

Little Sebago Lake Watershed Survey Report

Part I—North of Lyons Point



**Cumberland County Soil and Water Conservation District
Little Sebago Lake Association
Maine Department of Environmental Protection**

May 2003

Acknowledgments

The following people and organizations were instrumental in the Little Sebago Lake Watershed Survey Project and deserve special recognition for their efforts:

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Sponsors

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US EPA
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The Town of Windham
Oxford County SWCD
Cumberland County SWCD

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Cover Photo Credit: Ed Lefebvres

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When combined with many other similar sites from 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 Little Sebago Lake Watershed. It provides the results and analysis of a watershed survey conducted on the portion of the Little Sebago Lake Watershed north of Lyons Point . A survey of the southern portion of the watershed will be completed in the spring and summer of 2003. The surveys are conducted in response to evidence compiled over many years that has shown a gradual decline in the lake's water quality.

WATERSHED

All the land that surrounds a lake that drains or sheds its water into the lake through streams, ditches, directly over the ground surface or through ground water.

The Little Sebago Lake Association has tested water quality in Little Sebago Lake for more than 25 years. In recent years, water clarity and dissolved oxygen levels in the lake have shown some improvement. However, the Maine Department of Environmental Protection's (DEP) statistical analysis of the long term data shows that despite periodic fluctuations, the lake is under stress. Long term trends show that in some portions of the lake, the clarity of the water is decreasing. Also, the amount of oxygen in the bottom water of some portions of the lake has decreased, risking the

survival of cold water fish and the delicate water chemistry balance in the lake. Based on observations at other Maine lakes, these trends forecast a future decline in water quality. For these reasons, plus its regional significance, Little Sebago Lake appears on the list of **Nonpoint Source Priority Watersheds**.

Why is the Water Quality at Risk?

The biggest pollution culprit in Little Sebago Lake and other Maine's lakes is **nonpoint source (NPS) pollution**. NPS is found in storm water runoff from rain and snowmelt. During and after storms and snowmelt, soil (and hitch-hiking nutrients like phosphorus and nitrogen) washes into lakes from the surrounding landscape by streams and overland flow.

NONPOINT SOURCE POLLUTION

Also called NPS or polluted runoff. Pollution from diffuse, seemingly insignificant sources (such as erosion, roads, septic systems) that, when combined, add up to a significant amount of pollution to a watershed.



Runoff from the driveway and rooftops on this property combine to transport significant sediment into Little Sebago Lake.

An example of the powerful impact that storm water runoff can have on water quality is the improvement in Little Sebago Lake's water clarity and bottom water dissolved oxygen levels documented in 2001 and 2002. These improvements occurred during the years of lowest rainfall in recent history. One could safely say that this reduced rainfall resulted in less NPS, and thus an improvement in some water quality parameters.

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 other runoff shed from impervious surfaces like rooftops, compacted soil, gravel camp roads and pavement, speeds up, and becomes a destructive erosive force.

Why is Stormwater Runoff a Problem?

The problem is not necessarily the water itself, it's the nutrients and the sediment in the storm water runoff that can be bad news. Large volumes of sediment can settle out in the lake, creating an ideal substrate for nuisance and invasive aquatic plants such as variable-leaved water milfoil. **Phosphorus**, a nutrient that is common on land and in storm water runoff, is a primary food for all plants, including **algae**. In natural conditions, the scarcity of phosphorus in a lake limits algae growth. However, when a lake receives extra phosphorus from the watershed, 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.



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

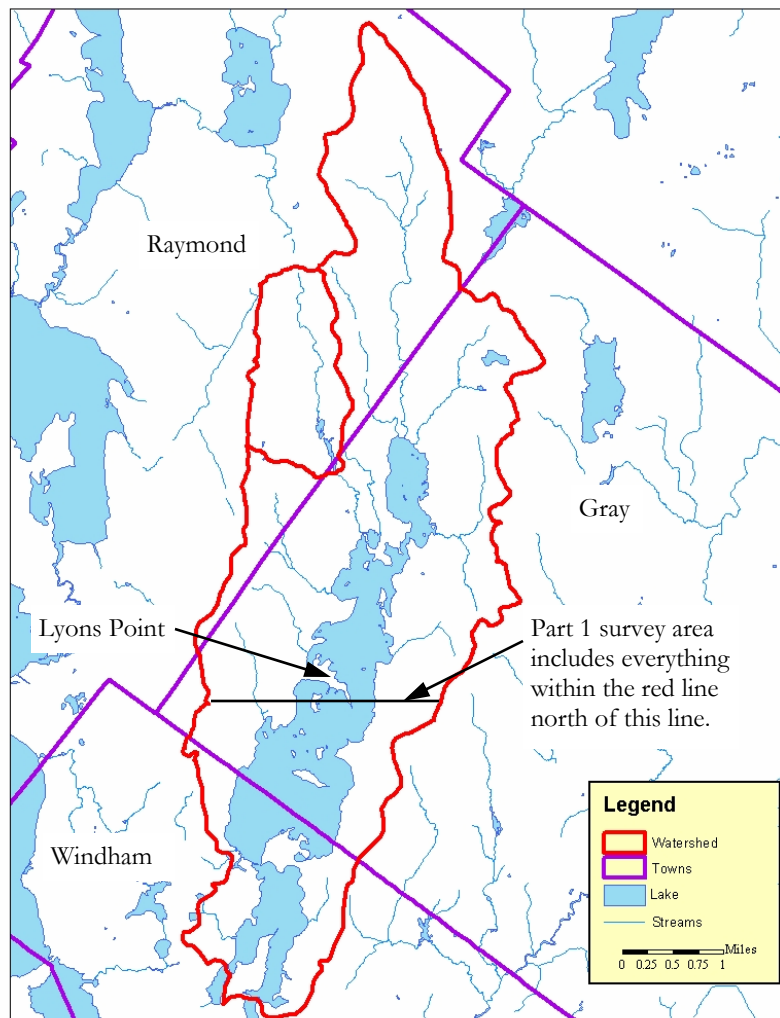


Figure 1. The Little Sebago Lake Watershed

Why should we protect the lake from polluted runoff?

- ◆ The lake 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.
- ◆ Little Sebago Lake provides recreational opportunities to watershed residents and to visitors. It is an important contributor to the local economy.
- ◆ 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.
- ◆ Once a lake has declined, it can be difficult or impossible to restore.



Variable-leaved water milfoil thrives in silty areas caused by sediment deposition.

What is being done to protect the lake from polluted runoff?

The Little Sebago Lake Association (LSLA) is one of the most proactive and well-organized lake associations in the region, and is dedicated to addressing the NPS issues facing the lake. Its board and members work with agencies and watershed residents to promote conservation efforts within the watershed. The LSLA also tests water quality in Little Sebago Lake as part of the Maine Volunteer Lake Monitoring Program.

During the spring and summer of 2002, the LSLA worked with the Cumberland County Soil & Water Conservation District (SWCD) and DEP to seek funding for, and conduct this watershed survey on the northern portion of the lake—north of Lyons Point. The remainder of the watershed will be surveyed in the spring and summer of 2003. Volunteer watershed surveys have been found to be one of the most effective ways to protect lake water quality by getting citizens involved in identifying existing and potential sources of polluted runoff.

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 Little Sebago Lake Watershed.
- ◆ Raise public awareness of the connection between land use and water quality, and the impact of polluted runoff.
- ◆ Inspire people to become active stewards of the watershed.
- ◆ 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 our hope that through future projects we 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. Through the leadership of the Little Sebago Lake Association, and with assistance from groups and agencies concerned with lake water quality, the opportunities for stewardship are limitless!

The Survey Method

The survey was conducted by volunteers with the help of trained technical staff. Volunteers were trained on survey techniques and erosion identification during a two hour classroom workshop in May 2002. Following the classroom training, the volunteers and technical staff spent the remainder of the day in the field documenting erosion on the roads, shoreline, streams, and foot trails in their assigned sectors using cameras and standardized forms. The teams worked together throughout the remaining summer to complete their sectors. Trained technical staff conducted follow-up examinations of sites in the fall of 2002 to verify data accuracy and to calculate estimates, where possible, of the pollutant loading from each site.

The data collected was entered into a computer database to create a spreadsheet, and the documented erosion sites were plotted on maps using GIS (Geographic Information Systems). 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. Maps and a description of sites and associated ranks are discussed in the next section of this report. A copy of the spreadsheet that contains all collected data is located in Appendix A.

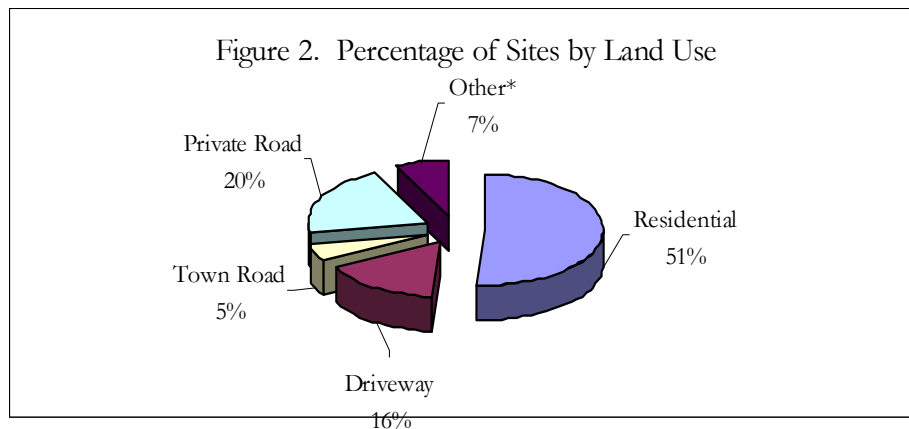
Summary of Watershed Survey Findings

Volunteers and technical staff identified 182 sites in the northern portion of the Little Sebago Lake Watershed that are currently impacting or have the potential to impact water quality of the lake. The data are outlined in the following pages in a variety of maps, tables and charts designed to summarize the problems documented and compare their relative impact on the lake. Also, information in Appendices A and B describe in more detail the locations of the sites documented through the survey.

Each documented site was placed into one of ten land use categories and ranked with a relative impact on the lake. Table 1 represents the tally of sites in each category as well as their impact rank. The different levels of impact are defined on the following page. The pie chart in Figure 2 below depicts the percentage of sites documented in each category. The majority of sites were associated with residential areas (51%).

Table 1. Summary of site categories and impacts

Category	High Impact	Medium Impact	Low Impact	Total
Residential	5	29	59	93
Private Road	10	12	16	38
Town Road	1	3	5	9
Construction	0	2	2	4
Driveway	3	14	12	29
Agriculture	0	1	0	1
Beach Access	0	1	2	3
Boat Access	2	0	0	2
Logging Road	1	0	0	1
Foot Trail/Path	0	1	1	2
Total	22	63	97	182



* Other sites include Agriculture (1%), Beach Access (1%), Boat Access (1%), Construction (2%), Logging Roads (1%), and Foot Trails/Paths (1%)

