



# TPPA Newsletter

Volume 3 , Issue 1

April, 2009

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## President's Message



By the time you receive this news-  
letter I will be back home in Mil-  
ton enjoying the lakes and  
working with my TPPA colleagues.  
This winter, while I was enjoying  
the Florida sunshine, certain TPPA  
members were working hard to  
plan parts of our "Stop Feeding the  
Bear" program. We owe our grati-  
tude to Bob Myrick, Mike DuBois,  
Jeff Everett, and Wayne Sylvester

for their work planning our first  
Watershed Survey which will cover  
the Townhouse Pond area; and to  
Mike McDonnell for his work to  
broaden the scope of our water  
sampling program.

TPPA is an all volunteer nonprofit  
organization. We are fortunate to  
have a fine group of board mem-  
bers, and volunteers who man our  
weed watcher, water sampling, and  
boat inspection programs. We  
could not function without their  
help. Watershed surveys will re-  
quire even more volunteers.  
All lakes age with time. Most New  
Hampshire lakes are approximately  
15,000 years old and have been  
going through a natural process of  
filling in over thousands of years.  
Humans can accelerate the natural  
lake aging process by increasing the

amount of nutrients (particularly  
phosphorus) and sediment that  
would naturally flow into a lake  
from the watershed. If we're to  
succeed in extending the useful life  
of our lakes we must find ways to  
decelerate this aging process. Our  
planned watershed surveys will  
help in this regard. We hope that  
all of you who live in the Milton  
Three Ponds watershed will sup-  
port these surveys, and we also  
hope that many of you will volun-  
teer to be surveyors.

I'm anxious to get back to Milton  
and am looking forward to seeing  
my summer friends and neighbors,  
and TPPA colleagues with whom  
we will continue to work to pre-  
serve the quality of our Three  
Ponds.

Norm Turgeon

## Around The Waterfront – Spring Clean Up

by: Amy Craig Riefenstahl TPPA Member  
Principal of Craig Environmental Design



Picture by: EnergyScapes Inc.,  
Minneapolis, MN

It's that time of year again when  
we come out of hibernation, wake  
up to the sun on our faces, song-  
birds in the air and the hope for  
summer days returns. It seems  
instinctual that after the realization  
of spring we feel the intense need  
to pick up a rake and hoe, picking

up sticks, raking leaves- neatening  
our yards.

This year while at the task at  
hand, consider making a few chang-  
es to your annual routine for the  
sake and health of our watershed.  
It will make a big difference to  
those that depend on our water-  
shed, including us. We're all part  
of the greater Milton Three Ponds  
watershed and everything we do  
impacts the water quality and our  
ultimate enjoyment of the Lake.

By taking the following few steps  
we can have a large impact on im-  
proving the Lake's water quality  
while reducing our yard mainte-  
nance time. Who doesn't want to  
spend less time doing those habitua-  
l tasks that take us away from the

reason we live by the Lake. With-  
out our help, the Lake will become  
increasingly unhealthy, with toxic  
levels of nutrients and invasive noc-  
uous weeds that impact our shore-  
lines. These elements result in  
poor water quality, an inability to  
support fish and wildlife well, and a  
major impact on our recreation  
and property values.

As landowners there are a few  
easy things we can do to prevent  
this. Believe it or not one of the  
best things we can do is to reduce  
runoff into the lake. When it rains  
or the snow melts in spring, water  
flows down hill into the lake. It's  
our goal to slow down the water

Spring - continued on p. 5

## Watershed Surveys

By Mike Dubois



As many of you know, TPPA plans to conduct surveys of the Three Ponds watershed, beginning with the Townhouse Pond watershed on May 30<sup>th</sup> of this year.

The purpose is to locate soil erosion sites on roads and other developed areas that may be having an adverse impact on the lakes. Results will be used for designing remediation projects, making recommendations to home owners, and seeking grant money for future surveys and remediation projects.

A committee of Wayne Sylvester, Jeff Everett, Bob Myrick and Mike Dubois has been planning the Townhouse survey over the past few months. These 4 people and 6 other TPPA volunteers received watershed survey training at Lovell Lake last September, courtesy of the Acton Wakefield Watershed Alliance. This training consisted of two hours of classroom time followed by hands-on field work, in groups of four led by an experienced surveyor. All who participated agreed that it was a fun and informative day, both for the surveyors and also for participating property owners.

