Panther Pond
Watershed Survey Report

Panther Pond Association

with support from

Maine Department of Environmental Protection
Cumberland County Soil and Water Conservation District
Raymond Waterways Protective Association

April 2004

The mission of the Panther Pond Association is to preserve a quality lake environment.

April 2004

The Board of directors of the Panther Pond Association is pleased to share with you the results of the Watershed Survey conducted last spring. Please study it and feel free to ask questions of any of the directors listed below.

With this completion of this project, the PPA has met its first challenge. It has defined its niche among several organizations charged with the care and protection of the area's ponds and lakes, especially the Raymond Waterways Protective Association (RWPA). The PPA has demonstrated its leadership by helping landowners develop a greater sense of ownership of Panther Pond, and it has formed a nucleus of dedicated people who will work to protect the pond's long-term viability.

Our second and enduring challenge is to help people solve the problems identified in the survey and even help people fix problems that were not considered serious enough to be included in the list of 84 sites, but that are of concern to the particular landowner. The details and timing of the programs to meet this challenge are described elsewhere in the survey. They include matching grants, technical assistance etc. Over the next year, the PPA will bring this information to the attention of its members.

Preserving a quality lake environment is a perpetual challenge. While Panther Pond's water quality continues to surpass state averages and there have been no reports of invasive plants, the pond is on the Maine DEP's list of the Lakes Most at Risk from New Development as well as its Nonpoint Source Priority Watersheds list due to the depletion of oxygen in the bottom waters of the lake - a condition linked to development pressure in the watershed and that threatens the lake's water quality if remedial actions aren't begun. The Panther Pond Association will continue to meet this challenge.

The report before you is the result of the unselfish dedication and hard work of the volunteers and of Wendy Garland of the DEP, Tamara Lee Pinard of the CCSWCD and of the RWPA which allowed its part-time environmental expert, Noralee Raymond, to spend considerable time on our behalf. We thank all of you.

Respectfully,

Gary Cox, President
Ben Severn, Vice President
Ginger Wallace, Environmental Officer
Ira McLain, Treasurer

Acknowledgments

The following people and organizations were instrumental in the Panther Pond Watershed Survey Project and deserve special recognition for their efforts:

Watershed Survey Volunteers

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Sharon Cox
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Valarie Lamont
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Sponsors

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Report Prepared by

Wendy Garland, Maine DEP

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When combined with many other similar sites throughout a watershed, even erosion from small sources such as this can have a significant impact on lake water quality.

Introduction

This report is specifically designed for citizens living in the Panther Pond Watershed. It provides the results and analysis of a soil erosion survey conducted in the Panther Pond Watershed in 2003. The survey was conducted in response to concerns about Panther Pond's water quality and a desire to preserve the pond's pristine quality for future generations to enjoy.

Panther Pond's Water Quality

Charlie Turner and other volunteers from the Raymond Waterways Protective Association (RPWA) have tested water quality in Panther Pond for more than 30 years. According to this data, Panther Pond's water quality is considered to be above average, and the potential for nuisance algae blooms is low. The long-time average water clarity is about 20 feet—about 5 feet clearer than the average Maine lake.

Despite these positive indicators, the bottom waters of the lake experience some oxygen depletion in late summer months. This oxygen depletion may be an early warning sign that the pond is under stress, and if this worsens over time, the pond's coldwater fish habitat would be impaired.

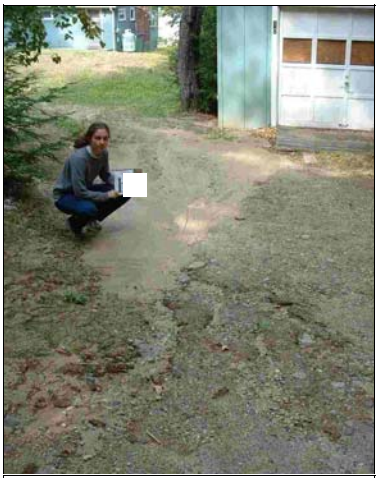
As a result of this monitoring data and the area's development trends, Panther has been placed on the State's *NPS Priority Watersheds* list, which means that the lake is threatened or impaired by polluted runoff, and the list of lakes *Most at Risk from New Development* under the Maine Stormwater Law.

POLLUTED RUNOFF

Also called NPS or nonpoint source pollution. Soil, fertilizers, septic waste, pet waste and other pollutants from diffuse, seemingly insignificant sources across the landscape that are carried into the pond by rainfall.

Why is the Water Quality at Risk?

The biggest pollution culprit in Panther Pond and other Maine lakes is **polluted runoff** or nonpoint source (NPS) pollution. Storm water runoff from rain and snowmelt picks up soil, nutrients and other pollutants as it flows across the land, and washes into the lake.



Runoff from roads and rooftops combine to erode and transport significant sediment to the pond.

In an undeveloped, forested watershed, storm water runoff is slowed and filtered by tree and shrub roots, grasses, leaves, and other natural debris on the forest floor. It then soaks into the uneven forest floor and filters through the soil.

In a developed watershed, however, storm water does not always receive the filtering treatment the forest once provided. It gathers with runoff from impervious surfaces like rooftops, compacted soil, gravel camp roads and pavement, speeds up, and becomes a destructive erosive force.