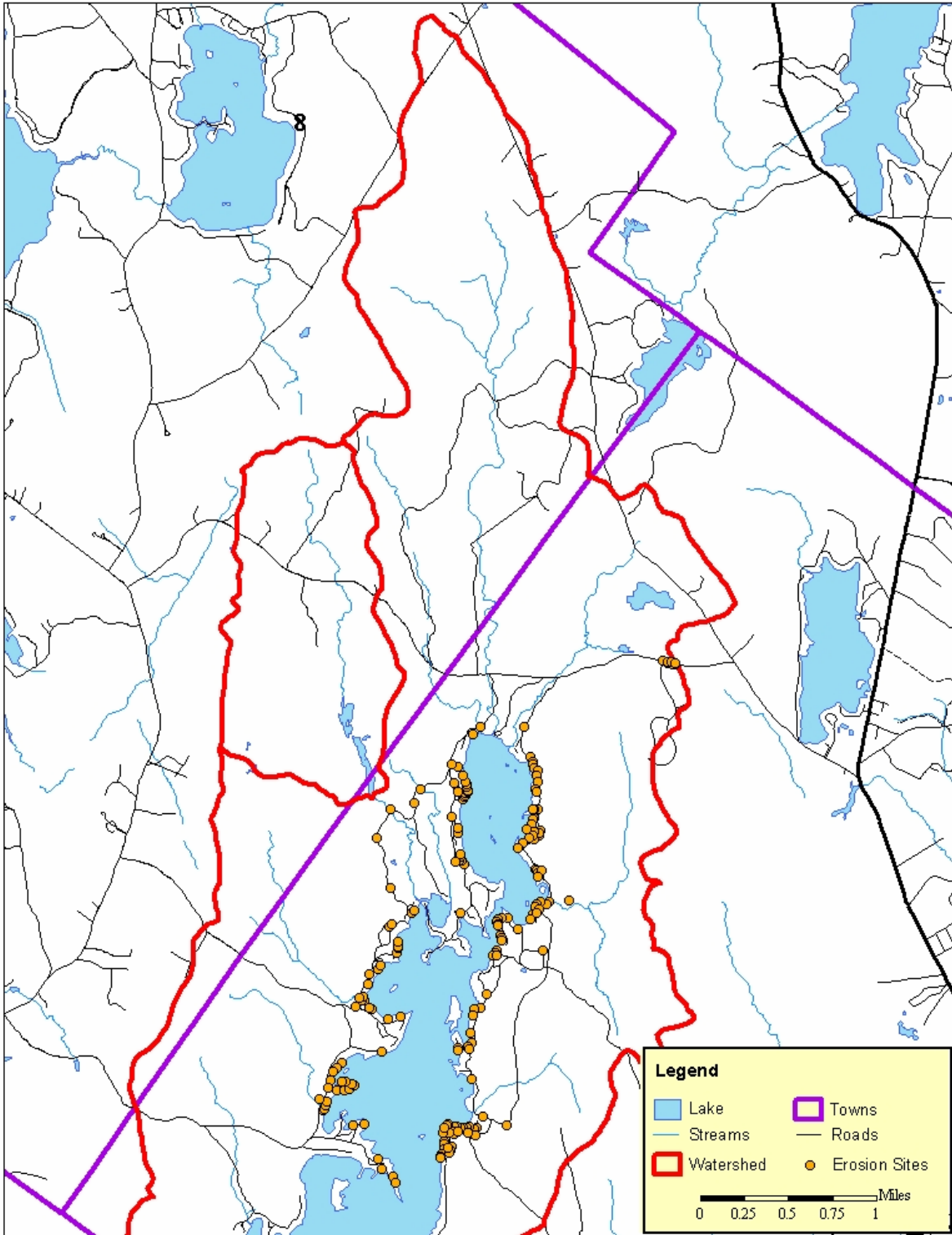
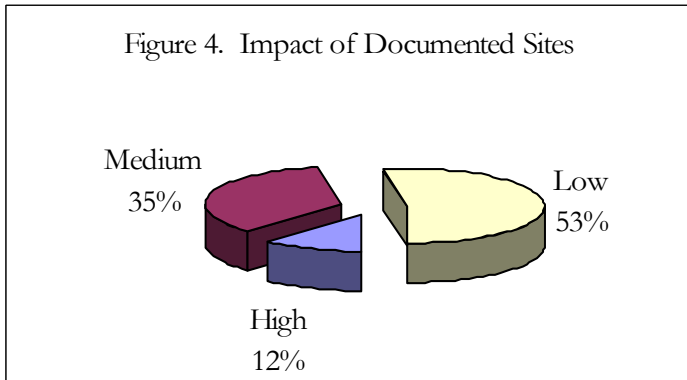


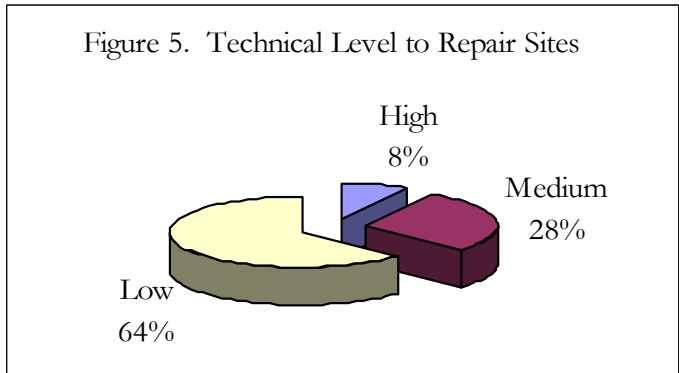
Figure 3. Survey Area with Points Representing Documented Sites

All of the documented sites were rated for their relative impact to water quality, and the costs and technical level of potential fixes. Figures 4, 5, and 6 depict these ratings.



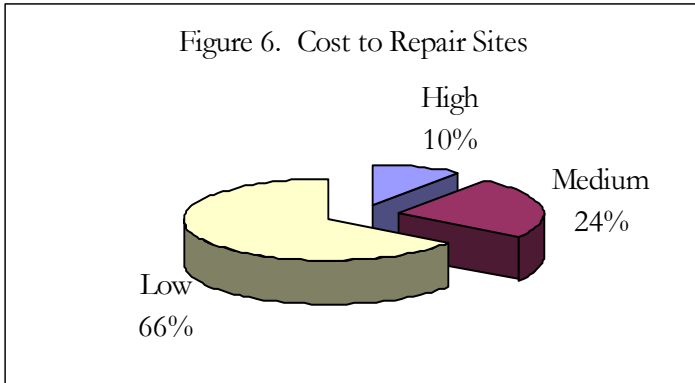
Impact was based on slope, soil type, amount of soil that’s eroding, proximity to water or buffer, and size of buffer.

- “Low” impact eroding 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 where there is significant erosion that flows directly into a stream, lake or ditch.



Technical level to install describes the degree of technical expertise needed to address a problem.

- A “low” tech level requires little or no specific technical assistance. For example, seeding and mulching an area of bare soil would require little technical expertise.
- Sites with a “medium” tech level need to be visited by a technical expert who can make detailed recommendations.
- A “high” tech level requires an engineered design.



Cost is an important factor in planning for restoration.

- “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

Of the 93 sites associated with residential areas documented through the survey, 59 were low impact, 29 were medium impact, and 5 were high impact. Over half of the sites can be fixed with little technical expertise and low cost.

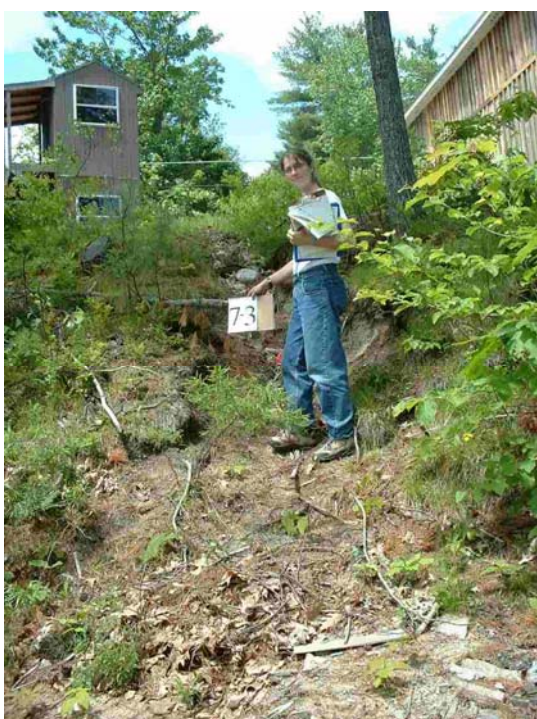
Common Problems Identified:

- Slight or moderate surface erosion
- Bare and sparsely vegetated soil
- Lack of vegetated buffer along shoreline
- Direct flow of runoff to lake
- Roof runoff causing erosion

Typical Solutions to these Problems:

- Seed and mulch bare soil
- Establish or enhance buffer
- Limit foot traffic in eroding areas
- Install dripline trench to catch roof runoff
- Install waterbar, open-top culvert, rubber razor or other runoff diverter
- Place mulch or stone on footpaths

Below is an actual example of residential polluted runoff on Little Sebago Lake, as well as a description of the problems and possible solutions for this site.



Problems:

- Moderate bank erosion from runoff.
- Unstable foot access to lake.
- Direct flow of sediment to lake.

Solutions:

- Hand place rocks in undercut areas.
- Plant trees and shrubs to enhance buffer.
- Create stable, meandering foot path elsewhere.
- Seed bare soil areas.
- Seek proper permits from DEP and Town.

Residential areas were associated with almost half (49%) of the identified sources of polluted runoff in the northern portion of Little Sebago Lake. These problems pose a significant threat to lake water quality. Fortunately, most of these sites can be corrected with easy, low cost fixes.

It's the cumulative impact of all the sites that causes water quality to decline.

Driveways

Of the 29 driveways documented to have problems, 12 were low impact, 14 were medium impact, and three were high impact. Most of the sites could be fixed with low to medium cost and technical expertise.

Common Problems Identified:

- Slight to moderate surface erosion
- Direct flow to lake or ditch
- Poor shaping
- Poor (too sandy) surface material

Recommended Solutions:

- Crown driveways so that water flows to either side
- Build up driveway with cohesive surface material
- Install diverters such as waterbars, open top culverts or rubber blades to get water off driveway
- Install turnouts to direct water into wooded depressions

Below is an actual example of polluted runoff from a driveway on Little Sebago Lake, as well as a description of the problems and possible solutions for this site.



Problems

- Moderate surface erosion.
- Poor driveway shaping and ruts cause water to concentrate and erode the surface.
- No ditches on the sides of driveway.

Solutions

- Add new surface material.
- Reshape and crown driveway so water moves quickly from the surface.
- Install diverters such as waterbars, open top culverts or rubber razors to get water off driveway.
- Install ditches to transport water downhill.

Preserve water quality and save time, money, and wear and tear on your vehicle by having a well crowned driveway. Use adequate surface material and add diversions to direct runoff into buffers.

It's great for watershed residents and it's great for the lake!

Private Roads

Of the 38 private road sites documented through the survey, 16 were low impact, 12 were medium impact and 10 were high impact. The problems are more expensive to fix and would require technical assistance.

Common Problems Identified:

- Slight to moderate surface erosion
- Direct flow to lake or stream
- Slight to moderate ditch erosion
- Undersized ditches
- Poor (too sandy) surface material
- Unstable culvert inlet and outlet
- Clogged ditches and culverts

Recommended Solutions:

- Crown and reshape road to get water off road
- Install diverters such as waterbars, open top culverts or rubber blades to get water off road
- Build up road with cohesive surface material
- Clean out culverts
- Clean, reshape and armor ditches with stone or grass
- Remove grader berms and winter sand to allow proper drainage
- Install culverts and stabilize ends with stone

Below is an actual example of polluted runoff from a private road on Little Sebago Lake, as well as a description of the problems and possible solutions for this site.



Problems:

- Poor road surface material (too sandy).
- No ditch or culvert; no stable escape for water on road.
- Direct flow of road material to lake.

Solutions:

- Attempt to get more water off of the road before it reaches this low point.
- Reshape and crown road.
- Create ditches, cross culvert, and plunge pools, to collect water and settle out sediment.

Unpaved roads are one of the biggest sources of pollution to Maine lakes.

While a one time fix may cost more up front, it will reduce lake pollution and reduce maintenance costs on your road and vehicle.

Town Roads

Of the 9 town road sites documented through the survey, 5 were low impact, 3 were medium impact and one was high impact. Over half of the problems can be fixed with low technical expertise and low cost.

Common Problems Identified:

- Slight to moderate shoulder erosion
- Slight to severe ditch erosion
- Direct flow of sediment to stream or ditch
- Undersized ditches
- Unstable culvert inlet and outlet
- Clogged and undersized culverts
- Winter sand

Recommended Solutions:

- Clean out culverts
- Install culverts and stabilize ends with stone
- Clean, reshape and armor ditches with stone or grass
- Install ditches
- Remove grader berms and winter sand to allow proper drainage
- Build turnouts to divert runoff out of ditches
- Install plunge pools or detention basins to hold runoff and catch sediment.

Below is an actual example of polluted runoff from a town road within the Little Sebago Lake watershed, as well as a description of the problems and possible solutions for this site.



Problems:

- Moderate to severe ditch and road shoulder erosion above leads to sediment deposition here.
- Direct flow of sediment and winter sand into stream.

Solutions:

- Reshape ditch and shoulder uphill.
- Armor ditch and shoulder with stone or grass.
- Install turnouts uphill, and possibly a detention basin to trap sediment before it reaches the stream.
- Remove winter sand.

Working with the Towns of Gray, Windham, and Raymond to fix and maintain town road sites will save money and improve water quality by keeping eroding soil and phosphorus out of Little Sebago Lake.

Sites in Other Categories

Boat Access Sites

Although only two boat access locations were documented as sites, they both were high impact. Problems identified at these locations included eroding tire ruts on the boat ramps, slumping or eroding banks on either side of the ramps, and moderate surface erosion where the ramps meet the lake. These problems can be fixed by establishing a crown on the ramp, armoring the banks with vegetation, rock, or concrete lock-blocks, and resurfacing the ramp where it meets the lake with a more stable material. The cost and technical level necessary to fix these sites are low to moderate.

Agricultural Sites

One horse farm was documented within the watershed as having a possible impact on the lake water quality. Exposed manure piles were observed and bare soil with slight sheet erosion was noted throughout the pasture and stable area. Technical assistance for these types of issues is available from the Cumberland County SWCD and the USDA Natural Resources Conservation Service. (Contact information for these groups is located on page 18 of this report.)