It's great that we have ten trained volunteers ready to lead our surveys; but we need at least twice that many more in order to succeed with our Townhouse Pond survey. So, if you haven't already done so, please contact Norm Turgeon (603 652-7863) or any of the committee members, and let us know of your willingness to serve as a volunteer surveyor on 30 May. You'll be glad you did.

With help from Wendy Garland and Joe Anderson of the Maine DEP and Sally Soule of the NHDES, we will train all volunteer surveyors at the Emma Ramsey Center starting at 8:45 AM on the morn-

“please .... let us know of your willingness to serve as a volunteer surveyor on 30 May. You'll be glad you did.”

ing of the survey. Volunteers will then be assigned to a group leader and sent out to conduct the survey, equipped with a map showing property owner names and addresses, survey forms, a GPS device, and a digital camera. Any properties not surveyed on the 30<sup>th</sup> will be done on the following week. The Emma Ramsey center will be open all day with refreshments provided by TPPA. At 3 o'clock all survey teams will turn in survey materials and download photographs.

Once all the data is collected it will be analyzed and summarized in a report, which will become part of our Watershed Management Plan. For each erosion site, the report will identify types of remediation actions that would be helpful to re-

duce harmful nutrients and pollutants from entering the lakes. This information will be made available to the property owners involved. It will also serve as a basis to obtain grant funding to assist in accomplishing the remediation projects.

Some of you have expressed concern that our surveys may identify non-compliances with State regulations or local zoning ordinances, leading to citations by enforcement agencies, and the requirement for costly corrective action levied on to property owners. We can only say that survey results will not be used for such purposes. TPPA is not an enforcement agency, nor are we acting as representatives of any such agency. We're just looking to find ways to prevent further degradation of the quality of our waters and the resulting decline in our property values. That's what TPPA is all about. So why not give us a hand?



Photos are of erosion sites observed at Three Ponds

## Recycle This!

### Ideas for a Cleaner Environment

A publication of the New Hampshire Department of Environmental Services, Concord, NH (603)

If you are reading this on paper, my hope is that you recycle it when finished. Recycling, after all, is more than the environmentally right thing to do; it saves you money on your local tax bill. Yes, our towns save money through recycling. In 2007, it cost New Hampshire towns and cities \$116 million to dispose of waste, yet every 1 percent increase in the recycling rate represents at least a savings of \$1 million!

Recent news reports, however, have indicated that there is no market for recyclables — these reports are wrong! Recyclables are still a valuable commodity, despite their lower market prices. We should not forget the environmental benefits of recycling vs. landfilling our wastes. With an average cost of \$75 per ton for disposal, not including transportation, the cost avoidance is still substantial and makes recycling still attractive.

Recycling paper is particularly easy. Did you know that almost 35 percent of the waste stream is paper and paper products? Yet nationally, we only recycle 51 percent of the available paper. In New Hampshire, only 19 percent of the available paper is recycled. The American Paper and Forest Products Association reports that at least 75 percent of all paper is recyclable, so

**Recycle** – continued on p. 6

## How did this happen? A cautionary tale.

From LEA Lake News - Fall 2008



— Photo courtesy of Margaret Poulin



— LEA photo

*Editor's note: This interesting story illustrates how legal loopholes, lack of state staff, and errors by some code enforcement officers can compromise Lake protection.*

*LEA (Lakes Environmental Association) is a non-profit organization formed to protect Maine's western Lakes.*

When the Songo River Queen sailed past Jim Gratello's dream house on Long Lake, 120 sixth graders all gasped at the same moment.

Since 1992, the Hey You! cruises have served as a hands-on demonstration of the lessons taught in LEA's "Living Connections" classes. Students have great fun, shouting "Hey You!" at people (LEA staff and volunteers) who are pretending to do something harmful to water quality, such as cutting lakeside shrubs or spreading fertilizer.

But at that moment on the June 2007 cruise, the sixth graders didn't yell at all. They knew they were looking at a real problem, one Mike Morse, assistant shoreland zoning coordinator at the Department of Environmental Protection would later call "an abomination of shoreland zoning."

