

MCGRATH POND & SALMON LAKE

2017 WATERSHED SURVEY

SURVEY FACTS

Watershed Towns: Belgrade & Oakland, Maine

Date: September 28, 2017

of Volunteers: 30

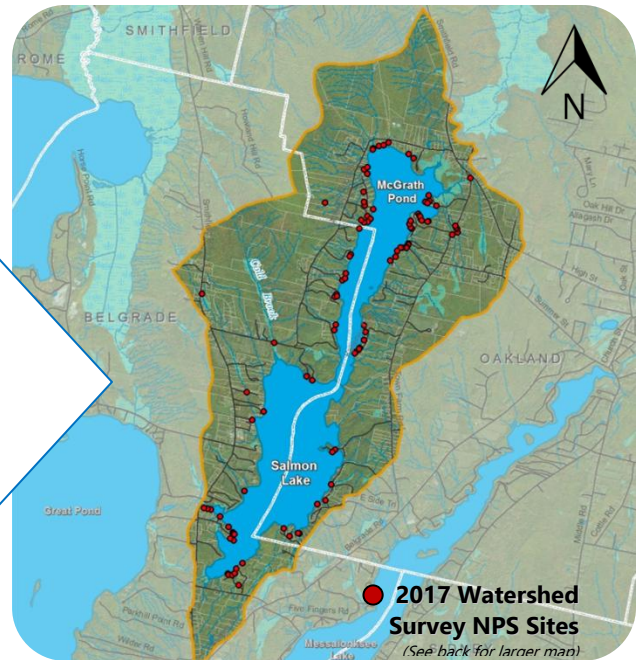
Water Quality Concerns:

- Polluted Runoff from Developed Land Areas
- Increased Frequency/Probability of Algal Blooms
- Low Oxygen/Internal Loading

Potential Pollutants: Nonpoint Source Pollution (NPS)*

Nutrient of Concern: Phosphorus

Total # of Sites Identified: 105



Number of NPS Sites by Land Use Type:

Residential	51
Beach/Boat Access	18
Driveways	13
Private Roads	11
Trails/Paths	5
State & Town Roads	3
Municipal/Public	2
Other	2



Residential properties account for 49% of documented NPS sites in the McGraith Pond-Salmon Lake watershed.

The watershed survey identified 105 different nonpoint source pollution (NPS) sites around the lake that affect the water quality of McGraith Pond & Salmon Lake

IMPACT

Shoreline erosion caused by beach and boat access on residential and commercial properties in the watershed accounts for an additional 17% of NPS sites.

Private roads, driveways, and trails/paths on residential property cumulatively have a **BIG** impact on the water quality in McGraith Pond & Salmon Lake.



CONSERVATION PRACTICES

Things You Can Do To Help!

1. Add vegetation to your shoreline buffer
2. Define & stabilize footpaths (add infiltration steps)
3. Add erosion control mulch (ECM) to bare soil areas
4. Install dripline trenches at your rooflines
5. Capture and infiltrate driveway runoff
6. Maintain private roads annually
7. Become LakeSmart ~ Contact MPSLA!

