

# Lake Life

The State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

August 6, 2009

His Excellency, Governor John H. Lynch  
and The Honorable Council  
State House  
Concord, NH 03301

APPROVED G & C  
DATE 8/19/09  
ITEM# 106

## REQUESTED ACTION

Authorize the Department of Environmental Services to enter into an agreement with the Baboosic Lake Association, Amherst NH, VC #156302, in the amount of \$78,000 to complete the *Baboosic Lake Watershed Stormwater BMP Implementation, Phase 2* Project effective upon Governor and Council approval through December 31, 2011. 100% federal funds.

Funding is available in the account as follows:

	<b><u>FY 2010</u></b>
<b>03-44-44-442010-2035-072-500575</b>	<b>\$78,000</b>
Dept Environmental Services, NPS Restoration Program, Grants-Federal	

## EXPLANATION

The Department of Environmental Services issued a Request For Proposals (RFP) for the 2009 Watershed Assistance and Restoration Grants program. The proposal process is a two-part process involving pre-proposals, and full proposals. Fourteen pre-proposals were received. The pre-proposals were ranked based on the criteria included in the RFP: water quality benefits, commitment of local support, clarity of project outcomes, tasks matching goals, and overall quality of the proposal. The seven highest ranking organizations were invited to attend an interview with DES staff to further discuss the proposed project, and then invited to submit full proposals. Based on results of the interview, quality of the full proposal submitted, and available federal grant funding, all seven projects were selected to receive funding. Please see Attachment B for a list of project rankings and review team members.

The DES Watershed Assistance Section focuses on the reduction of non point source (NPS) pollution. NPS pollution occurs when rainfall, snowmelt, or irrigation water runs over land or through the ground, transporting materials which are then deposited into rivers, lakes, and coastal waters, or introduced into the groundwater. Pollutants can include chemicals, sediments, nutrients, and toxics. These materials can have harmful effects on drinking water supplies, recreation, fisheries, and wildlife. Land development or changes in land use can also cause NPS pollution by disrupting the natural hydrology of a water body, increasing impervious surfaces, and contributing to the loss of aquatic

habitat. Watershed Assistance programs address NPS pollution by managing land use and drainage on a watershed scale.

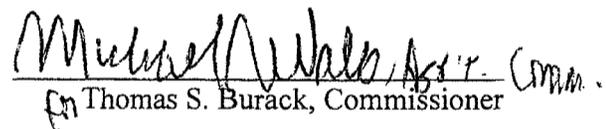
Baboosic Lake is a 221.9 acre natural lake situated on the boundary between the towns of Amherst and Merrimack, New Hampshire, with its watershed of 1,536 acres extending into both towns. Routine water quality monitoring has indicated a continuing deterioration in water quality and clarity. Over the past several years there have been several algae and cyanobacteria blooms. In 2008, Baboosic Lake was listed as impaired on the NH 303(d) for cyanobacteria and *E. coli*. A previous grant assisted the Baboosic Lake Association (BLA) with completing a comprehensive watershed management plan. The plan assessed and quantified the water quality issues in the watershed and provided a prioritized plan for addressing those issues, including setting a goal for phosphorus loading and methods to attain that goal. The plan identified locations of uncontrolled road runoff through inefficient storm drains, ditches, culverts and basins in the watershed, which was contributing high levels of nutrients, phosphorus, and sediment to the lake.

There were 17 priority sites identified in the watershed management plan. The BLA has completed the implementation of best management practices (BMPs) at four of the priority sites, and an additional site BMP was completed by the property owner. These BMPs include stormwater treatment methods such as infiltration trenches, vegetated buffer strips, bio-retention cells, and rain barrels. This project will implement BMPs at the 12 remaining priority sites. The project will also include an outreach component which will allow the BLA to continue educating residents regarding the connection between land use, maintenance and water quality.

The outcome of the project will be demonstrated through continued monitoring, modeling of pollutant load reductions, photo documentation of BMP implementation, and submission of regular progress reports and a comprehensive final report.

The total project costs are budgeted at \$130,026. DES will provide \$78,000 (60%) of the project costs through a federal grant and Baboosic Lake Association will provide the remaining costs through cash and in-kind services. A budget breakdown is provided in Attachment A. As required by Section 319 of the Clean Water Act, federal funds provided to this project must be matched by a local, state, or private share of at least 40 percent. In the event that federal funds become no longer available, general funds will not be requested to support this program.