"The kids knew it wasn't part of the act. But it was so obviously wrong that everybody on the boat was stunned," said Peter Lowell, LEA executive director." The shoreland zoning laws and the Natural Resources Protection Act were set up to protect our lakes. In this case, they malfunctioned."

The previous house on the property was built by Phil Chute, LEA's first president, and his father in the 1930s. Chute and his wife, Maggie, winterized the cottage in

1998. He died in 1990, and in June 2006, she sold the cottage and lot, which is slightly less than one acre and has 100 feet of shore frontage, to Gratello.

"It was absolutely heavenly, and I hated to sell it," she said. "But I couldn't afford it any more. It broke my heart, because it's the most perfect spot on the whole lake. You can see the village but it's far enough away so you don't have the noise. And it has the most incredible sunsets."

Gratello is a former mayor of Biddeford and co-owner of Joker's and the Portland Sports Complex. After two years, his new home is unfinished, so he lives in its guesthouse, nicknamed "the Cubbyhole." He is under orders from DEP and the new Naples, code enforcement officer to restore the shoreland buffer that disappeared during construction. The problems on the property, he said, resulted from one "misunderstanding" after another.

"I hope this is going to help everybody in the future and this process - this frustrating process! - will be eliminated," Gratello said. "Because I'd hate to see anyone go through what I've gone through the past two years."

Soon after the June 2007 cruise, LEA contacted DEP about the problems at the site. It was September 12, before Morse and Jeff Kalinich, of DEP's Bureau of Land and Water Quality, met with Gratello and John Thompson, then Naples code enforcement officer, at the building site. (Thompson, who has since resigned as CEO, did not return a phone call last week asking for his perspective on this case). Lowell and Colin Holme, LEA field services director, also were present.

The next day Morse sent Thompson a letter of warning, saying the CEO should have required Gratello to set the new house 100 feet or "to the greatest practical extent" away from the shore as required by law. According to the letter, Thompson admitted he also was "in error" when he calculated how much bigger the new house could be. Morse recently called it "a blatant disregard of the terms of the ordinance by the town," but Gratello got to keep his expanded house near the shore.

"He (Thompson) didn't have the jurisdiction to go back and revoke the guys permit," Morse said. "All we could do is say, 'town that was a bad decision,' and pursue whatever we can pursue with the town so it doesn't happen again in the future."

The problems, however, didn't end there. During construction of Gratello's new home, the plant buffer between the house and lake disappeared. Shrubs, bushes and groundcover protect Maine's lakes by serving as filters and purifiers for sediment and nutrient-laden runoff. That's why shoreland zoning laws require that the buffer zone be left undisturbed.

"Everything between the existing building and the lake should have been left exactly the way it was," Lowell said. "But what happened was the construction vehicles destroyed the buffer because, as Mr. Gratello said, all the fill from the foundation got dumped in the buffer. That's the total opposite of what should happen."

At their September 2007 meeting, Gratello was told he must replant the buffer zone. A week later, LEA's Colin Holme provided (free) a detailed mitigation plan explaining just how the buffer should be restored, and how runoff and erosion also should be prevented behind the house. Morse said he had Thompson's assurance that the buffer would be replanted.

"There's a certain expectation when the CEO says, 'Yes, we'll take care of this'", Morse said. "I can't hand-hold, everybody."

Yet, when the June 2008 Hey You! Cruise went past the property, Gratello's buffer zone was not restored, and he had added a retaining wall 10 feet in front of the house.

**Cautionary Tale** - continued on p. 4

**Cautionary Tale** - continued from p. 3

The Gratello house during construction in 2007

LEA again contacted DEP. Morse checked the site on September 18, and found that behind the retaining wall was a 10- by 39-foot "patio" and that Gratello also had a new dock, made up of two sections that created a 12- by 15-foot contiguous area. The law only allows a six-foot dock.

So Morse talked with the Naples CEO, Boni Rickett, who succeeded Thompson last June. Rickett sent Gratello a notice of violation dated October 7, 2008, telling him he must take corrective measures by November 21, including replacing trees and shrubs and reconfiguring the dock, or he would face a \$2500 fine. She did not mention the patio or wall.

On October 21, Morse told LEA the patio and dock must be removed and the buffer replaced and that he would be discussing that with Rickett.