Although much of Panther Pond's watershed is still forested, the pond's near-shore area has been developed with over 300 seasonal camps and year-round homes, four youth summer camps, and an extensive network of unpaved camp roads. Runoff from these developed areas often washes directly into the lake.

Why is Runoff a Problem?

Excess **phosphorus** can "fertilize" a lake and lead to nuisance **algal blooms**.

The problem is not necessarily the water itself. It's the nutrients in the runoff that can be bad news for Maine lakes. Studies have shown that runoff from developed areas has 5 to 10 times the amount of **phosphorus** compared to runoff from forested areas.

The nutrient, phosphorus, is a primary food for algae and other plants and is found in soils, septic waste, pet waste and fertilizers. In natural conditions, the scarcity of phosphorus in a lake limits algae growth. However, when a lake receives extra phosphorus, algae growth increases dramatically. Sometimes this growth causes choking blooms, but more often it results in small, insidious changes in water quality that, over time, damage the ecology, aesthetics and economy of lakes.

Soil is the biggest source of phosphorus to Maine lakes. As every gardener knows, phosphorus and other nutrients are naturally present in the soil. So, we are essentially "fertilizing" Panther Pond with the soil that erodes from our driveways, roads, ditches, pathways and beaches.

Panther Pond's Watershed

The Panther Pond Watershed (Figure 1) covers 12.3 square miles in Raymond and Casco. All of the land within this area drains directly to Panther Pond through a network of streams, ditches and overland flow.

Crescent Lake, Raymond Pond and several other smaller watersheds also feed into Panther Pond via the Tenny River and Rolfe Brook.

Activities in this entire area—not just the shoreline areas—can affect Panther Pond's water quality. This survey documented soil erosion problems in Panther Pond's direct watershed.

The Raymond Conservation Commission has already conducted similar erosion surveys in the Crescent Lake and Raymond Pond Watersheds and fixed erosion problems at numerous sites.

Long-term protection of Panther Pond will require coordinated stewardship in the entire watershed.

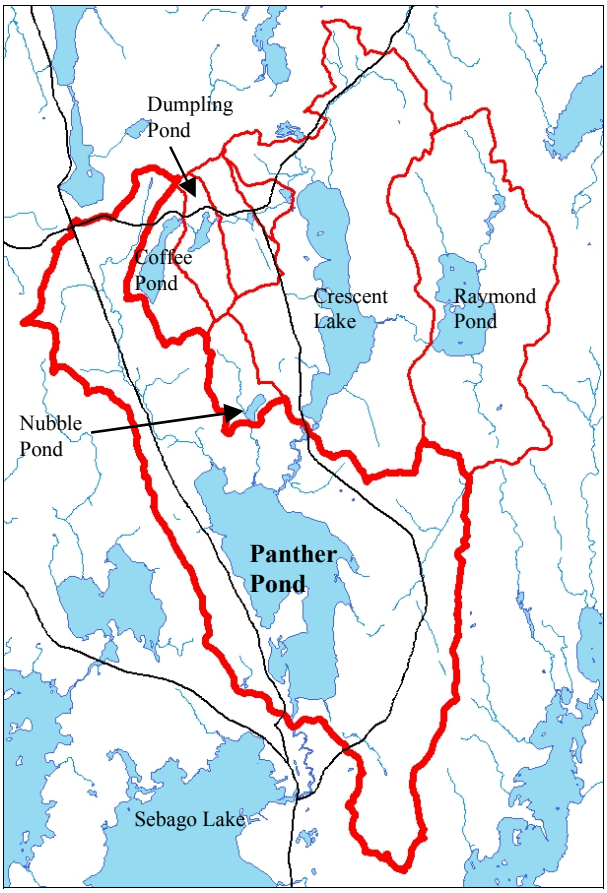


Figure 1. Panther Pond Watershed

Why should we protect Panther Pond from polluted runoff?

- Once a lake has declined, it can be difficult or impossible to restore. Prevention is the key.

- Panther Run is already host to variable-leaved water milfoil, an invasive aquatic plant. This plant and other invasive plants thrive in shallow areas with silty bottoms. Sediment deposited into the lake from erosion creates the ideal environment for these plants to thrive.

- The lake contains valuable habitat for fish, birds and other wildlife. Panther Pond provides recreational opportunities to watershed residents and to visitors. It is an important contributor to the local economy.

- Panther Pond and its watershed contributes 18% of the water flowing into Sebago Lake. This water, in turn, is a public drinking water source for over 45,000 households in Southern Maine.

- A 1996 University of Maine study demonstrated that lake water quality affects property values. For every meter (3 ft) decline in water clarity, shorefront property values can decline as much as 10 to 20 percent! Declining property values affect individual landowners as well as the economics of the entire community.

What is being done to protect Panther Pond?

The Panther Pond Association (PPA) formed in 2001. Its Board and members work with agencies, municipal officials and watershed residents to promote conservation efforts in the watershed. The RWPA helps support PPA and has tested water quality in Panther Pond as part of the Maine Volunteer Lake Monitoring Program for many years.

Soon after forming, the PPA learned about volunteer watershed surveys and how these projects help to protect lake water quality by getting citizens involved in identifying sources of polluted runoff. The PPA decided that a survey was an important first step in their lake protection efforts and approached the Maine DEP and Cumberland County SWCD for assistance.