Beach Access Sites

Three eroding beach access sites were noted; two with slight surface erosion, and one with moderate surface erosion. Problems at these sites were often caused by runoff problems uphill. Waterbars and runoff diverters uphill from these beaches would help to control this erosion.

Construction Sites

Four construction sites were noted as having impacts on the watershed; two with moderate impact, and two with low impact. Bare soil on construction sites is inevitable, however, proper use of silt fences, hay bales, and other temporary erosion control measures is effective at limiting the impact of construction activity on the watershed. Maintenance of temporary measures, seeding and mulching disturbed areas, and frequent visits by trained code enforcement personnel are also critical to ensuring protection of the lake from the disturbance associated with construction.

Examples of Good Watershed Protection Techniques

Survey teams identified many sites that showed good watershed protection techniques. These good practices included good vegetated buffers, and well maintained driveways, roads, and ditches. This photo (at right) for example, depicts a good example of a properly designed driveway. Note that this driveway includes a stable substrate (pavement) and waterbars that direct runoff into the wooded area to the right. The Maine DEP and Cumberland County SWCD have created numerous demonstration projects that showcase good watershed protection practices. Many of those demonstration projects are located on lakes near Little Sebago Lake. Contact the Maine DEP and SWCD for more details (page 18).



Next Steps ~ Where Do We Go From Here?

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

Individual Citizens

- Prevent runoff from washing sediment into the lakes. Detain runoff in depressions or divert flow to vegetated areas. Call the Cumberland County SWCD or DEP for free advice.
- Minimize the amount of cleared land and road surfaces on your property.
- Stop mowing and raking, and let lawn and raked areas revert back to natural plants. Deep shrub and tree roots help hold the shoreline.
- Avoid exposing bare soil. Seed and mulch bare areas.
- Don't bring in sand or rebuild beaches without permits and technical assistance.
- Call the Town Code Enforcement Officer before cutting vegetation within 250' of the shore.
- 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 Little Sebago Lake Association.

Little Sebago Lake Association

- Continue to increase and empower the association's membership, and provide educational materials and guidance to members of the Little Sebago Lake watershed community.
- Continue to partner with 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.

Road Associations (or private roads without associations)

- Minimize road runoff by doing regular, comprehensive maintenance. Form a road association if one does not already exist.
- Get a copy of "Camp Road Maintenance Manual – A Guide for Landowners." and share it with contractors working on and/or plowing the road. This reference is a "must-have" for anyone managing a gravel road. (Call the DEP at 822-6300 to order a free copy.)
- For more extensive problems, contact the Cumberland County SWCD or DEP to get help.

Municipal Officials

- Enforce shoreland zoning ordinance to ensure protection of Little Sebago Lake.
- 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.
- Promote training for road crews, boards, commissions, and other decision-makers.

Permitting ABC's

Protection of the Little Sebago Lake Watershed is ensured through the good will of residents around the lakes and through laws and ordinances created and enforced by the State and Towns.

How do you know when you need a permit?

- 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 Towns through the Code Enforcement Officer and the Planning Board.
- Soil disturbance within 75 feet of the lakeshore or stream also falls under the Natural Resources Protection Act, which is administered by the 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.

The Natural Resources Protection Act seeks to establish reasonable regulation in order to assure responsible development that does not harm Maine's precious natural systems.

~from Protecting Maine's Natural Resources~Volume 1, DEP 1996

The project partners encourage you to contact the DEP and Town Code Enforcement Officer if you have any plans to construct 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.

6/99 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 (3 COPIES, PLEASE BEAR DOWN)

Name of Applicant: <u>Kimberland County SINCID</u>	Name of Owner: <u>Norm & Michelle Groleau</u>
Mailing Address: <u>381 Main St Suite 3</u>	Town/City: <u>Gorham</u>
State: <u>Maine</u> Zip Code: <u>04038</u>	Daytime Telephone No: <u>201 839-7839</u>
Name of Wetland, Water Body or Stream: <u>Subsidiary Lake</u>	
Detailed Directions to Site: <u>121 Outlet Road, Rte. 26 North turn right onto Outlet Road. 121 Outlet Road is on the left 4 to 5 houses before you reach Barefoot Beach.</u>	
Town/City: <u>New Gloucester</u>	Map #: _____ Lot #: _____ County: _____
Description of Project: <u>Installation of a drywell to allow infiltration of roof runoff.</u>	Part of a larger project? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

(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.

<input checked="" type="checkbox"/> Sec. (2) Soil Disturbance	<input type="checkbox"/> Sec. (8) Shoreline Stabilization	<input type="checkbox"/> Sec. (14) Piers, Wharves & Piling
<input type="checkbox"/> Sec. (3) Inside Pipes	<input type="checkbox"/> Sec. (9) Utility Crossing	<input type="checkbox"/> Sec. (15) Public Boat Harbors
<input type="checkbox"/> Sec. (4) Replacement of Structures	<input type="checkbox"/> Sec. (16) Stream Crossing	<input type="checkbox"/> Sec. (16) Coastal Sand Dune Projects
<input type="checkbox"/> Sec. (5) REPEALED	<input type="checkbox"/> Sec. (11) State Transportation Facilities	<input type="checkbox"/> Sec. (17) Transfers/Permit Extension
<input type="checkbox"/> Sec. (6) Movement of Rocks or Vegetation	<input type="checkbox"/> Sec. (12) Restoration of Natural Areas	<input type="checkbox"/> Sec. (18) Maintenance Dredging
<input type="checkbox"/> Sec. (7) Coastal Pipes	<input type="checkbox"/> Sec. (13) FAW Creation/Enhance/Repair Quality Improvement	

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: 7/29/00

Keep the bottom copy as a record of permit. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection. Office as evidence of _____ or 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)852-6300	BANGOR DEP 106 HOGAN ROAD BANGOR, ME 04401 (207)741-4570	PRESQUE ISLE DEP 1235 CENTRAL DRIVE PRESQUE ISLE, ME 04769 (207)764-0477
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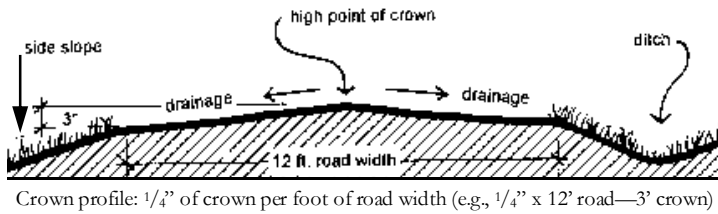
OFFICE USE ONLY	GL#	Staff	Staff
PBR #	FF	Acc. Date	Del. Date
			After Photos

DEPLW-27-899

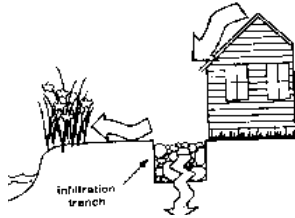
How to apply for Permit by Rule with DEP:

1. Fill out a notification form before completing any work on the ground. Forms are available from your town code enforcement officer or the Maine DEP offices in Portland or Augusta.
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.

Glossary of Common Conservation Measures

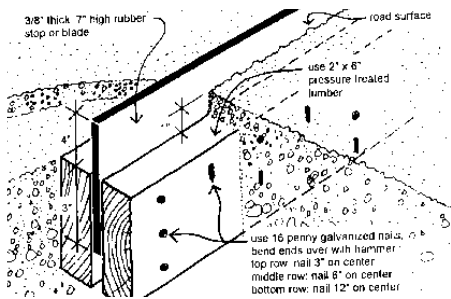
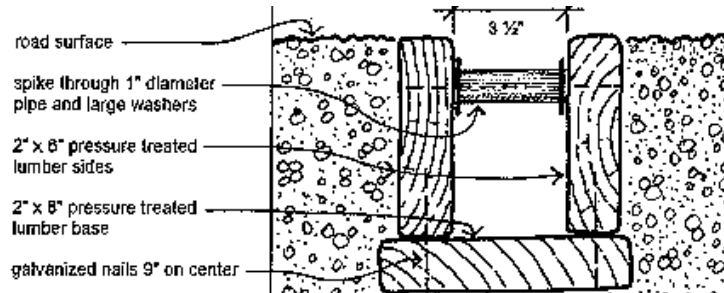


Crown—High point that runs lengthwise along the center of a road or driveway. The high point slopes gently away from the center toward the outer edge of the road, allowing water to drain off the road and preventing erosion of the road surface.



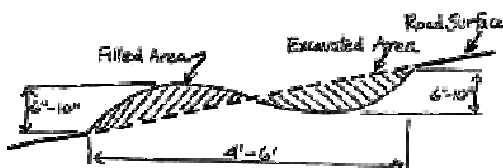
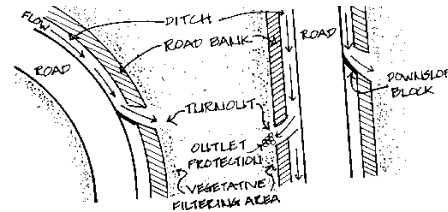
Dripline Trench—Rock-filled trench beneath the roof edge dripline that collects and stores roof runoff until it soaks into the ground. Helps control erosion and reduce wear on the house by preventing backsplash. A typical trench is 6-8” deep and 12-18” wide and filled with 3/4” stone. Can also be used along the edges of driveways to encourage infiltration of runoff.

Open Top Culvert—Box-like structure that collects and diverts road surface runoff away from a sloped driveway or camp road. They are seldom recommended for year-round roads due to the likelihood of plow damage. Install at a 30° angle to the road and direct the outlet into a stable buffer. Clean out leaves and debris periodically.



Rubber Blade—Structure that protrudes above the road surface high enough to intercept and collect water, while allowing traffic to pass over it. It is generally not used on seasonal roads and driveways because of the likelihood of plow damage. Install at a 30° angle to the road and direct the outlet into a stable buffer. The rubber conveyor belts can be purchased at some hardware stores or Augusta Rubber (582-6200).

Turnout—A conservation practice used to direct runoff from a ditch (or road ruts) into a vegetated buffer. The turnout should have a flared end section that is level and lined with rock to spread out the flow.



Waterbar—Ridge (like a speed bump) that runs diagonally across a road, driveway or path, typically at a 30° angle. Stops water from running down the road and diverts it to the side. Easy to construct and most appropriate for roads with low traffic volume. Needs to be rebuilt periodically.

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
A1	2	13	8	7	Horse Farm	Agriculture	Bare soil. Slight surface erosion. Manure piles and open pasture with exposed soil.	Need ag natural resource management specialist to look at to determine risk and solution. Possible candidate for NRCS technical assistance.	20000	Medium	Medium	Medium
Be1	1	10	32	I4-22	Qualey Rd. - Pole #63	Beach Access	Direct flow of sediment to lake. Lack of shoreline buffer. Slight surface erosion.	Add stone behind existing steps, restrict foot traffic to lake. Install waterbar. Establish buffer. Seed and mulch. Install steps.	200	Low	Low	Low
Be2	1	9c	32	ROW	Qualey Rd. Between I4-23, I4-24	Beach Access	Direct flow of sediment to lake. Moderate surface erosion.	Install waterbar. Establish buffer.	0	Medium	Low	Low
Be3	1	5	32	I4-34	Across from 7 Qualey Rd.	Beach Access	Direct flow of sediment to lake. Slight surface erosion.	Install rubber blade.	1440	Low	Low	Low
Bo1	1	8	32	I4-29	Qualey Rd.	Boat Access	Direct flow of sediment to lake. Severe surface erosion.	Add new surface material. Install rubber blade.	800	High	Low	Low
Bo2	1	2	32	I4-38, 39	Qualey Road	Boat Access	Direct flow of sediment to lake. Bare soil. Severe surface erosion. Unstable boat access.	Build up road. Reshape or crown. Install rubber blade.	2000	High	Medium	Medium
CS1	1	13	32	I4-20	Qualey Road	Construction Site	Stockpiled soil. Bare soil. Unstable construction site.	More erosion controls needed due to proximity to lake. Install erosion controls.	2500	Low	Low	Low
CS2	1	9e	32	I4-9	Qualey Rd	Construction Site	Stockpiled soil. Unstable construction site.	Install silt fence properly. Install erosion controls.	1200	Low	Medium	Low
CS3	3	16	18	L7-25	CMP Meter #3018066	Construction Site	Direct flow of sediment to lake. Bare soil. Severe surface erosion.	Install stone-filled dripline trench. Establish buffer. Seed and mulch. No raking.	0	Medium	Medium	Medium
CS4	9	12	7	10-15-1	Northridge Acres Subdivision	Construction Site	Unstable culvert inlet/outlet. Severe road shoulder erosion. Bare soil. Slight surface erosion.	Enlarge culvert. Stabilize culvert inlet and/or outlet. Install erosion controls. Install turnout(s). Reshape or crown. Seed and mulch.	6125	Medium	Medium	Medium
D1	1	15	40	I4-18	Qualey Rd. southern end	Driveway	Direct flow of sediment to lake. Moderate surface erosion.	Install ditch. Install turnout. Add new surface material.	1000	Medium	High	High
D2	1	7b	32	I4-4	Qualey Rd.	Driveway	Severe surface erosion.	Pave.	7500	Low	Medium	High
D3	1	9b	32	I4-26	Qualey Rd. near sharp bend	Driveway	Moderate surface erosion.	Extend timbers to trap sediment. Close off gravel driveway. Create footpath. Remove winter sand. Install rubber blade.	3500	Low	Low	Low
D4	1	3	32	I4-42, 39 or 44	Qualey Rd. east of int. w/ Mt. View	Driveway	Direct flow of sediment to stream. Moderate surface erosion.	Add new surface material.	120	Medium	Low	Low
D5	1	4	33	I4-45	Birch Haven Assoc Driveway	Driveway	Direct flow of sediment to lake. Slight surface erosion.	Install rubber blade.	600	Low	Low	Low

Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
6	24	L5-22	Ramsdell Rd. north of Grape Island Trail	Driveway	Direct flow of sediment to lake. Moderate road shoulder erosion. Lack of shoreline buffer. Moderate surface erosion.	Reshape area at road/driveway line. Reshape or crown. Install waterbar. Establish buffer.	3000	Medium	Low	Low
4	18	L6-43	Birchwood Rd. near end	Driveway	Direct flow of sediment to lake. Moderate surface erosion.	Cut back slopes and vegetate or rock. Install stone-filled dripline trench. Install open top culvert.	7500	Low	Medium	Medium
18A	18	L7-33	Birchwood Rd.	Driveway	Direct flow of sediment to stream. Moderate surface erosion.	Install ditch. Install detention basin.	500	Medium	Medium	Medium
19a	18	L7-32A	Birchwood Rd. east side of road	Driveway	Direct flow of sediment to ditch. Severe road shoulder erosion.	Clean out culvert. Armor ditch with stone or grass. Install ditch. Reshape ditch. Install turnout. Install detention basin.	125	Medium	Medium	Medium
21	18	L7-37A	CMP Pole #133 1/2	Driveway	Stockpiled soil. Moderate surface erosion.	Install ditch. Reshape or crown. Install open top culvert. Install waterbar.	1950	Medium	Medium	Medium
22	18	L7-38	Birchwood Rd.	Driveway	Direct flow of sediment to lake. Severe surface erosion.	Install turnout(s). Pave. Install waterbar.	1200	Medium	Medium	Medium
26	18	L7-49	Birchwood Rd. near island	Driveway	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Moderate surface erosion.	Replace culvert. Stabilize culvert inlet and/or outlet. Install dry well. Reshape or crown. Install waterbar. Seed and mulch. Rip rap.	1292	High	High	High
28	12	L8-1	Birchwood Rd. Pole #138	Driveway	Direct flow of sediment to ditch. Severe surface erosion.	Armor ditch with stone or grass. Reshape ditch. Seed and mulch.	40	Medium	Medium	Medium
29	12	L8-1,2	Birchwood Rd.	Driveway	Direct flow of sediment to lake. Severe surface erosion.	Install dry well. Establish buffer. Seed and mulch. Rip rap.	300	Medium	Medium	Medium
31	12	L8-9	Birchwood Road pole #140	Driveway	Severe surface erosion.	Install waterbar. Define pathways.	0	Low	Low	Low
33	12	L8-10	Birchwood Rd.	Driveway	Severe surface erosion.	Install waterbar. Extend buffer. Define pathways.	80	Low	Low	Low
34	12	L8-11	next door to 68 Birchwood	Driveway	Severe surface erosion.	Install culvert and install plunge pool at culvert outlet.	90	Low	Medium	Medium
22	11	L9-21	7 Cobb Rd pole # 165 1/2	Driveway	Direct flow of sediment to stream. Moderate surface erosion.	see recommendations for 7-21. This will take care of run off impacting driveway. Plant trees and shrubs along stream. Install waterbar.	600	High	Low	Low

Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
6	11	L9-9	From Westwood Rd left of green cottage	Driveway	Direct flow of sediment to lake. Slight surface erosion.	Install open top culvert. Install detention basin.	2000	Low	Medium	Low
15	17	L10-32	259 Westwood Rd 185.1 pole #	Driveway	Lack of shoreline buffer. Moderate surface erosion.	Install rubber blade. Establish buffer.	650	Medium	Low	Low
18	17	L10-29	Westwood Rd	Driveway	Moderate surface erosion.	Build up edge of driveway closest to road	450	Low	Low	Low
1	17	L-12-6	#2 Beaver Cove Rd	Driveway	Other/Slight surface erosion.	Install turnout(s). Install waterbar. Establish buffer.	1350	Low	Low	Low
35	24	L12-42	Kentwood Rd & Arundel	Driveway	Direct flow of sediment to ditch. Moderate roof runoff. Moderate surface erosion.	Install dry well. Add new surface material. Reshape or crown.	525	Low	Low	Low
30	14	L12-20	Hayden Lane - near rental camps	Driveway	Direct flow of sediment to lake. Moderate surface erosion.	Add new surface material. Install turnout(s). Install waterbar.	2000	Medium	Medium	Medium
29	24	L13-16	Hayden Lane	Driveway	Direct flow of sediment to lake. Moderate road shoulder erosion. Moderate surface erosion.	Add new surface material. Install turnout(s). Reshape or crown. Install waterbar. Install detention basin.	1875	Medium	Low	Low
28	24	L13-15	ROW near corner of Arundel Rd, Hayden Lane	Driveway	Direct flow of sediment to lake. Moderate road shoulder erosion. Moderate surface erosion.	Add new surface material. Install turnout(s). Install waterbar. Extend buffer.	2400	Low	Medium	Low
26	14	L13-7,8	ROW on Arundel Rd.	Driveway	Direct flow of sediment to lake. Moderate road shoulder erosion.	Install turnout(s). Install waterbar.	1000	High	Low	Low
23	24	L13-3	Arundel Rd. near corner w/ Gorc Rd.	Driveway	Direct flow of sediment to lake. Moderate surface erosion.	Add new surface material. Reshape or crown. Install waterbar. Establish buffer. Install infiltration trench.	3400	Medium	Medium	Medium
4	32	2-11A	Deer Acres Rd. Tele #7	Driveway	Direct flow of sediment to lake. Moderate surface erosion.	Add new surface material. Build up road. Reshape or crown. Install rubber blade. Establish buffer. Seed and mulch.	1500	Medium	Low	Medium
10	18	L7-1	Logging Road off Birchwood	Logging	Direct flow of sediment to stream. Severe surface erosion.	Install culvert or stone ford over stream crossing. Install rubber blade. Install waterbar. Install detention basin.	3250	High	Medium	Medium
6	33	L4-45	Tele pole #705	Private Road	Clogged culvert. Direct flow of sediment to stream. Slight surface erosion.	Clean out culvert. Add new surface material. Reshape or crown. Install detention basin.	1350	High	High	High
17	33	L4-49 - 55	Ramsdell Rd. from Jeep trail to stream crossing	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to lake. Moderate road shoulder erosion. Slight surface erosion.	Clean out catch basins. Stabilize culvert inlet and/or outlet. Add new surface material. Install turnout(s). Reshape or crown. Establish buffer.	3000	High	High	High

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
PR4	1	10a	32	L4-10,11	Pole #63 to #63 1/2 Qualey Road	Private Road	Moderate road shoulder erosion.	Remove grader berms. Seed and mulch.	450	Low	Low	Low
PR5	1	7e	32	L4-4	Qualey Road between lot 24-4 and turn in road	Private Road	Moderate surface erosion.	Install culvert beneath driveway. Armor ditch with stone or grass. Install ditch. Install detention basin.	750	Low	Medium	Medium
PR6	1	7	32	L4-38-40	Mountain View & Qualey Rd. intersection	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Slight road shoulder erosion. Road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Reshape ditch. Remove grader berms.	242	Medium	Low	Low
PR7	2	2	32	L5-11	near pole #85	Private Road	Unstable culvert inlet/outlet. Slight road shoulder erosion. Road shoulder erosion.	Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Install ditch. Remove grader berms. Reshape or crown.	500	Low	Medium	Medium
PR8	2	25	25	L5-22 to 23	Pole #91 1/2 Ramsdell Rd.	Private Road	Direct flow of sediment to lake. Moderate road shoulder erosion. Moderate surface erosion.	Complex road problem. Many fixes needed here. Install plunge pool. Install ditch. Build up road.	600	High	High	High
PR9	2	24	25	L5-26	Ramsdell Rd	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Severe road shoulder erosion. Moderate surface erosion. Stream undercutting road shoulder. Severe problem.	Complex site - needs engineering assistance. Enlarge culvert. Install plunge pool. Replace culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Install turnout. Add new surface material. Build up road. Remove grader berms. Reshape or crown.	450	High	High	High
PR10	2	9	25	L6-11	Loon Lane intersection with Ramsdell Rd	Private Road	Direct flow of sediment to lake. Moderate road shoulder erosion. Moderate surface erosion.	Add new surface material. Build up road. Install turnout(s). Install broad-based dip. Install waterbar.	0	Medium	Medium	Medium
PR11	2	14	25	L6-35	Lake Grove Springs	Private Road	Direct flow of sediment to lake. Moderate road shoulder erosion.	Build up road. Install turnout(s). Reshape or crown. Install waterbar.	3000	Medium	Medium	Low
PR12	3	30	12	L8-6	~ 80 Birchwood Rd.	Private Road	Direct flow of sediment to lake. Severe erosion at culvert outlet	Needs professional help - severe problem	960	High	High	High
PR13	3	18	18	L7-33, L7-32B	Road in front of 122 Birchwood	Private Road	Direct flow of sediment to stream. Severe road shoulder erosion.	install cross culvert to other side. Armor ditch with stone or grass. Install ditch. Install detention basin.	240	High	High	High
PR14	3	19	18	L7-35	Birchwood Rd.	Private Road	Clogged culvert. Direct flow of sediment to lake. Severe road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Install ditch. Install turnout(s).	1600	High	Medium	Medium