When the LEA talked with Gratello October 30, he said he had completed "90 percent" of Holme's mitigation plan, but ran out of money before he could restore the shorefront. He also said he'd received a permit from DEP's Kalinich to build the wall and "there is no patio. It's just crushed rocks."

On November 4, Morse, Rickett and Lowell met with Gratello at his Long Lake home. Morse said that Gratello had been issued a permit by DEP for the wall, under the Natural Resources Protection Act.

"Maybe the DEP shouldn't have issued it," Morse said, "but if the town had done what it was supposed to have done under its own shoreland zoning ordinance, there wouldn't have been a problem."

After a lengthy discussion, it was agreed that Gratello would:

- Make sure the new dock doesn't go past the existing concrete dock.
- Replant the lawn area in front of the house with about 30 shrubs.
- Replant two trees of birch, red oak or maple.
- Replant shrubs in the patio's corner and install a 3-foot ornamental border along the retaining wall, allowing only a 6-foot wide path.

"That should take care of everything," Rickett said. "It seems like a fair compromise." Gratello agreed, adding, "I didn't get everything I wanted, but that's the beauty of a compromise."

Morse thought "under the circumstances, looking at the pre-existing conditions closer and considering some of the town's actions -or lack of actions -I think it's the best solution for all of us. The best we can live with."

But Lowell left thinking this case illustrates how legal loopholes, lack of state staff and errors by some CEOs compromise Lake protection.

"The fact that DEP can issue a permit under the Natural Resources Protection Act for something that's illegal under shoreland zoning and the fact that code officers occasionally - or routinely in some cases - will give tacit approval to situations like that, creates a fertile ground for this kind of confusion and abuse of the laws," Lowell said. "The answer really is to coordinate the laws and it should have been done years ago."



Jim Grattello, left, on patio with Mike Morse and Peter Lowell

## Frequently Asked Questions

### NH Comprehensive Shoreland Protection Act (CSPA)

from NH DES Website

#### What is the Comprehensive Shoreland Protection Act (CSPA)?

The CSPA (RSA 483-B) was originally enacted into law in the 1991 session of the Legislature. The act established minimum standards for the subdivision, use and development of the shorelands along the state's larger waterbodies. In April and July of 2008, the act was amended and several changes took effect including limitations on impervious surfaces, new vegetation maintenance requirements and the establishment of a permit requirement for many, but not all, construction, excavation and filling activities within the protected shoreland.

#### Where is the protected shoreland located?

The protected shoreland extends 250 feet landward from the reference line of protected waterbodies.

#### What activities require a shoreland permit?

New construction or construction that modifies the footprint of existing impervious surfaces on a lot within the protected shoreland, using mechanized equipment to either excavate, remove or form a cavity within the ground within the protected shoreland and filling any area within the protected shoreland with rocks, soil, gravel or sand requires a shoreland permit.

#### What activities DO NOT require a shoreland permit?

Many activities within the protected shoreland have been identified as not requiring a shoreland permit because the activity does not constitute construction, excavation or filling. These activities include, but are not limited to:

- Trimming, pruning, and thinning of branches to the extent necessary to protect structures, maintain clearances, and provide views.

CSPA FAQ - continued on p. 6

**Spring** - continued from p. 1

so that it absorbs into the ground first! The ground acts like a sponge, collecting the water and filtering it before it enters the lake. Unfortunately, with an increase in development around the shoreline the porous ground has been reduced, so we need to improve and protect what's left.



Drawing by: Lauren Chase Rowell, Nottingham, NH

**Exposed ground is vulnerable ground**

- Some of us spend hours each year raking the pine needles and leaves off open areas to create bare soil. This year, try to eliminate exposing soil and choose carefully what you rake. Even pine needles slow water down and help it become absorbed into the ground. So keep your soils covered.

**Plantings, plantings, plantings** - Historically, natural lakeside settings in the northeast were covered with a vegetative layer. If we mimic nature, our lake will be healthier for it. Try to protect and enhance any area on your property that has plants. The more plants you have the greater the total root mass and canopy area, which is key to slowing down runoff. An area with trees, shrubs and ground-cover has many levels in which raindrops can disperse and that action helps reduce waters force, allowing it to be absorbed. The roots of the vegetation trap the water and take it up into the plant for nourishment. If you think about it, we don't water our native trees and plants, so if we preserve them on our property, we'll ultimately reduce maintenance time.