A Steering Committee formed to guide the project, and the survey was conducted during the spring and summer of 2003 with project funding from the PPA. Since then, the steering committee has continued to meet and pursue grants and other opportunities to help address the pollution problems identified in the survey.

The Purpose of the Watershed Survey

The primary purpose of the watershed survey was to:

- Identify and prioritize existing sources of polluted runoff, particularly soil erosion sites, in the Panther Pond Watershed.
- Raise public awareness about the connection between land use and water quality, and the impact of soil on Panther Pond. Inspire people to become active stewards of the watershed.
- Provide the basis to obtain federal funds to assist in fixing identified erosion sites.
- Use the information gathered as one component of a long term lake protection strategy.
- Make general recommendations to landowners for fixing erosion problems on their properties.

The purpose of the survey was NOT to point fingers at landowners with problem spots, nor was it to seek enforcement action against landowners not in compliance with ordinances. It is the hope that through future projects, the PPA can work together with landowners to solve erosion problems on their property, or help them learn how best to accomplish solutions on their own.

Local citizen participation was essential in completing the watershed survey and will be even more important in upcoming years. With the leadership of the PPA and RWPA, and with assistance from agencies concerned with lake water quality, the opportunities for stewardship are limitless.

The PPA hopes that you will think about your own property as you read this report, and then try some of the recommended conservation measures. Everyone has a role to play in lake protection!

The Survey Method

The survey was conducted by volunteers with the help of trained technical staff from the DEP, CCSWCD and RWPA. Volunteers were trained on survey techniques and erosion identification during a two hour classroom workshop in April 2003. Following the classroom training, the volunteers and technical staff spent the remainder of the day in the field documenting erosion on the roads, properties, driveways, and foot trails in their assigned sectors using cameras and standardized forms. The teams worked together throughout the spring to complete their sectors. Trained technical staff conducted follow-up examinations of sites in the summer and fall of 2003 to verify data accuracy and estimate, where possible, the pollutant loading from each site.

The collected data was entered into a computer database to create a spreadsheet, and the documented erosion sites were plotted on maps. The sites were broken out into categories (driveways, roads, private residences) and ranked based on their impact on the lake, the technical ability needed to fix the problem, and the estimated cost of fixing the problem.

A description of sites and associated rankings are discussed in the next section of this report. Maps of the erosion sites are located in Appendix A, and a spreadsheet with data from the documented sites is located in Appendix B. Additional site information can be obtained from the PPA.

Summary of Watershed Survey Findings

Volunteers and technical staff identified 84 sites in the Panther Pond Watershed that are currently impacting or have the potential to impact water quality of the lake. Some key conclusions include:

- 84 erosion sites is a very manageable number of problems. Surveys in much smaller watersheds in the area have identified well over 100 sites.
- Almost half of the identified sites were found on residential areas. These sites tend to have less severe erosion and can be fixed easily with low cost. Individual landowners can play a big role in helping address these problems.
- Most sites can be fixed with very little labor and materials cost. In fact, only two of the 84 sites were rated with a high cost of materials and labor (over $2500).
- Erosion on road-related sites (state, town and private roads and driveways) make up about only one-third of the total number of sites. However, they tend to be larger erosion problems with a greater impact to the lake.
- Erosion sites were identified all around the lake and on nine different types of land uses. As such, everyone has a role to play in lake protection. The Town of Raymond, Maine DOT, shorefront property owners, business owners, ATV riders and even people living far from the lake can all take measures to reduce lake pollution.
- Based on rough estimates, over 84 tons of soil wash into Panther Pond each year from the erosion sites identified in the survey. That's four dump truck loads being dumped in each year!

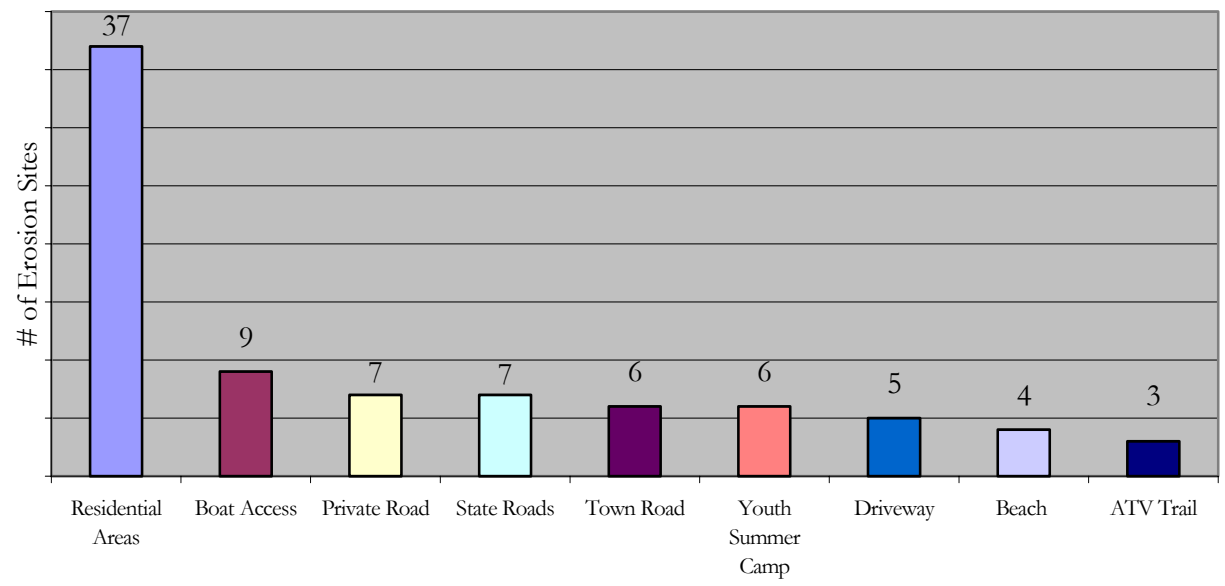
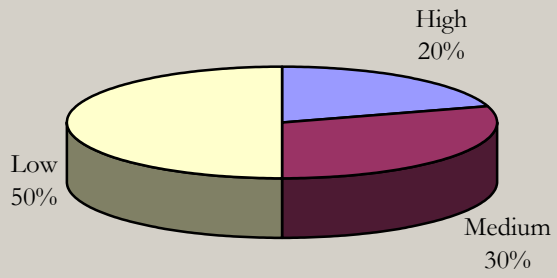