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
PR15	3	35	12	L8-11	Birchwood Rd.	Private Road	Moderate road shoulder erosion.	Create water diversion at top of hill. Enlarge culvert. Install ditch.	200	Low	Medium	High
PR16	3	11	18	L7-5,6,4,3	Birchwood Rd. - Birchwood Shores area	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to lake. Moderate road shoulder erosion. Stockpiled soil. Slight surface erosion.	Install earthen berm and vegetate along stream edge where snow is plowed. Stabilize culvert inlet and/or outlet. Install turnout(s).	60	Low	Low	Low
PR17	3	32	12	~L8-10	Birchwood Rd.	Private Road	Clogged culvert. Direct flow of sediment to ditch. Moderate surface erosion.	Install level spreaders in buffer area to disperse flow. Clean out culvert. Enlarge culvert. Reshape ditch.	12	Low	Medium	Medium
PR18	3	3	18	L6-38,39	End of Birchwood Road	Private Road		Install turnout. Install detention basin.	88	Medium	Medium	Medium
PR19	3	5	18	L6-43-47	Birchwood Road	Private Road	Moderate road shoulder erosion.	Armor ditch with stone or grass. Install ditch. Install detention basin.	1000	Medium	High	High
PR20	3	37	12	4-14	Birchwood Road Pole #595	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Moderate road shoulder erosion.	Enlarge culvert. Install plunge pool. Reshape ditch.	100	Medium	Medium	Medium
PR21	3	36	12	4-14	across from swamp	Private Road	Moderate road shoulder erosion.	Install basin across from house. Install cross culvert. Install ditch. Install detention basin.	300	Medium	High	High
PR22	3	27	18	L7-49 to 51	near 88 Birchwood	Private Road	Unstable culvert inlet/outlet. Bank failure.	Clean out culvert. Install plunge pool. Stabilize culvert inlet and/or outlet. Reshape ditch. Install turnout. Remove grader berms.	90	Medium	Medium	Medium
PR34	5	5	32	L14-36, 35	Evergreen Rd. Pvt. near turn of Deer Acres	Private Road	Direct flow of sediment to lake. Moderate road shoulder erosion.	Armor ditch with stone or grass. Install ditch. Remove winter sand.	1125	Medium	Medium	Medium
PR35	5	34	24	L12-41, 42	Kentwood Rd	Private Road	Direct flow of sediment to ditch. Slight surface erosion. Unstable construction site. New gravel road - unstable surface and ditches.	Install ditch. Install turnout.	625	Low	Medium	Medium
PR36	5	27	24	L13-22	Arundel Road Pole #9	Private Road	Clogged culvert. Unstable culvert inlet/outlet. Direct flow of sediment to ditch. Moderate road shoulder erosion.	Clean out culvert. Install plunge pool. Stabilize culvert inlet and/or outlet. Install ditch.	50	Low	Low	Low
PR37	5	25	24	L13-28	Pole 4S & 4	Private Road	Clogged culvert. Unstable culvert inlet/outlet. Direct flow of sediment to ditch. Slight road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Install ditch. Reshape ditch.	50	Low	Low	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
PR37a	5	21	24	L13-2, L-13-29	Junction Aquila & Arundel Rds	Town Road	Clogged culvert. Unstable culvert inlet/outlet. Direct flow of sediment to stream. Moderate road shoulder erosion.	Clean out culvert. Enlarge culvert. Install plunge pool. Replace culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Install ditch. Reshape ditch. Install turnout. Install turnout(s). Remove winter sand. Extend buffer.	475	High	High	High
PR38	4	3	40	L15-45	Lyons Pt from pole 18 to Johnson Property	Private Road	Direct flow of sediment to lake. Moderate surface erosion. Pavement in poor condition.	Re-pave. Remove winter sand. Reshape or crown. Pave.	3600	Low	Medium	High
PR39	7	1	11	L9-12	Hunnewell	Private Road	Moderate surface erosion.	Add new surface material. Build up road. Install turnout(s). Install waterbar.	3000	Low	Medium	Medium
PR40	7	5	11	L9-7 - 11	loop of Hunnewell by CMP poles 1711 and 171	Private Road	Direct flow of sediment to lake. Moderate surface erosion.	Install runoff diverters. Add new surface material. Reshape or crown. Establish buffer.	7200	High	Medium	Medium
PR41	7	12	17	3-3c	Top of Swett Dr pole # 176 Caracass Rd	Private Road	Moderate road shoulder erosion. Moderate surface erosion.	Install culvert, reshape veg shoulder. Install ditch. Install turnout(s). Remove winter sand. Reshape or crown. Rip rap.	2600	Medium	High	Medium
PR42	7	19	17	3-3a	Westwood Rd in front of Foster residence (277)	Private Road	Severe road shoulder erosion.	Install turnout(s).	688	Medium	Medium	Medium
PR43	7	21	11	L9-20,21	Cobb Rd from beginning w/ Westwood pole #167	Private Road	Direct flow of sediment to stream. Moderate road shoulder erosion. Moderate surface erosion.	Install culvert under driveway, Enhance turnout. Install ditch. Remove grader berms. Reshape or crown. Install detention basin.	3900	High	High	High
PR44	6	3	17	3-4	Farwell Bk Rd Crossing	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream.	Stabilize culvert inlet and/or outlet. Reshape or crown. Rip rap.	340	Medium	Medium	Low
PR45	6	6	17	L11-21	Westwood Rd 30ft north of Pickrel Pond Ave	Private Road	Clogged culvert. Direct flow of sediment to lake. Slight road shoulder erosion. road shoulder erosion.	Clean out culvert. Install plunge pool. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Reshape ditch.		Low	Low	Low
PR46	6	7	17	3-11	Johnson Rd	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Ditch blocked with excavated soil	lengthen culvert. Stabilize culvert inlet and/or outlet. Install ditch.	200	Low	Medium	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
PR47	6	9	17	3-12	Pole #24 Johnson Rd	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to ditch.	Install ditch.	1000	Low	Low	Low
PR48	6	8	17	3-13	Near #116 pole #20.4	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to ditch.	Install plunge pool. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Rip rap.	250	Low	Medium	Low
PR49	6	10	17	3-4b	Johnson Rd Pole #9	Private Road	Direct flow of sediment to stream. Stockpiled soil.	Install turnout. Seed and mulch.	2500	Low	Low	Low
R1	1	14	40	L4-18	southern end of Qualey Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Moderate surface erosion.	Install retaining wall. Create infiltration area behind existing steps. Install stone-filled dripline trench. Establish buffer. Seed and mulch. Install steps.	1500	Medium	Medium	Medium
R2	1	12	32	L4-14	Qualey Rd.	Residential	Slight surface erosion.	Close off parking area at base of slope. Seed and mulch.	300	Low	Low	Low
R3	1	11	32	4-12	Across from pole #63 Qualey Road	Residential	Moderate surface erosion.	Close off 2nd driveway. Install landscape timbers along edge of trailer platform and crushed stone along edge of platform. Establish buffer. Seed and mulch. No raking.	180	Low	Low	Low
R4	1	9d	32	L4-23	Qualey Rd.	Residential	Direct flow of sediment to lake. Slight roof runoff. Lack of shoreline buffer. Moderate surface erosion.	Shore up retaining wall. Install dry well. Install waterbar. Establish buffer. Seed and mulch. Install steps.	900	Low	Low	Medium
R4a	1	9a	32	L4-27	Qualey Rd. near bend	Residential	Slight roof runoff. Bare soil. Slight surface erosion.	Install stone-filled dripline trench. Establish buffer. Seed and mulch. Define pathways. No raking. Install steps.	600	Low	Low	Low
R5	1	7c	32	L4-4	Qualey Rd.	Residential	Moderate surface erosion.	Cut back bank. Terrace.	1000	Low	High	High
R6	1	7f	32	L4-29	Qualey Road	Residential	Direct flow of sediment to lake. Moderate surface erosion.	Install stone-filled dripline trench. Install waterbar.	600	Medium	Low	Low
R7	1	7d	32	L4-33	Qualey Rd.	Residential	Moderate surface erosion.	Add new surface material. Establish buffer. Terrace.	750	Low	Medium	Medium
R8	1	7a	32	L4-36	Qualey Rd.	Residential	Moderate surface erosion.	Install stone-filled dripline trench. Install waterbar. Establish buffer. Seed and mulch. Rip rap.	25	Low	Low	Low
R9	1	1	32	L4-37	Qualey Rd. - Policeman's Cove	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch.	644	Low	Low	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R9a	1	18	33	L4-76	Ramsdell Rd. across from Camp Sebago	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Moderate surface erosion.	Establish buffer.	24	Low	Low	Low
R10	1	19	32	L5-4	Grape Island Trail	Residential	Bare soil. Lack of shoreline buffer.	Install landscape timbers along edge of sand to retain sand, then plant buffer between timbers and lake. Establish buffer.	1600	Low	Low	Low
R11	1	20	32	L5-5	Grape Island Trail	Residential	Direct flow of sediment to lake. Slight roof runoff. Lack of shoreline buffer.	Install stone-filled dripline trench. Install dry well. Establish buffer. Seed and mulch.	75	Low	Low	Low
R12	2	1	32	L5-11	Ramsdell Rd. Pole #85 1/2	Residential	Pet waste. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Install stone-filled dripline trench. Establish buffer. Seed and mulch.	750	Low	Low	Low
R13	2	3	32	L5-12	Ramsdell Rd. near Grape Island Trail	Residential	Moderate road shoulder erosion. Bare soil. Moderate surface erosion. Exposed roots. Trash. Junk car. Broken car battery.	Add new surface material. Reshape or crown. Install waterbar. Establish buffer. Seed and mulch.	75	Medium	Low	Low
R14	2	4	24	L5-14	Ramsdell Rd. near Grape Island Trail	Residential	Bare soil. Slight surface erosion.	Extend buffer. Mulch.	600	Low	Low	Low
R15	2	5	24	L5-18	Ramsdell Rd. near Grape Island Trail	Residential	Lack of shoreline buffer. Slight surface erosion.	Establish buffer.	1600	Low	Low	Low
R16	2	10	25	L6-11	Loon Lane	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Establish buffer. Seed and mulch. No raking.	2000	Low	Low	Low
R17	2	11	25	L6-11-12	Loon Lane	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Moderate surface erosion.	Build up road. Establish buffer.	1000	Medium	Medium	Low
R18	2	12	25	L6-14	Loon Lane	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Mulch. Install steps. Terrace.	500	Low	Low	Low
R19	2	23	25	L6-18	Lake Grove Springs	Residential	Beach enhancement with sand. Bare soil. Lack of shoreline buffer. Slight surface erosion. Unstable beach access.	Remove of supplemented beach material. Establish buffer. Seed and mulch.	0	Medium	Low	Medium
R20	2	22	25	L6-19	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Establish buffer. Seed and mulch.	0	Low	Low	Low
R21	2	21	25	L6-20	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Install stone-filled dripline trench. Install waterbar. Establish buffer. Seed and mulch. Mulch. Install steps. Terrace.	0	Medium	Medium	Medium

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R22	2	20	25	L6-23	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Install waterbar. Extend buffer. Install steps. Terrace.	0	Low	Low	Low
R23	2	19	25	L6-24	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Seed and mulch. No raking.	0	Medium	Low	Low
R24	2	18	25	L6-25	Lake Grove Springs - Narrows	Residential	Bare soil. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Establish buffer. Seed and mulch. No raking.	0	Medium	Low	Low
R25	2	17	25	L6-26	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Establish buffer. Seed and mulch. Terrace.	0	Medium	Medium	Medium
R26	2	16	25	L6-27	Lake Grove Springs - Narrows	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Severe surface erosion.	Some of plants given away at LSLA meeting were planted where alders were cut. Install waterbar. Establish buffer. Seed and mulch. Mulch. No raking.	10000	Medium	Medium	Medium
R27	2	15	18	L6-30	Lake Grove Springs	Residential	Direct flow of sediment to lake. road shoulder erosion. Road shoulder erosion. Bare soil. Moderate surface erosion. Unstable beach access.	Install waterbar. Mulch. No raking. Terrace.	300	Medium	Medium	Low
R28	3	1	18	L6-38	Birchwood Road near end	Residential	Direct flow of sediment to lake. Shoreline erosion. Lack of shoreline buffer. Slight surface erosion.	Drywell or turn gutter spout toward landscape bed. Install dry well. Establish buffer.	525	Medium	Low	Low
R29	3	2	18	L6-39	Birchwood Road near end	Residential	Direct flow of sediment to lake. roof runoff. Road material transported to lake	Install stone-filled dripline trench. Remove winter sand.	480	Low	Low	Low
R30	3	6	18	L6-45	Birchwood Rd.	Residential	Direct flow of sediment to lake. roof runoff. Bare soil. Lack of shoreline buffer. Unstable boat access.	Install stone-filled dripline trench. Establish buffer. Seed and mulch. Mulch.	750	High	Low	Medium
R31	3	7	18	L6-46	Birchwood Rd. May Meadow Cove	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Install stone-filled dripline trench. Mulch. No raking.	400	Low	Low	Low
R32	3	8	18	L6-48	Birchwood Rd. May Meadow Cove	Residential	Moderate surface erosion. unstable foot trail out of house	Install gutter downspout. Install dry well. Install steps.	50	Low	Low	Low
R33	3	9	18	L6-50	Birchwood Rd. May Meadow Cove	Residential	Direct flow of sediment to stream. Severe roof runoff. Severe surface erosion.	Install rip rap or gabions. Install dry well. Establish buffer. Rip rap.	50	Medium	Medium	Low
R34	3	11a	18	L7-6	Birchwood Rd.	Residential	Shoreline erosion. Lack of shoreline buffer. Unstable beach access.	Establish buffer. Mulch. No raking.	0	Low	Low	Low
R35	3	12	18	L7-8 or 9	Birchwood Rd.	Residential	Shoreline erosion. Lack of shoreline buffer. Slight surface erosion. Unstable beach access.	Install stone-filled dripline trench. Establish buffer.	0	Low	Low	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R36	3	13	18	L7-9	Birchwood Rd.	Residential	Lack of shoreline buffer. Moderate surface erosion.	Terrace more. Install stone-filled dripline trench. Establish buffer. Seed and mulch. Terrace.	7500	Medium	Medium	Medium
R37	3	14	18	L7-11	160 Birchwood near pole #125 1/2	Residential	Direct flow of sediment to lake. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Install waterbar. Extend buffer. Seed and mulch.	2400	Low	Low	Low
R38	3	15a	18	L7-28	Birchwood Rd.	Residential	Shoreline erosion. Lack of shoreline buffer.	Establish buffer. Seed and mulch.	600	Low	Low	Low
R39	3	17	18	L7-32	Birchwood Rd.	Residential	Direct flow of sediment to lake. Slight surface erosion.	Send copy of Camp Road Maintenance Manual. Install stone-filled dripline trench. No raking.	400	Low	Low	Low
R40	3	20	18	L7-35	Birchwood Rd. at road bend	Residential	Direct flow of sediment to lake. Moderate surface erosion.	Install dry well. Extend buffer. Seed and mulch. No raking.	150	High	High	High
R41	3	23	18	L7-40, 41	Birchwood Rd.	Residential	Shoreline erosion. Severe surface erosion.	Extend buffer. Mulch.	320	Medium	Low	Medium
R41a	3	16a	18	L7-36	Birchwood Rd.	Residential	Direct flow of sediment to lake. Slight roof runoff. Severe surface erosion.	Waterbar on path to beach. Install stone-filled dripline trench. Install waterbar.	600	Medium	Medium	Medium
R42	3	24	18	L7-42	Birchwood Rd.	Residential	Direct flow of sediment to lake. Slight surface erosion. Erosion at base of stairway to beach area	Install dry well.	40	Low	Low	Low
R43	3	25	18	L7-49	Birchwood Rd.	Residential	Shoreline erosion. Moderate surface erosion.	Continue with large red pavers. Seed and mulch.	75	Low	Low	Low
R44	6	5	11	L-33	Westwood Rd	Residential	Septic system under construction. No silt fence.	Install erosion controls.	0	Low	Low	Low
R45	7	23	11	L9-18	Cobb Rd pole #167 on left of house	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Runoff diverters. Install stone-filled dripline trench. Install steps.	280	Low	Medium	Low
R46	7	24	11	L9-15	15 Cobb Rd	Residential	Direct flow of sediment to lake. Roof runoff.	Install stone-filled dripline trench. No raking.	300	Low	Low	Low
R47	7	25	11	L9-14	31 Cobb Rd	Residential	Direct flow of sediment to lake. Bare soil. Slight surface erosion.	Manage roof runoff. Enlarge existing dry wells. Install stone-filled dripline trench. Install dry well. Extend buffer. No raking.	456	Medium	Low	Low
R48	7	4	11	L9-13	"Chickawauki" on camp	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Moderate surface erosion. Front of cottage moderate surface erosion, back of cottage severe surface erosion.	Plant trees and shrubs. Install stone-filled dripline trench. Establish buffer. Seed and mulch. De-fine pathways. No raking.	2374	High	Medium	Medium