**Create a vegetative shoreline buffer**  
- We all want a large sandy beach at the

waters edge to relax and swim by, but ecologically beaches increase runoff and devoid the valuable shoreline of habitat, food, and shelter for wildlife. This year, consider how much beach you really need or whether you might be happy with a perched beach (off shoreline beach) or a natural open area instead. Creating a vegetative buffer along the shoreline is one of the best actions you can take for the lake. Just a 5-10 foot depth of vegetative buffer along the waterfront can tremendously increase water quality through filtration. It will cut down on nocuous weeds and algae in the water, prevent erosion along the shore and vastly improve wildlife on the lake such as birds and big bass.

**Keep run-off pollutant free** - Another important thing we can do is to make sure that the water running off our property into the lake is pollutant free. Everyone loves a lawn, it's part of our heritage, but lawns are not ecologically natural to lakefronts and therein lies the problem. They are one of the biggest contributors to excess nutrient in lakes, which cause algae

blooms and toxic water quality. The reason for this is our need for green in the form of fertilizer.

If you can accept an unfertilized lawn, then save yourself time and money and feel good about it. If green is your favorite color then consider these few tips:

- Get your soil tested and only fertilize for the nutrients your lawn needs.
- If you can only find blended fertilizers, use one that's low in phosphorous because excess phosphorous causes algae blooms.
- Only apply as much fertilizer as you need. Over fertilizing only runs off into the lake. Slow release fertilizers and organic varieties are best. Check your local garden supply store for the best tips.
- Fertilize in spring and fall only when the grass is green and not in summer when grass is dormant and the lake is most vulnerable.
- Do not fertilize within 25 feet of the high water mark.
- Lastly, consider reducing or eliminating the size of your lawn. Lawns are appealing, but all that mowing

Try these few suggestions and you will make a big impact on our lakefront and have more time and money to enjoy it. For more information about how you can be a good steward of the lake contact the University of New Hampshire Cooperative Extension or visit them on line.

Honestly, I just heard the Ice Cream truck go by. Spring is here!

**The NH RSA 483-B COMPREHENSIVE SHORELAND PROTECTION ACT specifies that:**

**Low phosphorus, slow release nitrogen fertilizer may be used for the area that is beyond 25 feet from the reference line. No fertilizer, except limestone, shall be used between the reference line and 25 feet.**

**ANY fertilizer you feel you need to use.  
BE SURE IT'S A "0" PHOSPHOROUS FERTILIZER  
by being sure the middle number in the 3 shown on every bag is a ZERO.**

**Mark Your Calendars !!**
  
**TPPA ANNUAL MEETING and PICNIC**
  
**Everett Cove Marina**
  
**6:00 PM on Thursday, 25 June 2009**

**Recycle** - continued from p 2

both nationally and locally, we have a long way to go. Perhaps it's because many mistakenly believe that some paper like the glossy newspaper inserts or the envelopes with the little seethrough windows are not recyclable. Basically, the rule of thumb for paper recycling is that if you can tear it, you can recycle it. Don't have paper recycling at work or school? Encourage your company or school to set up a recycling program and volunteer to help. Remember, it all benefits you and your community.

How about plastic? Only 23 percent of the plastic bottles made are recycled; the rest go into landfills, or worse. Plastic water and soda bottles save energy because they are so light and easy to transport, but every time we throw them away, we lose the oil that it took to make them. In a 2007 CNN survey of American beliefs about recycling it was discovered that as much as 72 percent of Americans didn't know that plastic is an oil-based product –

around 10 percent of US oil consumption goes into making plastic. Additionally, 40 percent of those surveyed thought that plastic biodegrades, whether it's underground, in landfills, or, incredibly, out at sea. (By the way, it doesn't break down in the environment.) Plastic recycling is easy and your local transfer station is the best place for it.

Finally, you can compost your food waste. About 13 percent of the waste stream is food waste. Most of it, with the exception of meat, milk and eggs, can be composted. You can buy compost bins at most garden centers, which come with very good instructions on how to make a great soil amendment from waste food.