Figure 2. Numbers of Sites by Land Use

Table 1. Breakdown of site by land use categories and impact to lake.

Category	High Impact	Medium Impact	Low Impact	Total
Residential	0	11	26	**37**
Boat Access	2	2	5	**9**
Private Road	0	2	5	**7**
State Roads	4	2	1	**7**
Town Road	3	1	2	**6**
Youth Summer Camp	3	3	0	**6**
Driveway	1	2	2	**5**
Beach	2	0	2	**4**
ATV Trail	2	1	0	**3**
Total	**17**	**24**	**43**	**84**

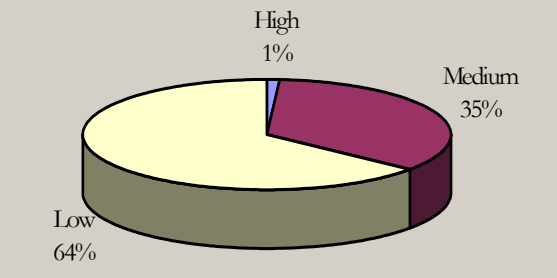
Impact to Lake—Each site was rated for its potential impact to the lake. Only 20% (17 of 84 sites) were deemed to have a high impact.



Impact was based on slope, soil type, amount of soil eroding, proximity to water or buffer, and buffer size.

- "Low" impact sites are those with limited soil transport off-site.
- At "medium" impact sites, sediment is transported off-site, but the erosion doesn't reach a high magnitude.
- "High" impact sites are large sites with significant erosion that flows directly into a stream or the lake.

Cost of Materials to Fix Sites—Recommendations were made for fixing each site, and the associated cost of labor and materials were estimated. Only 1% (or 2 sites) entail a high cost. As shown below, most can be fixed inexpensively with low-cost materials like mulch and stone.

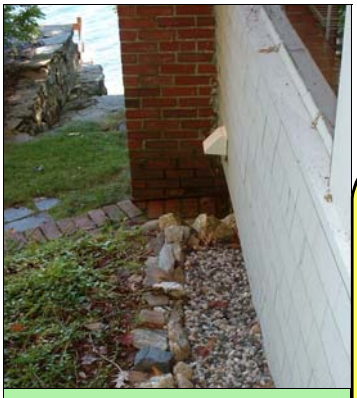


Cost is an important factor in planning for restoration. The cost of labor and materials to fix each site was rated as follows.

- "Low" cost sites were estimated to cost less than $500 to fix.
- An estimate of $500 to $2,500 was rated "medium".
- If the estimated cost to fix a site exceeded $2,500, a "high" rating was assigned.

Residential Areas

Of the 37 sites associated with residential areas, 26 were low impact, 11 were medium impact, and none were high impact. 32 of the 37 sites can be fixed with low cost. Some of the most common problems and recommended conservation practices are pictured below.



Roof Runoff—Install stone-filled trenches along the roof dripline to help infiltrate runoff.

Before

Loose, bare soil washed down hill directly into lake.

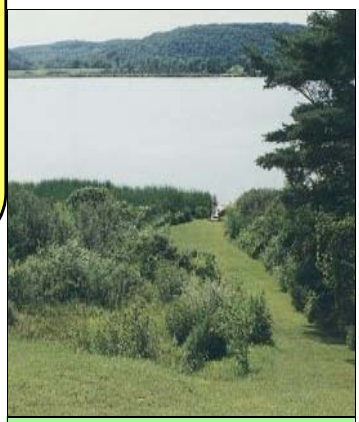
After

A winding path was created and covered with crushed stone.

Sides of the path were covered with bark mulch and planted with attractive shrubs and flowers.

Mulch—Place mulch such as P&K Gravel's "fine erosion control mix" on bare soil.

Waterbars—Place timbers or log "speed bumps" across paths to slow runoff and trap soil.



Buffers—Plant trees and shrubs along the shoreline or let them grow back naturally.