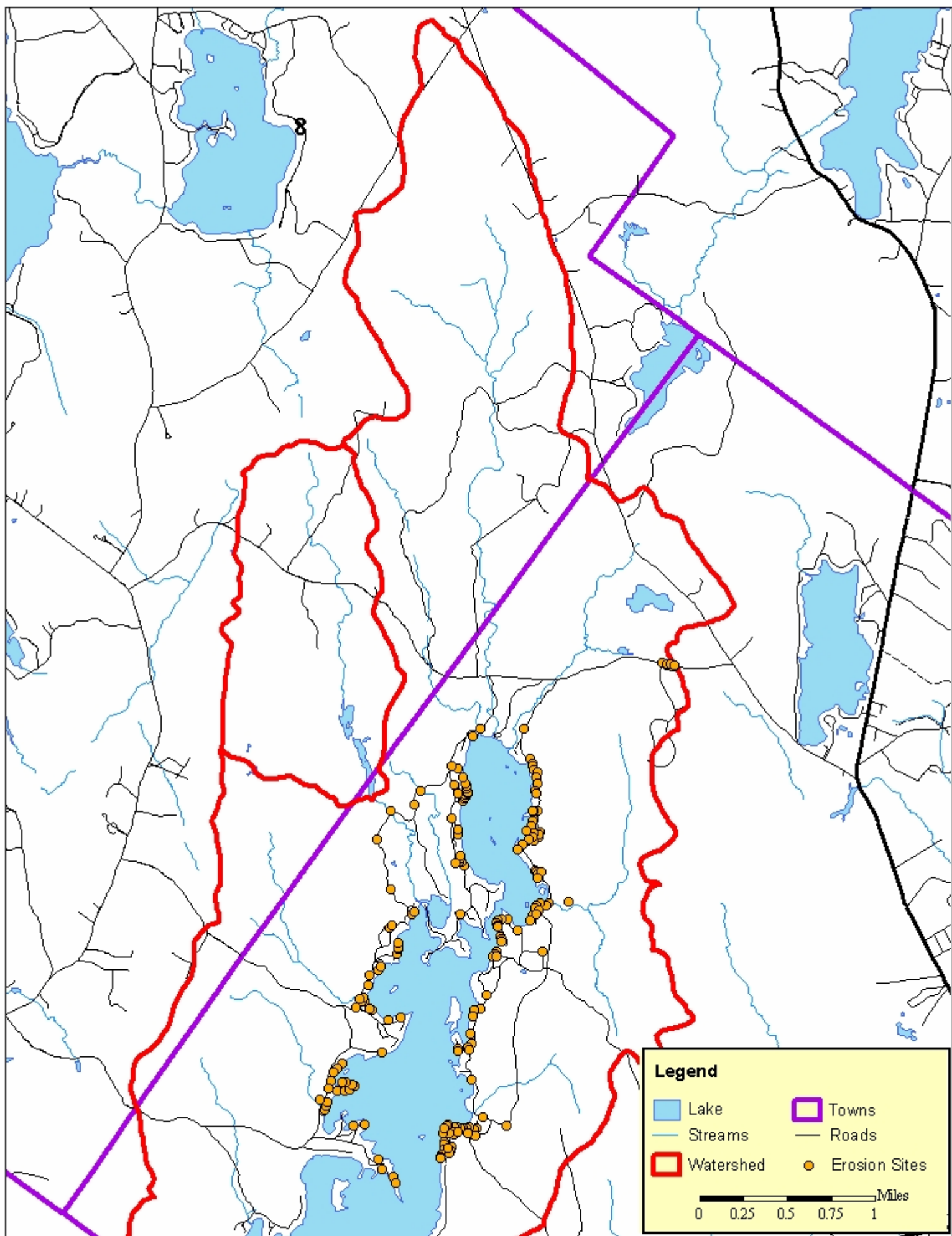
Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R49	7	3	11	L9-11	banking between Hunnewell and Whitmore	Residential	Severe surface erosion.	Restrict foot traffic. Extend buffer. Seed and mulch.	320	High	Low	Medium
R50	7	8	11	L9-11	Whittmore	Residential	Lack of shoreline buffer. Unstable beach access.	Install stone-filled dripline trench. Establish buffer. Seed and mulch. No raking.	4790	Medium	Low	Low
R51	7	7	11	L9-9	Westwood Rd. after Hunnewell	Residential	Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch. Define pathways.	350	Low	Low	Low
R52	7	9	17	L9-8	Westwood Rd - steps down to lake	Residential	Bare soil. Lack of shoreline buffer. Slight surface erosion.	Plant trees and shrubs. Install stone-filled dripline trench. Extend buffer. No raking.	160	Low	Low	Low
R53	7	10	17	L9-7	Westwood Rd steps to lake. End of Swett Dr.	Residential	Bare soil. Lack of shoreline buffer.	Plant trees and shrubs. Install waterbar. Establish buffer. Seed and mulch.	160	Low	Low	Low
R54	7	11	17	L9-5	Westwood Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Install dry well. Install waterbar. Establish buffer. Seed and mulch. Define pathways.	720	Low	Low	Low
R55	7	13	17	L10-43	13 Swett Rd (or adjacent)	Residential	Beach enhancement with sand. Lack of shoreline buffer.	Plant trees and shrubs. Enhance retaining wall.	960	Low	Low	Low
R56	7	14	17	L10-40	Swett Rd before house boat access	Residential	Beach enhancement with sand. Bare soil. Lack of shoreline buffer.	Reduce beach area near water. Extend buffer. Seed and mulch. Define pathways.	540	Low	Low	Low
R57	7	16	17	L10-30	Westwood Rd	Residential		Build up ice berm. Install stone-filled dripline trench. Install dry well. Install waterbar. Establish buffer.	540	Low	Low	Low
R58	7	17	17	L10-29	Westwood Rd	Residential	Bare soil. Moderate surface erosion.	Stone at outlet of small pipe besides stairs. Install stone-filled dripline trench. Install waterbar. Establish buffer.	225	Medium	Low	Low
R59	7	20	17	L10-26	Westwood Rd	Residential	Lack of shoreline buffer. Moderate surface erosion.	Runoff diverters. Install stone-filled dripline trench. Install rubber blade. Extend buffer. Install steps.	450	Medium	Low	Low
R60	6	2	17	L-12-7	127 Johnson Rd	Residential	Direct flow of sediment to lake. Slight surface erosion. Unstable beach access.	Install rubber blade. Install waterbar. Establish buffer.	0	Low	Low	Low
R61	5	33	24	L12-17	Arundel Road	Residential	Direct flow of sediment to lake. Slight runoff. Shoreline erosion. Lack of shoreline buffer. Slight surface erosion.	Establish stable slope. Build up at top of steps and divert into infiltration trench. Install stone-filled dripline trench. Install dry well. Establish buffer. No raking.	1200	Low	Low	Low

