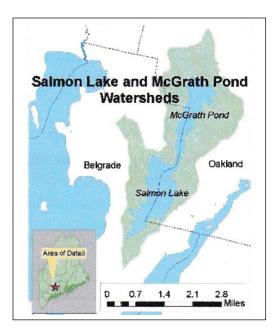


WHAT IS OUR WATERSHED?

A watershed is the area of land, often considerably larger than the lake itself, from which streams and other surface water flow into the lakes. The McGrath-Salmon watershed is almost 4500 acres, whereas the lakes themselves cover only 1150 acres. Given the large size of the watershed, bare soil and other problems can be quite far from the lakes, yet have considerable impact on them.



As rainwater runoff flows over driveways, bare soil, grass, and other surfaces, nutrients such as phosphorous adhere to water molecules and flow into the lakes. Once in the lakes, nutrients that don't flow out eventually settle to the bottom as sediments. Lakes like ours can become nutrient-rich, support lots of algae growth, and turn green. In the worst cases, the water gets slimy, and when the algae die, the lake water stinks!

Salmon Lake, by virtue of the nutrients in its water and its depth, harbors regions of oxygen-starved waters near the lake's bottom. This can bring phosphorus that was deposited in the bottom sediments over many years back up into the water column. This happens because the lack of oxygen in the deep water breaks the chemical bond that held the phosphorus in place. For the last three years, phosphorus

from bottom sediments has combined with nutrients flowing into the lake from streams to bring about late-summer algae blooms, and Salmon Lake has turned a dull green.

WHY SURVEY THE WATERSHED?

The McGrath-Salmon Watershed was last surveyed in 1998 -- <u>almost 20 years ago</u>. The Maine DEP's recommended frequency for watershed surveys is <u>once every five years</u> because land use can change quickly in a heavily populated watershed like ours. Moreover, having a recent Watershed Survey is necessary to apply for state and federal grants to protect and improve water quality. **The McGrath Pond-Salmon Lake Watershed is long overdue for a survey.**

<u>The purpose of the Watershed Survey is to identify nutrient-runoff (erosion) problem sites</u>. A remediation plan is then developed and shared with property owners. Those who choose to take corrective action may do so, accessing free programs such as Lake Smart and the Youth Conservation Corps, or working with their road associations.

THE EAST POND EXAMPLE

A few miles to the north of our lakes, East Pond has been experiencing algae blooms for many years. After completing a Watershed Survey in 2015 and developing a Watershed-Based Protection Plan to remediate problem sites, the East Pond Association has proposed an Alum Treatment. This treatment will keep phosphorus from being released into the lake waters and prevent future algae blooms. If successful, the alum treatment should last for many years, but the cost is high: \$750,000 to \$1,000,000. This is an exciting possibility that we will follow closely.

WHY WE NEED YOUR SUPPORT

The total cost of doing the Watershed Survey and the Watershed-Based Protection Plan is approximately \$8,000. This includes fees for an experienced lakes environmental consultant to help us organize and manage the survey, write the report, and draw up the Watershed-Based Protection Plan. She has done this successfully for both East Pond and North Pond in recent years, and we are pleased to be able to make use of her services.

Benefits of a Watershed Survey

- Raises everyone's awareness of the need to protect McGrath Pond & Salmon Lake from soil erosion and other runoff problems.
- Provides landowners with information about how to eliminate runoff problems from their property.
- Documents problems currently existing in the watershed.
- Provides the means to acquire state and federal grants to protect and improve McGrath Pond & Salmon Lake water quality.
- Builds the Community by working together for the health of the lakes.
- Works toward the MISSION of the McGrath Pond-Salmon Lake Association: To preserve and protect the natural character, enhance the water quality and promote the responsible use of the lakes for the benefit of ALL.

Other expenses include technical support (mapping, technical leaders, volunteer training, community outreach), survey report preparation (data entry and summary report), mailing to watershed landowners (initial mailing to approximately 450 in watershed, follow-up with results & remediation suggestions to an estimated 150 landowners), and refreshments for volunteer training.

For the watershed survey, the MPSLA has support from the Norcross Wildlife Foundation, the Volunteer Lake Monitoring Program (VLMP), the Belgrade Regional Conservation Alliance (BRCA), the Belgrade Lakes Association (BLA), and the Maine Department of Environmental Protection. Through the generosity of the BLA, in response to the significant nutrient load Great Pond gets from McGrath Pond and Salmon Lake, your donation will be matched up to \$2,000.

All of us who cherish McGrath Pond & Salmon Lake appreciate your help in meeting our financial goal. Remember, this is to support work that will let us locate erosion sources of nutrient runoff and partner with road associations and landowners to mitigate it. It also puts us in a position to apply for state and federal grants to protect and preserve our lakes. THANKS!

The McGrath Pond-Salmon Lake Association is a 501(c)3 organization, and all contributions are tax deductible to the extent allowable by law.

Your check can be made payable to MPSLA and mailed to PO Box 576, Oakland ME 04963. Thank you.

In addition to money, we need <u>VOLUNTEER HELP</u>. There's lots to do! Call Christie at 465-2227 or email <u>mpslassociation@gmail.com</u>.