Residential areas were associated with half (50%) of the identified sources of polluted runoff. These problems pose a significant threat to lake water quality. Fortunately, most of these sites can be corrected with easy, low cost fixes.

Roads

7 private roads, 7 state roads, and 6 town road sites were identified during the survey. All of the state and town road sites have already been brought to the attention of the DOT and Town of Raymond. Some of the low cost sites will be addressed through regular maintenance, but the more expensive fixes will be pursued through state and federal grants. Some of the most common problems and recommended conservation practices are pictured below.

Ditching—Create U-shaped ditches and armor them with rocks and/or grass.

Problem—This site along Route 121 has moderate ditch and shoulder erosion and a large amount of winter sand that washes into one of the pond's feeder streams.

Solution—Remove winter sand. Reshape and vegetate road shoulder. Clean out, reshape and seed ditch.

Turnouts—Create openings along roads or ditches to direct water into vegetated areas.

Culverts—Armor culvert inlets and outlets with rock riprap. Create 'plunge pools' to protect the outlet and trap sediment.

Crown—Grade the road so that water runs off the sides. Remove sand and grader berms from the edges of the road.

Roads are one of the biggest sources of pollution to Maine lakes. Regular maintenance by road associations and town and state road departments is critical.

Driveways

Only 5 driveway sites were documented with problems. One had a high impact, 2 had medium impact and two had low impact. All of sites can be fixed at a medium cost ($500-$2500). Some of the most common problems and recommended conservation practices are pictured below.

Rubber Razors—Direct water off the driveway and into vegetation with rubber razors.

Open Top Culverts—Direct water off the driveway with open top culverts.

Problem—Water concentrates in ruts and erodes the surface of this driveway. A small basin at the base ponds water and traps some of the sediment.

Solution—The driveway can be improved by adding hard-packing gravel, crowning the surface, and installing runoff diverters.

Road Material—Add hard-packing, cohesive surface material to the driveway.

Ponding Areas—Create small ponding areas to trap sediment and infiltrate driveway runoff.

Although driveway erosion is not a widespread problem around Panther Pond, proper driveway maintenance is important to keep it this way. Use good, hard-packing surface material and add diversions to direct runoff into vegetated areas.

Beaches

By nature, beaches are easily eroded by runoff. Of the four sites identified with erosion problems, two were high impact and two were low impact. All of the sites can be easily fixed with low cost.

Common Problems:

- Slight to severe surface erosion
- Lack of shoreline vegetation
- Direct flow of sediment to lake

Recommended Solutions:

- Direct upland runoff away from beaches with waterbars or other runoff diverters.
- Reduce size of beaches where possible by revegetating areas.
- Do not add new sand to beaches without permits.

Boat Access

Of the nine boat access areas, some provide vehicle access and others are carry-in launches. Two were high impact, two were medium impact and five were low impact. Three sites will probably need medium cost and technical expertise to fix, but the other six can be fixed easily with little cost.

Common Problems:

- Slight to moderate surface erosion
- Direct flow of sediment to lake
- Unstable, rutted driving surface

Recommended Solutions:

- Add better surface material and reshape/crown to direct water to sides.
- Place erosion control mulch on pathways.
- Install waterbars or rubber razors across boat access to direct water off into adjacent vegetation.
- Discontinue vehicle access where possible.

Youth Summer Camps

The lake's four Youth Summer Camps present unique challenges due to the heavy foot traffic they receive. Of the six sites identified, three were high impact and three were medium impact. Recommended fixes range in cost and technical level, but many of the recommendations could be accomplished by the campers themselves as part of an educational service learning project.

Common Problems:

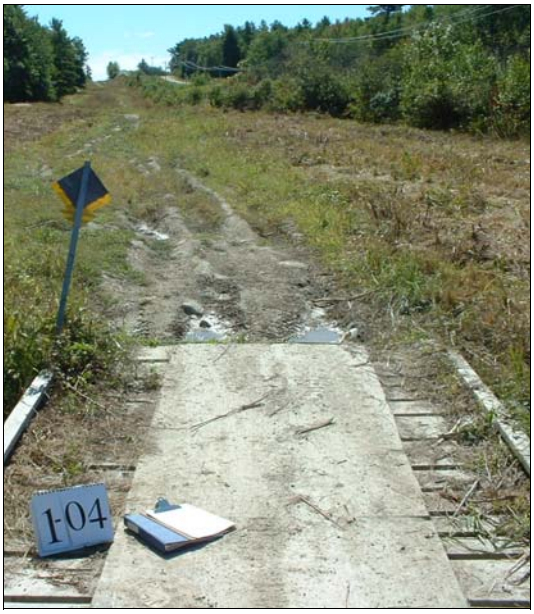
- Slight to severe surface erosion
- Bare soil in high use areas
- Lack of shoreline buffers
- Direct flow of sediment to lake

Recommended Solutions:

- Establish defined footpaths and restrict foot traffic where possible.
- Mulch and vegetate bare soils.
- Install steps and waterbars on banks to slow runoff.
- Establish shoreline buffers .

ATV Trails

Three erosion sites were identified on ATV trails at stream crossings along the CMP power lines. Two of the sites were high impact, and one was a medium impact problem. The sites can all be fixed with medium cost. Lasting solutions will also require educating people that use the trails.