The agreement has been approved by the Office of the Attorney General as to form, execution, and content. We respectfully request your approval.

  
for Thomas S. Burack, Commissioner

## **BLA Awarded \$78,000 Grant**

As you can see by the two previous pages, we have some very good news to report to you all. We finally made it through the paper work, interviews and what ever else they could throw at us, but in the end we finally got approval on our grant request. We were up against some stiff competition; there were 14 entries for this round of grant funding. Out of those 14 only 7 were selected with the Baboosic Lake Association coming in second just behind the city of Concord. Now the real work begins.

During the next 6 months the whole board will be busy doing all the prep work to get ready to start construction on the rest of the remaining sites that need to be fixed. They will be getting design plans made, getting estimates, lining up volunteers, materials and construction equipment so we can be off and running come spring/summer of 2010. There should be plenty of work going on around the lake next summer. Also during the off-season the board will continue to seek alternative funding to continue the improvement of this lake. It is our goal to get Baboosic Lake off the states Impaired Water Body list. Remember, money and resources are very tight right now and to achieve our goals will require innovative thinking. If you have any suggestions/ ideas please feel free to contact any board member or send email.

## **2009 Social Recap**

There was a full slate of social events this summer. Boat parade, sail boat race, cardboard boat race, Baboosic Lake Olympics, 2 ice cream socials and the annual cookout with raffle and games. The boat parade only had two boats. First place went to Gilligan's Island (Riedel/Willett crew), second place Grilling (Lenny nation) and third place went to the person who wore a gorilla suit on Gilligan's Island around the entire lake on that hot day. The sail boat race had only one boat. Rick Boyd being a good sport completed the entire course to take the trophy. The first ice cream social was lightly attended with the second one picking up a little more steam. The cardboard boat race and Olympic day were held down on 4 Season's beach. All participants seemed to be having a great time.

The annual cookout looked to be in jeopardy with a storm blowing through. We had a down pour for about 20 minutes then the skies cleared and turned out to be a beautiful day. Everyone chipped in to help get things set up on time. BML catering worked right through the rain preparing the food and had it ready right on time. Once again CYJ were great hosts helping us wherever they could and also providing plenty of chairs for all of you to sit down and eat. Further in the newsletter you will see a list of contributors who provided donated items to be raffled off to help raise funds, you can find this contributors list in the social section of the web site at: <http://baboosiclake.com> We rely on all your donations to fulfill our mission; your support is critical to the health of Baboosic Lake.

# Help Prevent Stormwater Runoff

By:

**Slowing it Down  
Spreading it Out  
Soaking it In**

How you can help

*A simple solution that you can do yourself*



*Left: Since most of the water that flows off this roof top is not able to sink into the hard compacted lawn and soil below, it flows across the lot picking up soil and other pollutants before flowing into the lake.*

*Right: A dripline trench was installed to catch water that runs off the roof allowing it to sink into soil below instead of running downhill and picking up pollutants before flowing into the lake.*



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The above project was done over the course of the weekend at the BLA President's home. We were experiencing a lot of erosion from roof runoff, which was flowing right into the lake. We used  $\frac{3}{4}$  inch natural stone on both sides of the house. So far so good since the project was completed we have eliminated the erosion problem. Remember little things like this only help to improve the lake over the course of time.

## 2009 Water Testing Results

### E-coli Water Testing



Location	July/August 2009	
	Map Code	E-coli July-Aug
Hillside	1	17 25
4 Seasons	2	39 6
Greenwood/Lakeside	3	3 21
Oliver's Pipe	4	3 6
Carter Road	5	4 6
Jebb Road	6	1 16
Far Cove	7	1 2
Seagull Heaven	8	8 11
Washer Cove	9	28 9
Moonbeam	10	11 28
Amherst Town Beach	11	45 20

**\*\*Please note - counts higher than 88ppl will be retested\*\***

**Also please remember not to feed the ducks and geese. Their waste contributes to higher e-coli counts**

### Education

Part of our mission on the board is to continue education on what we can all do to help preserve and protect Baboosic Lake. On that note I have contacted NH lakes education director Andrea LaMoreaux, if you remember she spoke to us at one of our annual meetings. Since then she has been writing very informative and educational articles that pertain to many of the problems that are plaguing NH Lakes including ours. Andrea has offered to let us use these articles in our newsletter and post them on your website: <http://baboosiclake.com> The first article we have for you to read is about phosphorus and you should know that it is very bad for the lake. Hopefully you will take the time to read these articles and be able to gather something out of them to use in your everyday lives around the lake. If you choose you can check out more of these at [nhlakes.org](http://nhlakes.org)

# Protect Your Lake: Choose To Be Phosphorus-Free!

by Andrea LaMoreaux  
NH Lakes Education Director

Did you know that no matter where you live, whether you live along the shoreline of a lake, river, or stream, or if you live miles away from the nearest water body, what you do in your home and on your property ultimately affects the quality of your favorite lake?