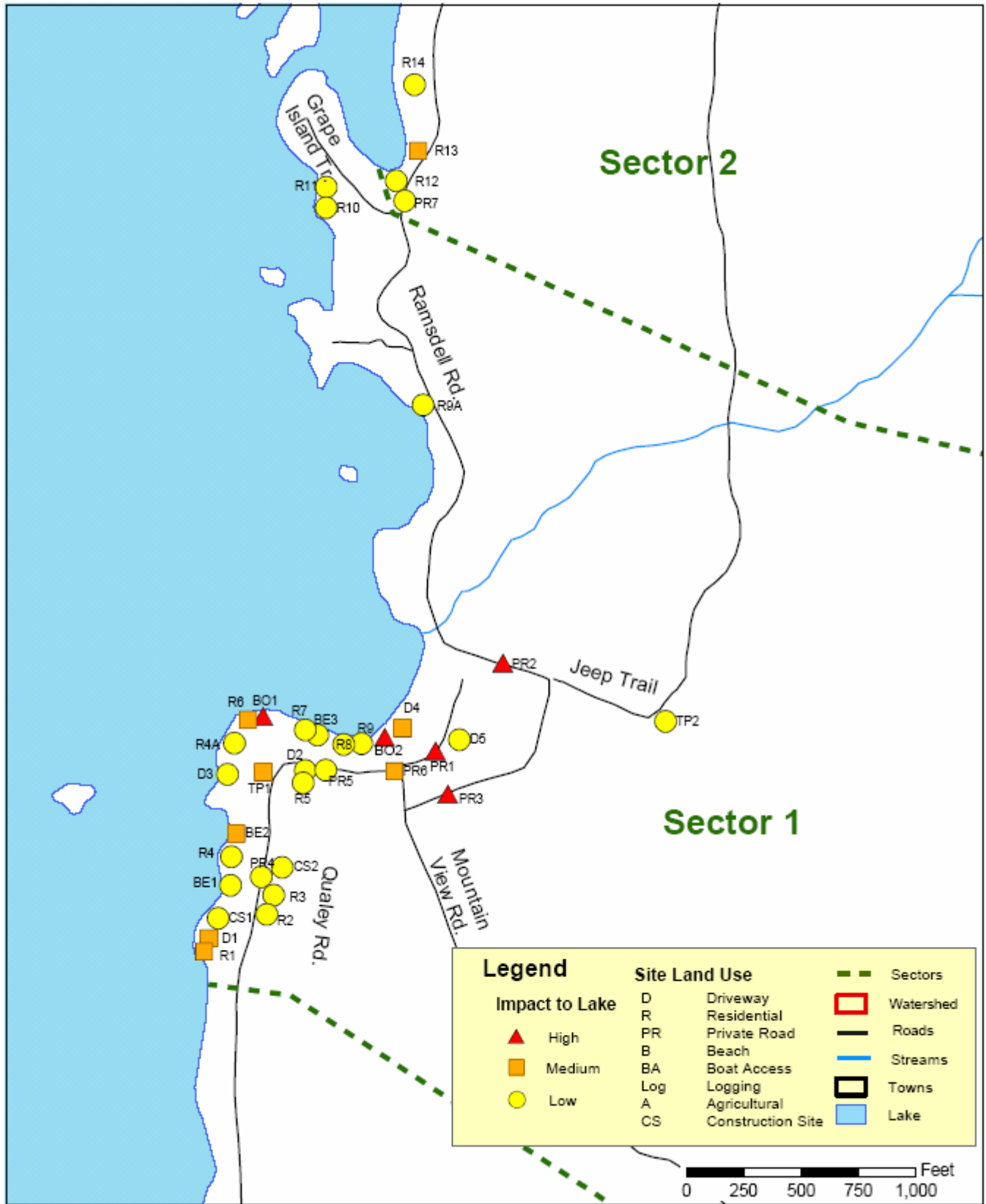
Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R62	5	32	24	L12-19	Arundel Road	Residential	Slight roof runoff. Slight surface erosion.	Extend gutter downspout to buffer. Install dry well. Extend buffer. Seed and mulch.	400	Low	Low	Low
R63	5	31	24	L12-21	Hayden Lane Sandy Beach for rentals	Residential	Direct flow of sediment to lake. Slight surface erosion.	Establish buffer. Install infiltration trench. Mulch. Define pathways. Terrace.	3000	High	Low	Low
R64	5	24	24	L13-4	Arundel Rd. near corner w/ Gore Rd.	Residential	Bare soil. Lack of shoreline buffer.	Extend buffer. Seed and mulch.	1200	Low	Low	Low
R65	5	22	24	L13-3	Arundel Rd. near corner w/ Gore Rd.	Residential	Direct flow of sediment to lake. Slight roof runoff. Bare soil. Shoreline erosion. Slight surface erosion.	Install stone-filled dripline trench. Seed and mulch. Define pathways.	7500	Medium	Low	Low
R66	5	20	24	L13-32	Aquila Rd. near corner w/ Gore Rd.	Residential	Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch. No raking.	2500	Low	Low	Low
R67	5	21	24	L13-33	Aquila Rd. near corner w/ Gore Rd.	Residential	Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch. No raking.	0	Low	Low	Low
R68	5	19	24	L13-40,41	Kram's Point	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch. No raking.	3750	Low	Low	Low
R69	5	18	24	L13-46	Kram's Point near Gansmere Point	Residential	Bare soil. Shoreline erosion. Slight surface erosion. Unstable beach access.	Install stone-filled dripline trench. Install dry well. Establish buffer. Seed and mulch. No raking.	3750	Low	Low	Low
R70	5	17	32	L13-70	Aquilla Rd. near end	Residential	Direct flow of sediment to lake. Shoreline erosion. Lack of shoreline buffer. Unstable beach access.	Establish buffer. Seed and mulch. No raking.	2500	Low	Low	Low
R71	5	16	32	L14-13	Deer Acres Rd. near Sand Island	Residential	Direct flow of sediment to lake. Road shoulder erosion. Unstable beach access.	Establish buffer. Seed and mulch. No raking.	22600	Low	Low	Low
R72	5	14	32	L14-17	Deer Acres Rd. near Sand Island	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion. Unstable beach access.	Establish buffer. Seed and mulch. No raking.	7500	Low	Low	Low
R73	5	13	32	L14-20	Deer Acres Rd. - Pirate's Cove	Residential	Direct flow of sediment to lake. Road shoulder erosion. Stockpiled soil. Lack of shoreline buffer. Slight surface erosion.	Extend buffer.	1000	Low	Low	Low
R74	5	15	32	L14-16	Deer Acres Rd. near Sand Island	Residential	Direct flow of sediment to lake. Shoreline erosion. Lack of shoreline buffer. Unstable beach access.	Armor ditch with stone or grass. Install turnout. Establish buffer. Seed and mulch. No raking.	0	Low	Low	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R75	5	12	32	L14-25	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Shoreline erosion. Lack of shoreline buffer. Slight surface erosion. Unstable construction site. New septic system under construction.	Add new surface material. Establish buffer. Mulch. No raking.	7500	Medium	Low	Low
R76	5	11	32	L14-26	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Shoreline erosion. Lack of shoreline buffer. Moderate surface erosion.	Establish buffer. Mulch. Define pathways. No raking.	7500	Medium	Low	Low
R77	5	10	32	L14-28	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Mulch. No raking.	3750	Medium	Low	Low
R78	5	9	32	L14-29	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Mulch. No raking.	9600	Medium	Low	Low
R79	5	8	32	L14-30	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Mulch. No raking.	3750	Medium	Low	Low
R80	5	7	32	L14-32, 31	Evergreen Rd.	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Seed and mulch. No raking.	7500	Medium	Low	Low
R81	5	6	32	L14-34	Evergreen Rd, Tele #4	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Extend buffer. Seed and mulch. Mulch. Define pathways. No raking.	3750	Medium	Low	Low
R82	5	3	32	L14-39	Deer Acres Rd	Residential	Direct flow of sediment to lake. Slight road shoulder erosion. Road shoulder erosion. Moderate roof runoff. Bare soil. Lack of shoreline buffer. Moderate surface erosion.	Install stone-filled dripline trench. Establish buffer. Extend buffer. Seed and mulch. Define pathways.	0	Medium	Low	Low
R83	5	2	32	L14-40	Deer Acres Rd	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Install stone-filled dripline trench. Establish buffer. Seed and mulch. Mulch. Define pathways. No raking.	1500	Medium	Low	Low
R84	5	1	32	L14-41	Deer Acres Rd.	Residential	Direct flow of sediment to lake. Slight road shoulder erosion. Severe roof runoff. Lack of shoreline buffer. Slight surface erosion.	Stabilize culvert inlet and/or outlet. Install rubber razor. Install waterbar. Extend buffer.	300	Low	Low	Low
R85	4	6b	14	41	Deer Acres Rd.	Residential	Direct flow of sediment to lake. Stockpiled soil.	Remove stockpiled soil	50	Low	Low	Low

Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
R86	4	4c	15	27	Steele Rd north side	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Slight surface erosion.	Extend buffer. Mulch.	120	Low	Low	Low
R87	4	4b	15	30	End of Steele Rd	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Slight surface erosion.	Establish buffer. Mulch.	600	Low	Low	Low
R88	4	4	15	43	Cedar gambrel. 164 Lyons Pt Rd	Residential	Direct flow of sediment to lake. Slight surface erosion. Unstable beach access.	Extend buffer. Install steps/runoff diverters.	300	Low	Low	Low
R89	4	2	15	50	178 Lyons Pt Rd	Residential	Direct flow of sediment to lake. Bare soil. Lack of shoreline buffer. Slight surface erosion.	Establish buffer.	60	Low	Low	Low
R90	4	1	15	51	181 Lyons Point Rd	Residential	Direct flow of sediment to lake. Lack of shoreline buffer. Slight surface erosion.	Establish buffer.	50	Low	Low	Low
TP1	1	9	32	14-28	between 48 Qualey and 46 Qualey	Trail or Path	Direct flow of sediment to lake. Moderate surface erosion.	Define meandering path, possibly close off. Install rubber blade. Extend buffer. Define pathways.	400	Medium	Low	Low
TP2	1	21	33	7-6	~1/3 mi on Jeep Trail from Ramsdell Rd.	Trail or Path	Direct flow of sediment to stream. Severe surface erosion. stream crossing	install stone ford where trail crosses stream.	150	Low	Medium	High
TR1	1	16	33	14-1a, 1b	Ramsdell Rd. - 1st 500' from Mt. View Rd.	Private Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Moderate road shoulder erosion. Moderate surface erosion.	Lengthen culvert inlet. Detention basin along ditch to stream. Install plunge pool. Stabilize culvert inlet and/or outlet. Install ditch. Install turnout. Install detention basin.	3000	High	Medium	High
TR2	9	4	7	10-25D	24 Egypt Road	Town Road	Clogged culvert. Direct flow of sediment to ditch. Slight road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Remove winter sand.	150	Low	Low	Low
TR3	9	3	7	10-26	32 Egypt Road	Town Road	Clogged culvert. Direct flow of sediment to ditch. Slight road shoulder erosion. Slight surface erosion.	Clean out culvert. Remove winter sand. Reshape or crown.	176	Low	Low	Low
TR4	9	2	7	10-32	36 Egypt Road	Town Road	Clogged culvert. Direct flow of sediment to ditch. Slight road shoulder erosion. Slight surface erosion.	Clean out culvert. Remove winter sand. Reshape or crown.	216	Low	Low	Low
TR5	9	13b	7	4-3	27 Egypt Rd	Town Road	Unstable culvert inlet/outlet. Direct flow of sediment to ditch. Slight road shoulder erosion. Road shoulder erosion.	Clean out culvert. Reshape ditch. Remove winter sand.	1000	Medium	Low	Low

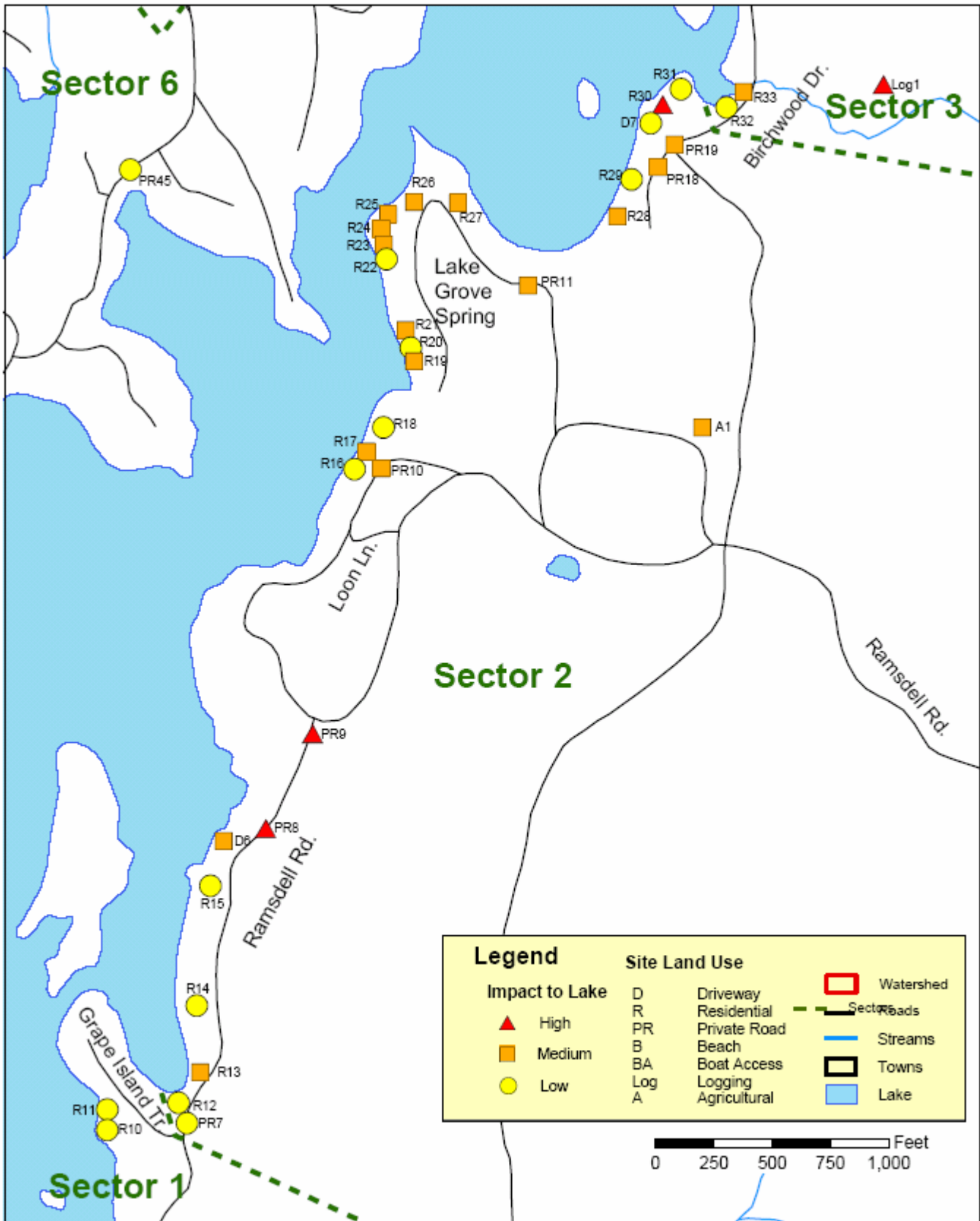
Final Site #	Sector #	Site #	Tax Map #	Tax Lot# *	Location	Land Use	Description of Problem	Recommendations	Area Affected	Impact of Problems	Technical level to Install	Cost
TR6	9	14	7	4-2	31 Egypt Rd.	Town Road	Clogged culvert. Unstable culvert inlet/outlet. Direct flow of sediment to ditch. Slight road shoulder erosion. Road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Remove winter sand.	1000	Medium	Low	Low
TR7	9	15	7	10-10B	Egypt Rd. CMP Pole #8	Town Road	Clogged culvert. Unstable culvert inlet/outlet. Slight road shoulder erosion. Road shoulder erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Remove winter sand.	6000	Low	Low	Low
TR8	9	1	7	4-23	40 Egypt Road	Town Road	Clogged culvert. Direct flow of sediment to ditch. Slight road shoulder erosion. Road shoulder erosion. Slight surface erosion.	Clean out culvert. Stabilize culvert inlet and/or outlet. Armor ditch with stone or grass. Reshape ditch. Add new surface material. Reshape or crown.	360	Low	Low	Low
TR9	6	4	11	L9-36	Sand Brook Crossing (Westwood Rd)	Town Road	Unstable culvert inlet/outlet. Direct flow of sediment to stream. Moderate road shoulder erosion.	Clean up winter sand. Stabilize culvert inlet and/or outlet. Install turnout(s). Remove winter sand.	270	Medium	High	Medium