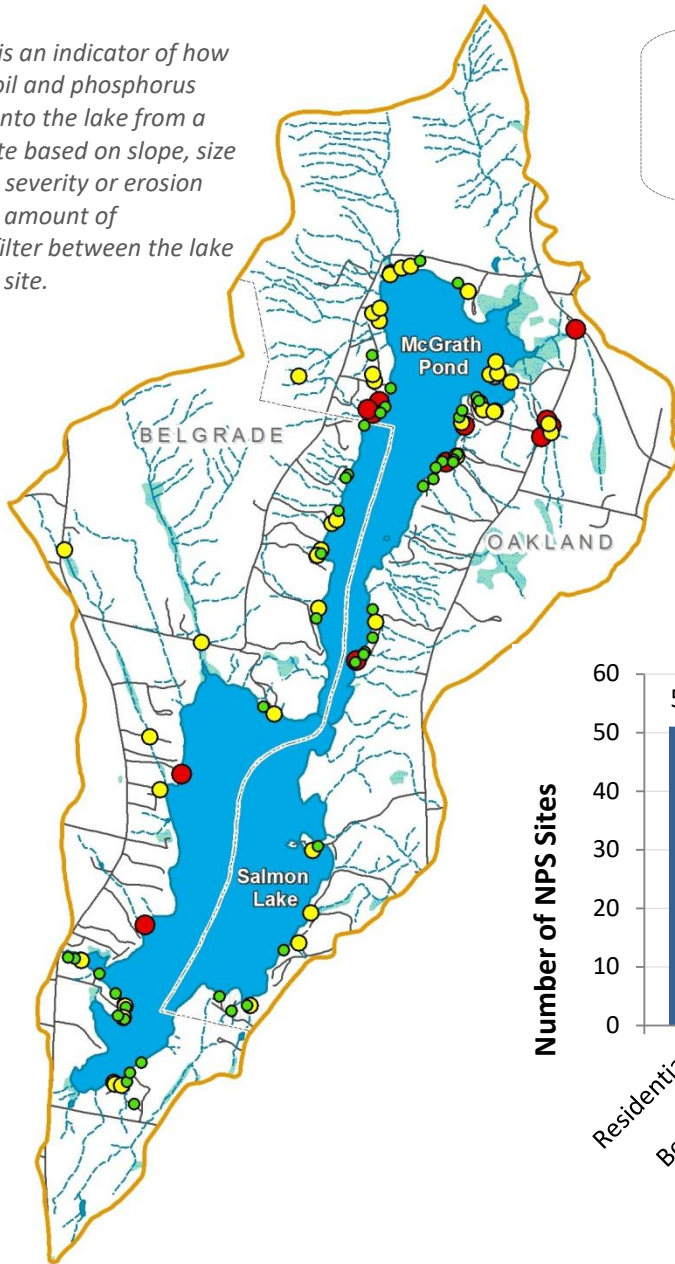


BEFORE & AFTER

*Nonpoint Source (NPS) pollution, or polluted stormwater runoff comes from a number of diffuse sources within a watershed. NPS includes soil, fertilizers, septic waste and other pollutants from diffuse sources across the landscape that are carried into a waterbody by rainfall.

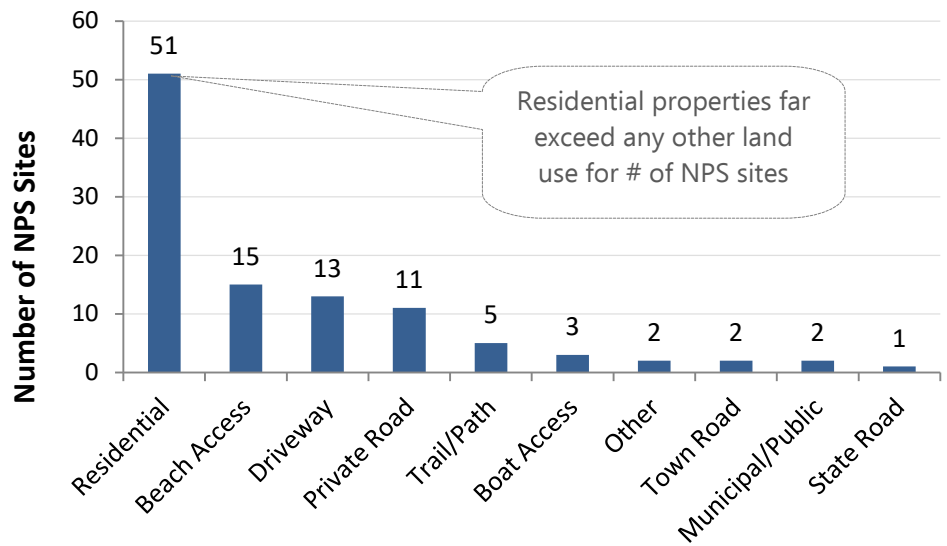
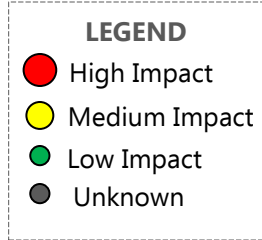
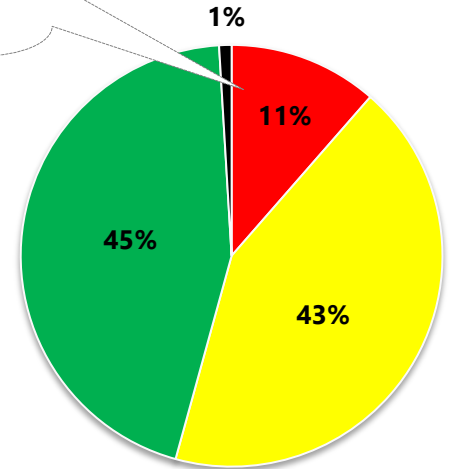
IMPACT OF NPS POLLUTION SITES & NUMBER OF SITES BY LAND-USE TYPE

Impact is an indicator of how much soil and phosphorus erodes into the lake from a given site based on slope, size of area, severity or erosion and the amount of buffer/filter between the lake and the site.



12 of the 105 sites ranked high impact. These sites are spread across 8 different land-use categories.

% of High, Medium & Low Impact NPS Sites



Residential properties far exceed any other land use for # of NPS sites

of NPS Sites by Land-Use Type

Lake Characteristics	McGrath Pond	Salmon Lake
Surface Area	467 ac	666 ac
Perimeter	6.9 mi	7.9 mi
Maximum Depth	27 ft	57 ft
Average Depth	16 ft	23 ft
Flushing Rate	0.69/yr	0.54/yr

Watershed Restoration Priorities

1. Focus on residential, beach/boat-access, and driveway sites by neighborhood around McGrath Pond utilizing the local Youth Conservation Corps (YCC) to assist landowners
2. Address all private-road and high-impact boat-access sites around Salmon Lake
3. Meet with commercial camp owners to address NPS sites at commercial camps on both lakes
4. Improve public-access areas at Pleasant Point Park on the north end of McGrath Pond

This survey was made possible in part by the MPSLA through generous contributions of its members and grants from the Maine Volunteer Monitoring Program (VLMP), Belgrade Lakes Association (BLA) and the Norcross Wildlife Foundation. In-kind contributions were made possible by the many volunteers that participated in the survey, including MPSLA members, BRCA, Maine DEP, North Pond Association, and other interested stakeholders.