Common Problems:

- ATVs riding through streams & not using bridges
- Direct flow of sediment to streams
- Moderate to severe surface erosion on trails
- Lack of vegetation along streams

Recommended Solutions:

- Reshape and crown trails to get water into adjacent vegetation.
- Install runoff diverters across trails.
- Install signs or boulders and repair bridges to prevent vehicles from riding through streams.
- Allow stream-side vegetation to grow higher.

Next Steps ~ Where Do We Go From Here?

Fixing the sites identified in this survey will require efforts by individuals, the Panther Pond Association, road associations and municipal officials.

Panther Pond Association

- Distribute copies of the survey report to property owners and road associations with identified erosion problems and encourage them to make improvements.
- Apply for DEP and other grants to help landowners, road associations and the Town of Raymond fix erosion problems identified in the watershed survey.
- Continue to increase and empower the association's membership, and provide educational materials and guidance to members of the Panther Pond watershed community.
- Continue to partner with RWPA, agencies, municipalities, Districts, and others to jointly seek funding and implement projects to protect the lake water quality.
- Organize workshops and volunteer "work parties" to start fixing identified erosion problems and teach citizens how to fix similar problems on their own properties.
- Educate municipal officials about lake issues and work cooperatively to find solutions.

Individual Citizens

- Look in the report to see if you have a documented erosion problem. If so, try to start fixing the problem. Call the RWPA, CCSWCD or DEP for free advice about how to get started.
- Prevent runoff from washing sediment into Panther Pond. Detain runoff in depressions or divert flow to vegetated areas using some of the practices on page 18.
- Stop mowing and raking your shoreline and parts of your property, and let lawn and raked areas revert back to natural plants. Deep shrub and tree roots help hold the soil.
- Avoid exposing bare soil. Seed and mulch bare areas.
- Don't bring in sand to create beaches. Don't rebuild beaches without permits and properly dealing with upland runoff.
- Read "Permitting ABCs" on page 19 and call the Town Code Enforcement Officer and DEP before starting doing any cutting or soil disturbance projects.
- Maintain septic systems properly. Pump septic tanks (every 2 to 3 years for year round residences; 4-5 years if seasonal) and upgrade marginal systems.
- Join the Panther Pond Association and Raymond Waterways Protective Association.

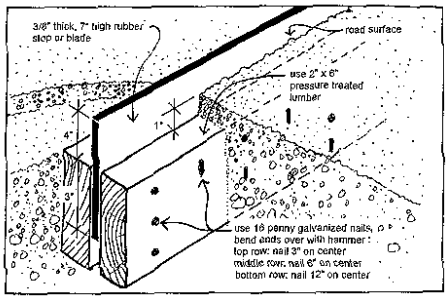
Municipal Officials

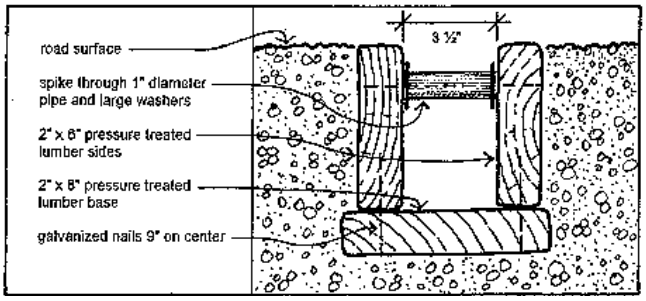
- Enforce shoreland zoning and other town ordinances to ensure protection of Panther Pond.
- Conduct regular maintenance on town roads in the watershed, and fix town road problems identified in this survey.
- Participate in and support long term watershed management projects.

Glossary of Common Conservation Measures

Rubber Razor Blade: Use this structure in a sloped gravel driveway or camp road. It can be plowed over only if the plow operator is aware of its presence and lifts the plow blade slightly. Place it at a 30 degree angle to the road edge and point the outlet toward a stable vegetated area.

Materials: Rubber Conveyor Belt is available at Portland Rubber (774-3993).



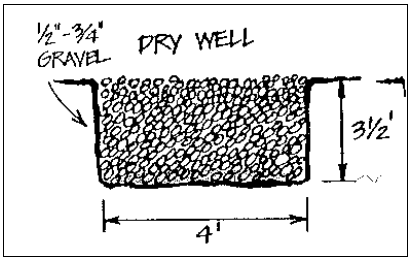


Open Top Culvert: Use this structure in a sloped gravel driveway or camp road that does not get plowed in the winter. Place it at a 30 degree angle to the road edge and point the outlet into stable vegetation. Remove leaves and debris annually.

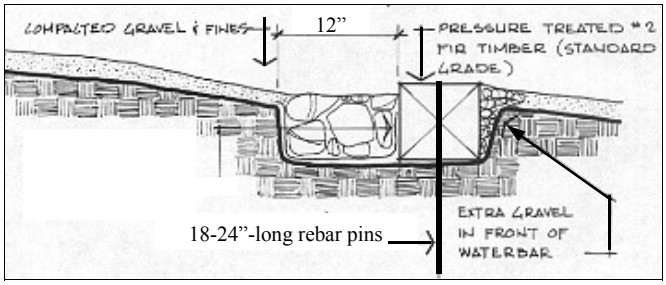
Materials: Pressure treated timbers, pipe and galvanized nails available at most hardware stores.

