt picks up soil, nutrients and other pollutants as it flows across the land, and washes into the lake.

POLLUTED RUNOFF Also called NPS or nonpoint source pollution. Soil, fertilizers, septic waste and other pollutants from diffuse sources across the landscape that are carried into a waterbody by rainfall.

Runoff from developed land is the major source of nutrients for most lakes. Runoff from developed areas has 5 to 10 times the amount of **phosphorus** compared to runoff from forested areas.

# Activities that contribute to nutrients in lakes:

- Use of lawn & garden fertilizers.
- Faulty septic systems.
- Using soap in or near the lake.
- Soil erosion.
- Dumping or burning leaves in or near a lake.
- Feeding birds and wildlife.

The nutrient phosphorus is food for algae and other plants and is found in soils, septic waste, pet waste and fertilizers. When a lake receives extra phosphorus, algae growth increases dramatically.

Sometimes this growth causes algal blooms, but more often it results in small changes that, over time, damage the ecology, aesthetics and economy of lakes.

Riverside



## SEPTIC SYSTEMS & Water Quality Why it's important to properly maintain your system

Wastewater enters your septic tank from your house. Heavy solids sink to the bottom and greases, oils and lighter solids rise to the top to form a layer of scum. Naturally occurring bacteria decompose the biodegradable waste. Liquids flow out of the tank into the leach field, where bacteria, viruses and nutrients are removed. Eventually wastewater reaches groundwater.



#### Septic Tank

Improperly maintained septic systems can contaminate ground water and surface water with nutrients and pathogens. A properly designed, installed and maintained system will function well throughout its 20-30 year lifespan. To keep it functioning well and lengthen the life of your septic system, remember to:

- Keep up with regular maintenance
- Pump it out regularly (every 2-3 years)
- Conserve water
- Limit the use of garbage disposals
- Dispose of fats or greases properly
- Dispose of chemicals properly
- Direct runoff away from your leach field