The number one source of pollution to New Hampshire's freshwater is phosphorus pollution, and most all of us, whether we realize it or not, contribute to this source of pollution through our daily activities. Phosphorus pollution causes algae blooms and even toxic bacteria blooms in our lakes, rivers, and streams. Luckily, there are at least two very simple things you can do in your home and on your property to reduce your personal contribution to phosphorus pollution.

## **Choose phosphate-free automatic dishwashing detergents.**

Phosphorus, usually in the form of phosphates, has historically been one of the main ingredients in household cleaning detergents. However, in 1994, at the urging of NH LAKES and others, the New Hampshire Legislature passed a law restricting phosphates to trace amounts (less than 0.5 percent by weight) in all household cleaning products *except* for automatic dishwashing detergents. At that time, there were no readily available phosphate-free automatic dishwashing detergents that did a good job at getting dishes clean.

During the 2009 legislative session, NH LAKES, in conjunction with Representative Sue Gottling from Sunapee and the New Hampshire Department of Environmental Services, successfully passed a bill that adds automatic dishwashing detergents to the statewide ban on household cleaning products containing phosphorus. Last Wednesday, if you passed by the town docks in Meredith just after 10 a.m., you would have seen Governor John Lynch singing this new lake protection measure into law—starting in July 2010, household automatic dishwashing detergents sold in New Hampshire will be phosphate-free! This law will surely help protect our lakes, including your favorite lake, from phosphorus pollution, helping prevent the occurrence of unsightly, foul-smelling algal blooms and toxic bacteria blooms.

Until this important law takes effect in July 2010, please choose to protect your lake by purchasing automatic dishwashing detergents that do not contain phosphate. Read the product labels closely—if it doesn't claim to be "phosphorus-free" or "phosphate-free," it probably contains phosphorus. Fortunately, now there are many automatic dishwasher detergents available that do not contain phosphates. The August 2009 issue of Consumer Reports rated automatic dishwashing detergents and recommended the phosphate-free brands of Method (<http://www.methodhome.com/product.aspx?page=15529>) and Simplicity

<http://www.simplicityclean.com>). **Please make it your choice to find a phosphate-free dishwashing detergent in your local supermarket and use it in your home!**

**Choose phosphorus-free lawn fertilizers.**

Another easy way to reduce your personal contribution to phosphorus-pollution is to not use fertilizers on your lawn since most conventional fertilizers contain phosphorus. The typical New Hampshire lawn doesn't even need phosphorus—so why waste money on fertilizer in the first place?

If you must use fertilizer, remember that the NH Comprehensive Shoreland Protection Act prohibits the use of fertilizer within 25 feet of lakes and rivers, and between 25 and 250 feet from shorelines, allows the use of slow release, low-phosphate fertilizers only.

Instead of waiting for a new law that prohibits the use fertilizers containing phosphorus in all areas of your watershed, **please make it your choice to use a fertilizer that is phosphorus-free.** On every bag or box of fertilizer, there should be a string of three numbers. Make sure that the middle number, which indicates the phosphorus content, is "0."

**Want to learn about more household pollution prevention tips?**

For more pollution prevention tips about how you can reduce the amount of pollution that your household generates, and to do your part in protecting the environment while improving the quality of life for you and your family, visit the New Hampshire Department of Environmental Services Pollution Prevention for Households Program website at <http://des.nh.gov/organization/commissioner/p2au/pps/pphp/index.htm>.

NH LAKES is a statewide, nonprofit, member-supported organization headquartered in Concord. The organization is dedicated to protecting New Hampshire's lakes, which are integral to the quality of life and economic health of the State. NH LAKES serves as a source of information about lakes and lake issues through educational materials and programs, and through its work with state legislators advocating on issues of water quality, boater education and boating safety, invasive species prevention, appropriate public access and a balance of lake uses.

For more information on the organization's lake protection efforts across the state and how to help, please visit [www.nhlakes.org](http://www.nhlakes.org) or contact (603) 226-0299. To receive NH LAKES' free monthly e-news blast, *Shorelines*, full of interesting lake-related information, sign up on the website

## **Special Thanks for Donated Items**

We appreciate the generous donations of the following people and companies who provided prizes and services that helped make the picnic a huge success.

Pasta Loft

Weathervane

Moulton' Market

Tulley Buick Nashua

Medlyn Motors Milford

Blowin Smoke

Bedford Prime Meats

Grenons Trading Co

Pizza Mia

Granite State Boat Works

Hannaford

Stoneriver Outfitters

Bernie Shedd

Elaine Engelhardt

Jane Wenzel

Richard Sullivan

Camp Young Judaea

## **Baboosic Lake Association Sponsors**



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