Drywell: Use a drywell to collect runoff from roof gutter downspouts. Drywells can be covered with sod, or left exposed for easy access and cleanout. Drywells and infiltration trenches work best in sandy or gravelly soils.

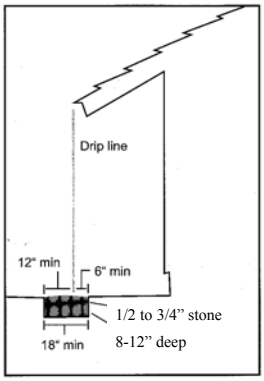
Materials: 1/2" to 3/4" crushed stone is available from P&K Gravel (693-6765), Shaw Brothers (839-2552) and several other distributors.



Waterbar: Install waterbar "speed bumps" to break up the slope and keep water from concentrating on a path. Fill behind with crushed stone to help runoff soak into the ground and direct water into vegetated areas. Rot-resistant logs or pressure treated timbers can be used. Extend past the outside edge of both sides of the path and install at a 30-degree angle. Secure the waterbar with large stones on the downhill side and/or pound in with pieces of rebar steel.



Materials: Available at most hardware stores.



Dripline Trenches: Install a rock-filled trench along the roof drip line to collect and infiltrate roof runoff, thereby controlling erosive runoff from the rooftop. The trench will collect roof runoff and store it until it soaks into the soil. These systems will also reduce wear on your house by reducing back splash.

Materials: See Drywell (above) for suppliers of 1/2" to 3/4" crushed stone.

Mulch: Spread two to four inches of mulch to stabilize areas of bare soil or sparse vegetation (except areas of concentrated runoff). Limit raking to let areas naturalize over time. Use "Erosion Control Mix", bark mulch, wood chips or crushed stone.

Materials: "Fine erosion control mix" mulch available at P&K Gravel (693-6765).

Permitting ABC's

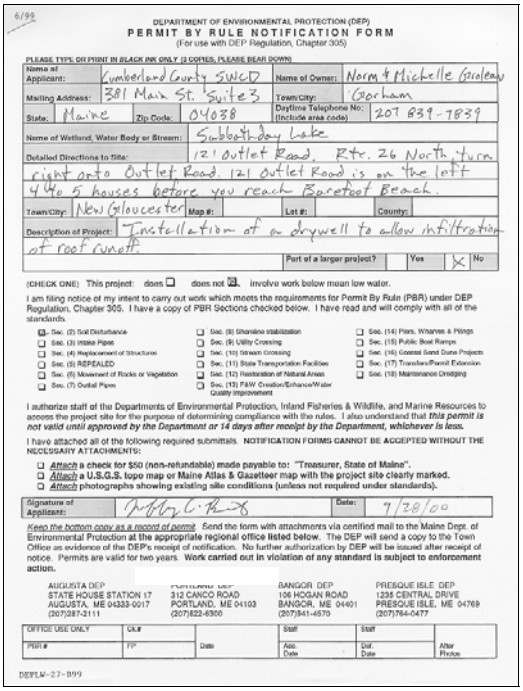
Protection of the Panther Pond Watershed is ensured through the good will of residents around the lakes and through laws and ordinances created and enforced by the State and Town. The following laws and ordinances require permits for activities adjacent to Panther Pond.

- **Shoreland Zoning—**Construction, clearing of vegetation and soil movement within 250 feet of the lake shore falls under the Shoreland Zoning Act, which is administered by the Town through the Code Enforcement Officer and the Planning Board.
- **Natural Resources Protection Act (NRPA) -** Soil disturbance within 75 feet of the lakeshore or stream also falls under the NRPA, which is administered by the DEP.
- **Raymond Land Use Ordinance**—Most lots within 600 feet of a pond or stream must now follow specific rules to minimize soil erosion and phosphorus export to the lake. Rules apply to new construction and expansions of homes, accessory structures, and driveways. This ordinance is administered by the Raymond Code Enforcement Officer and Planning Board.

Contact the DEP and Town Code Enforcement Officer if you have any plans to construct, expand or relocate a structure, clear vegetation, create a new path or driveway, stabilize a shoreline or otherwise disturb the soil on your property. Even if projects are planned with the intent of enhancing the environment—such as installing some of the practices mentioned in this report – contact the DEP and Town to be sure. See the last page of this report for contact information.

How to apply for Permit by Rule with DEP:

To ensure that permits for projects that will not result in significant disturbance are processed swiftly, the DEP has established a streamlined permit process called **Permit by Rule**. These one page forms (shown below) are simple to fill out and allow the DEP to quickly review the project.



DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
PERMIT BY RULE NOTIFICATION FORM
(For use with DEP Regulation, Chapter 305)

PLEASE TYPE OR PRINT IN BLACK INK ONLY (2 COPIES, PLEASE BEAR DOWN)

Name of Applicant: Cumberland County SWCD | Name of Owner: Norm & Michelle Grolean
Mailing Address: 381 Main St. Suite 3 | Town/City: Gorham
State: Maine | Zip Code: 04038 | Daytime Telephone No: (Include area code) 207 839-7839
Name of Wetland, Water Body or Stream: Sabbathday Lake
Detailed Directions to Site: 121 Outlet Road, Rte. 26 North, turn right onto Outlet Road. 121 Outlet Road is on the left 4/10 5 houses before you reach Barefoot Beach.
Town/City: New Gloucester | Map #: | Lot #: | County:
Description of Project: Installation of a drywell to allow infiltration of roof runoff.
Part of a larger project? Yes X No

(CHECK ONE) This project: does ☐ does not ☒ involve work below mean low water.

I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Regulation, Chapter 305. I have a copy of PBR Sections checked below. I have read and will comply with all of the standards.

☒ Sec. (2) Soil Disturbance
☐ Sec. (3) Intake Pipes
☐ Sec. (4) Replacement of Structures
☐ Sec. (5) REPEALED
☐ Sec. (6) Movement of Rocks or Vegetation
☐ Sec. (7) Outfall Pipes
☐ Sec. (8) Shoreline stabilization
☐ Sec. (9) Utility Crossing
☐ Sec. (10) Stream Crossing
☐ Sec. (11) State Transportation Facilities
☐ Sec. (12) Restoration of Natural Areas
☐ Sec. (13) F&W Creation/Enhance/Water Quality Improvement
☐ Sec. (14) Piers, Wharves & Pilings
☐ Sec. (15) Public Boat Ramps
☐ Sec. (16) Coastal Sand Dune Projects
☐ Sec. (17) Transfers/Permit Extension
☐ Sec. (18) Maintenance Dredging

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that *this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.*

I have attached all of the following required submittals. NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:

☐ *Attach* a check for $50 (non-refundable) made payable to: "Treasurer, State of Maine".
☐ *Attach* a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
☐ *Attach* photographs showing existing site conditions (unless not required under standards).

Signature of Applicant: [signature] Date: 7/28/00

Keep the bottom copy as a record of permit. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. **Work carried out in violation of any standard is subject to enforcement action.**

AUGUSTA DEP: STATE HOUSE STATION 17, AUGUSTA, ME 04333-0017, (207)287-2111
PORTLAND DEP: 312 CANCO ROAD, PORTLAND, ME 04103, (207)822-6300
BANGOR DEP: 106 HOGAN ROAD, BANGOR, ME 04401, (207)941-4570
PRESQUE ISLE DEP: 1235 CENTRAL DRIVE, PRESQUE ISLE, ME 04769, (207)764-0477

OFFICE USE ONLY	OLW		Staff	Staff
PBR #	FP	Date	Acc. Date	Dif. Date	After Photos

DEPLW-27-1999

1. Fill out a notification form before completing any work. Forms are available from your town code enforcement officer or the Maine DEP .
2. The permit will be reviewed by DEP within 14 days. If you do not hear from DEP within 14 days, you can assume your permit is approved and you can proceed with work on the project. If you bring the permit directly to a DEP office, you could get your permit approved immediately.
3. Follow the proper standards for keeping soil erosion to a minimum during construction, such as installing silt fence. It is important that you obtain a copy of the standards so you will be familiar with the law's requirements.

Where Do I Get More Information?

Contacts

Panther Pond Association
P.O. Box 68, Raymond, ME 04071
(207) 655-3936 or PantherPondAssoc@aol.com
Carries out outreach and advocacy within the Panther Pond Watershed; provides educational materials to landowners; and directs individuals to appropriate agencies.

Raymond Waterways Protective Association
PO Box 1243, Raymond, ME 04071-1243
(207) 671-3329
Monitors water quality on all of Raymond's lakes and ponds; provides educational materials and technical assistance to watershed landowners.

Cumberland County Soil and Water Conservation District
201 Main St. Suite 6, Westbrook, ME 04092
(207) 856-2777
Offers assistance with watershed planning and surveys, environmental education, engineering support, seminars and training sessions, and education on the use of conservation practices.

Maine Department of Environmental Protection
312 Canco Road, Portland, ME 04103
Toll Free (888) 769-1036 or (207) 822-6300
Provides permit applications and assistance, numerous reference materials, technical assistance, environmental education, project funding opportunities, and stewardship activities for lakes.

Publications

The Buffer Handbook: A Guide to Creating Vegetated Buffers for Lakefront Properties. Androscoggin Valley SWCD. 1998. 20 pgs. www.state.me.us/dep/blwq/docwatersheds

Camp Road Maintenance Manual: A Guide for Landowners. Kennebec County SWCD and Maine DEP. 2000. 54 pgs. www.state.me.us/dep/blwq/docwatersheds

A Homeowner's Guide to Environmental Laws Affecting Shorefront Property in Maine's Organized Towns. Maine DEP. 1997. DEPLW-38-B98. 28 pgs. www.state.me.us/dep/blwq/docwatershed/materials

Maine Shoreland Zoning—A Handbook for Shoreland Owners. Maine DEP. 1999. DEPLW 1999-2. 34 pgs.

Gardening to Conserve Maine's Native Landscape: Plants to Use and to Avoid. Cooperative Extension. 1999. Leaflet. www.umext.maine.edu/onlinepubs/htmpubs/2500.htm

Find out how to make your property more lake-friendly.
Contact one of the groups listed above for a free consultation.