During August and September, the value of recyclables hit all time record highs. Copper metal went to \$3.60 a pound and aluminum beverage cans topped out at \$1.05 per pound. Some grades of scrap steel were close to \$600 a ton. However, as the worldwide economy began to slow down, the markets for recyclables also

collapsed. China, the primary market for paper, stopped buying scrap paper and began to work off inventories. The top five steelmaking countries, India, Japan, China, Russia and Turkey also reduced purchases of scrap metal. While the value received from the sale of recyclables has been reduced, the spot market prices in late November and early December are more like those in 2006, before the run-up in the price of oil fueled speculation in other commodities. The price of recyclables, like other commodities, became inflated and have now simmered down to more sustainable levels.

Until the surplus inventory is worked down, certain items, such as scrap paper, will actually cost money to recycle. But now, as in past recessions, that will change. The bottom line, regardless of the economy, is that recycling is great for the environment, and it reduces the cost to your town for waste disposal, which saves you money on your taxes.

**CSPA FAQ** - continued from p. 4

- Maintenance of legal, existing, altered areas, such as mowing lawns, raking leaves and pine needles, mulching landscaped areas and haying fields.
- Planting one or more trees within existing altered areas more than 50 feet from the reference line with mechanized equipment.
- Planting of non-invasive vegetation and maintenance of existing gardens.
- Hand-pulling or use of hand tools to remove invasive species or other noxious or harmful plants such as poison ivy, including the root systems, provided that any area exceeding 10 square feet without vegetation be replanted with non-invasive, non-harmful species.
- Placement of stepping stones, provided no root systems are removed to accommodate their placement.
- Placement or installation of readily moved items such as picnic tables, lawn chairs, and swing sets.
- Construction or installation of fences using hand tools.
- Maintenance, repair or modification of an existing driveway, including repaving, provided that there is no increase in impervious area.
- Maintenance, repair or modification of an existing primary or accessory structure that does not:
  1. Alter the footprint or impervious area of the structure.
  2. Require, or result in, the alteration of previously unaltered areas.
  3. Increase the number of residential dwellings on the property
- 4. Require, or result in, any excavation or filling within the protected shoreland
- 5. Exceed the criteria of the Shoreland Rule (Env-WVq 1405) associated with accessory structures.
- Modifications to an existing structure that minimally changes the outside dimensions of the structure, provided the work does not require excavation or filling such as installing a skylight or dormer or putting new siding over old siding.
- Installing private water facilities such as a well including associated connection lines.
- Forest management that is not associated with shoreland development or land conversion that is conducted in compliance with RSA 227-J:9.
- Forestry conducted by or under the direction of a water supplier for the purpose of managing a water supply watershed.
- Agricultural activities and operations defined in RSA 21:34-a and as governed by RSA 430.



**CSPA FAQ** - continued from p. 6

- Digging test pits for the purposes of determining suitability for wastewater disposal under RSA 485-A:29 relating to subdivisions or septic systems, provided there is no disruption of groundcover within 50 feet of the shoreline and no test pits within 75 feet of the shoreline.
- Replacing utility poles or guy wires using mechanized equipment, provided that appropriate siltation and erosion controls are used and all temporary impacts are restored.
- Digging test pits for the purposes of determining suitability for wastewater disposal under RSA 485-A:29 relating to subdivisions or septic systems, provided:
  1. There is no disruption of groundcover within 50 feet of

the reference line.

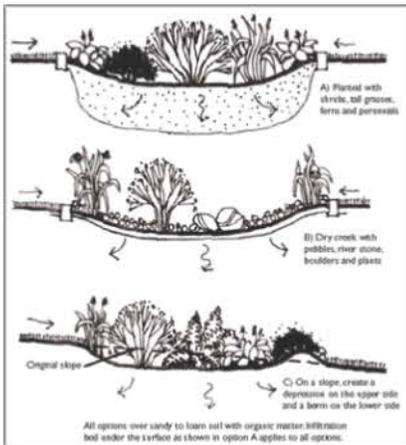
2. No test pits are dug within 75 feet of the reference line unless required in order to evaluate eligibility for replacement under Env-WVq 1003.10.
- Use of hand tools, such as augers or tile spades, to install monitoring wells, piezometers and flow meters , for:
    1. Evaluating site conditions as necessary for the submittal of information required by a permit application under RSA 482-A relating to wetlands, RSA 485-A:29 relating to subdivision of septic systems, or RSA 485-A:17 relating to alteration of terrain.
    2. Educational purposes.
    3. Monitoring hydrology.