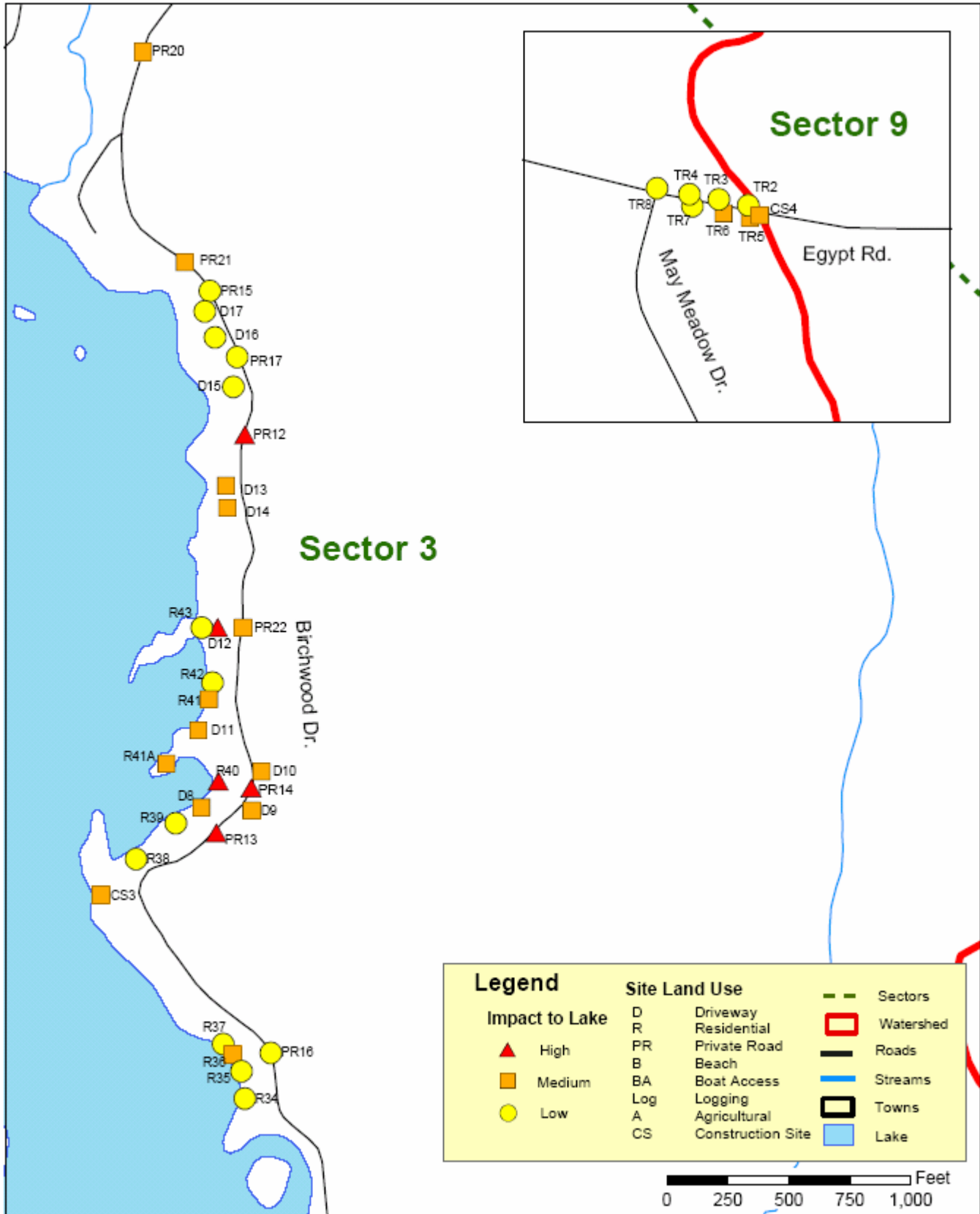
Map 6. Sectors 1 and 2 **

** Site locations shown are approximate.



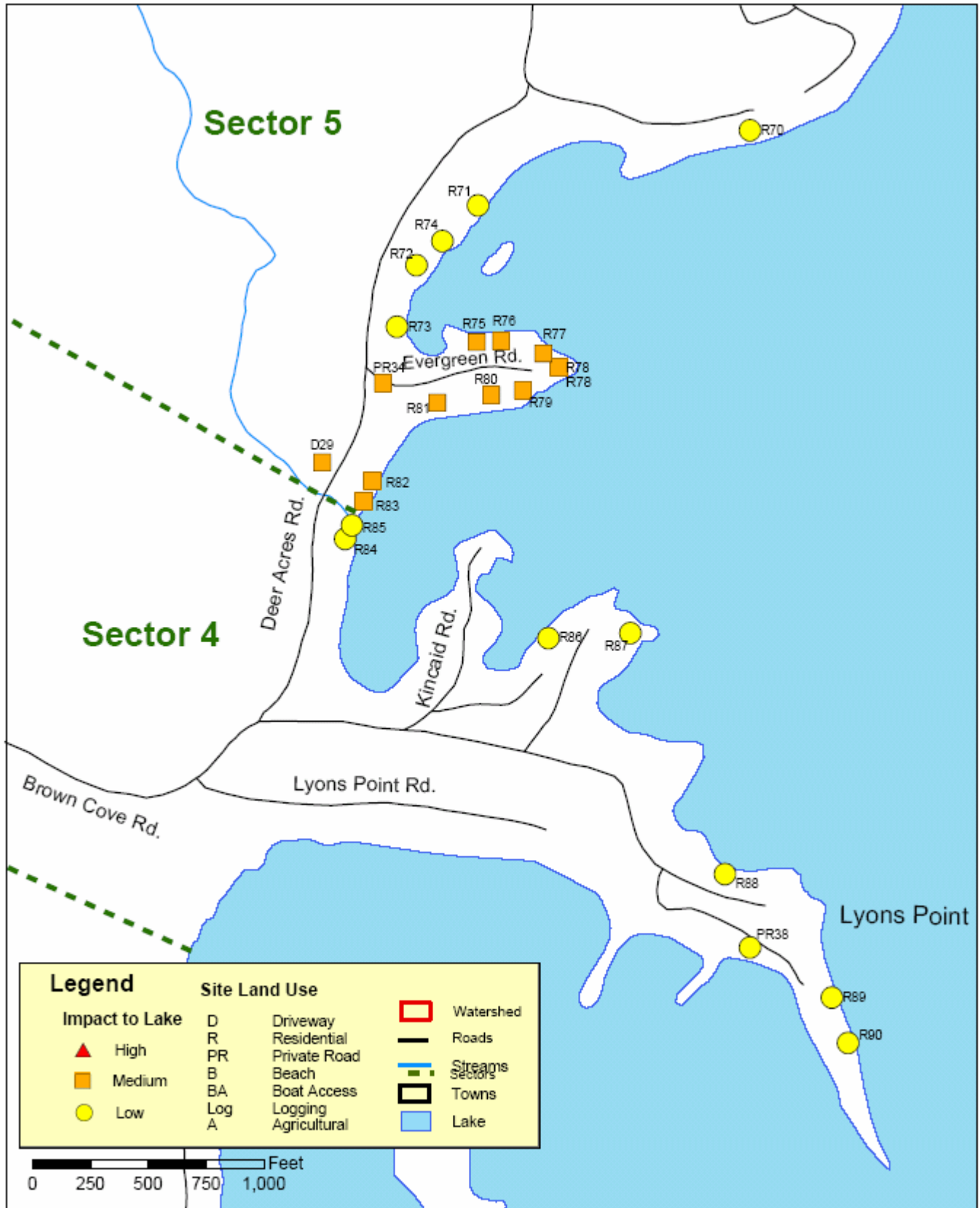
Map 4. Sectors 2 and 3**

**Site locations shown are approximate.



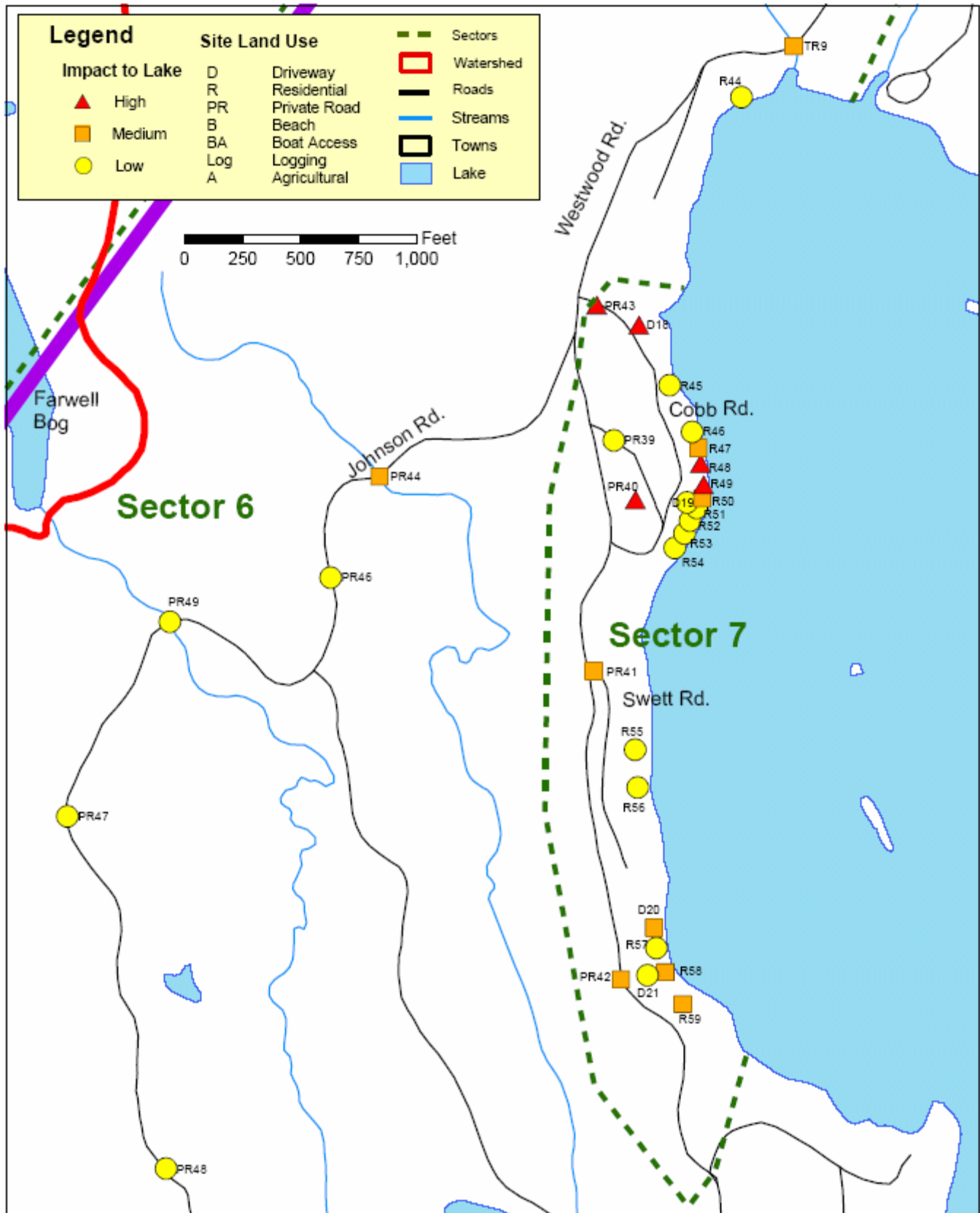
Map 2. Sectors 3 and 9**

**Site locations shown are approximate.



Map 5. Sectors 4 and 5**

**Site locations shown are approximate.



Map 1. Sectors 6 and 7**

**Site locations shown are approximate.

Where Do I Get More Information?

Contacts

Little Sebago Lake Association

PO Box 912

E-mail: info@littlesebagolake.com

Windham, ME 04092

Web site: www.littlesebagolake.com

Outreach and advocacy within the watershed, provides educational materials and directs individuals to appropriate agencies.

Cumberland County Soil and Water Conservation District

201 Main St. Suite 6, Westbrook, ME 04092

(207) 856-2777

Offers assistance with watershed planning and survey work, 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.

Maine Congress of Lake Associations (COLA)

1-877-254-2511

E-mail: info@mainecola.org

Web site: www.mainecola.org

The only statewide network of individuals and lake associations devoted solely to the protection and preservation of our lakes.

Publications

The Buffer Handbook: A Guide to Creating Vegetated Buffers for Lakefront Properties. Androscoggin Valley SWCD and Lake and Watershed Resources Management Associates. 1998. 20 pgs. plus inserts.

Camp Road Maintenance Manual: A Guide for Landowners. Kennebec County SWCD and Maine DEP. June, 2000. 54 pgs.

A Homeowner's Guide to Environmental Laws Affecting Shorefront Property in Maine's Organized Towns. Maine DEP. December, 1997. . DEPLW-38-B98. 28 pgs.

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. University of Maine Cooperative Extension. Bulletin #2500. June, 1999. Folded leaflet.

Remember, the long term health of the watershed depends on you!