## Rain Gardens

### Managing Runoff in your Yard (from Maine DEP website)

**Purpose:** Rain gardens are attractive and functional landscaped areas that are designed to capture and filter stormwater from roofs, driveways, and other hard surfaces. They collect water in bowlshaped, vegetated areas, and allow it to slowly soak into the ground. This reduces the potential for erosion and minimizes the amount of pollutants flowing from your lawn into a storm drain, and eventually into our streams and lakes.

**Installation:** Rain gardens can vary in size, but are most effective when built to 20-30% of the drainage area. Rain gardens



for single-family homes will typically range from 150 to 300 square feet, but even a smaller one will help reduce water pollution problems.

- ❖ The garden should be bowl-shaped, with the lowest point of the

more than 6" below the surrounding land.

- ❖ The sides should be gently sloping towards the center to prevent sudden drop-offs that could lead to erosion problems or walking hazards.
- ❖ Rain gardens are often placed in a pre-existing or created depression within a lawn, or in a location that receives roof runoff from a downspout.
- ❖ To avoid flooding improperly sealed foundations, build your rain garden 10' away from existing structures, and direct water into the garden with a grassy swale, French drain, gutter extension or other device.

Rain gardens can be placed in sunny or shady regions of your lawn, but plants should be chosen accordingly, with the lowest point planted with wet tolerant species, the sides closest to the center planted with moist tolerant species, and the edges of the rain garden should be planted with subxeric (moist to dry) or xeric (dry) tolerant plants. It is also important to check the permeability of your soil. Sandy soils only need compost added, but clay soils should be replaced with a mix (50- 60% sand, 20-30% topsoil, 20-30% compost). After construction of the garden is complete, the entire area should be covered with a thick layer of mulch, preferably Erosion Control Mix.

**Materials:** Replacement Soil mixes and Erosion Control Mix are available from local garden centers. Native plants can be purchased from your local nursery. Please see Native



**Before**

Plant Lists from this series for plant descriptions based on specific sun and soil conditions.

**Maintenance:** Overall, once plants mature, the maintenance of a rain garden is very low. Watering is important during the first growing season, and some weeding is necessary after planting. As the garden matures, some of the perennials may need to be divided if plantings become too crowded.



**After**



**TPPA**  
**P.O. Box 1242**  
**Milton, NH 03851**

**Board of Directors**

Norman Turgeon, President  
 Mike McDonnell, Vice Pres  
 Bob Myrick, Secretary  
 Steve Baker, Past President  
 Mike Dubois, Education  
 Linda Dame, Weed Monitoring  
 Dolly Shevenell, Water Sampling  
 Emery Booska, Conservation  
 Jeff Everett, ME Lake Hosts  
 Heidi Ford, Wildlife

**Visit our Website**

[www.threeponds.org](http://www.threeponds.org)

**Contact us**

[normturgeon@metrocast.net](mailto:normturgeon@metrocast.net)  
 Or mail to  
 TPPA  
 P.O. Box 1242  
 Milton, NH 03851

**TPPA Meetings** are on 4th  
 Thursday of each month, 7:00 PM  
 at Emma Ramsey Center.  
 All Members are encouraged to  
 attend.

**Three Ponds Protective Association**  
**New and Renewal Membership Form for 2009**

Name:

**Permanent**

Address  
 City  
 State  
 Zip  
 Phone  
 E-Mail

**Summer**

Address  
 City  
 State  
 Zip  
 Phone  
 E-Mail

Own Waterfront Property?    Yes    No

**Family Membership\***

- Supporter    \$15
- Sponsor    \$25
- Patron    \$50
- Benefactor    \$75
- Conservator    \$100

\* Individuals who cannot contribute one of these amounts may still become members. Whatever one can afford is sufficient. Members are encouraged to contribute by volunteering to work as an officer or action team member.

**Business Membership**

- Silver    \$50
- Gold    \$100
- Platinum    \$200

**Make checks payable to: TPPA**  
**Mail Application and Payment to:**  
**TPPA**  
**P.O. Box 1242**  
**Milton, NH 03851**