

# 2020 LOVEJOY POND WATERSHED SURVEY Summary Fact Sheet

## SURVEY FACTS

**Survey Date:** September 26, 2020

**Lake Name:** Lovejoy Pond

**Watershed Location:** Fayette, Readfield & Wayne, Maine

**Watershed Area:** ~4.6 square miles

**Total # of Sites Identified:** 51

This survey was a collaboration of the Lovejoy Pond Improvement Association, the 30 Mile River Watershed Association, the Maine Department of Environmental Protection, and the University of Maine at Farmington.

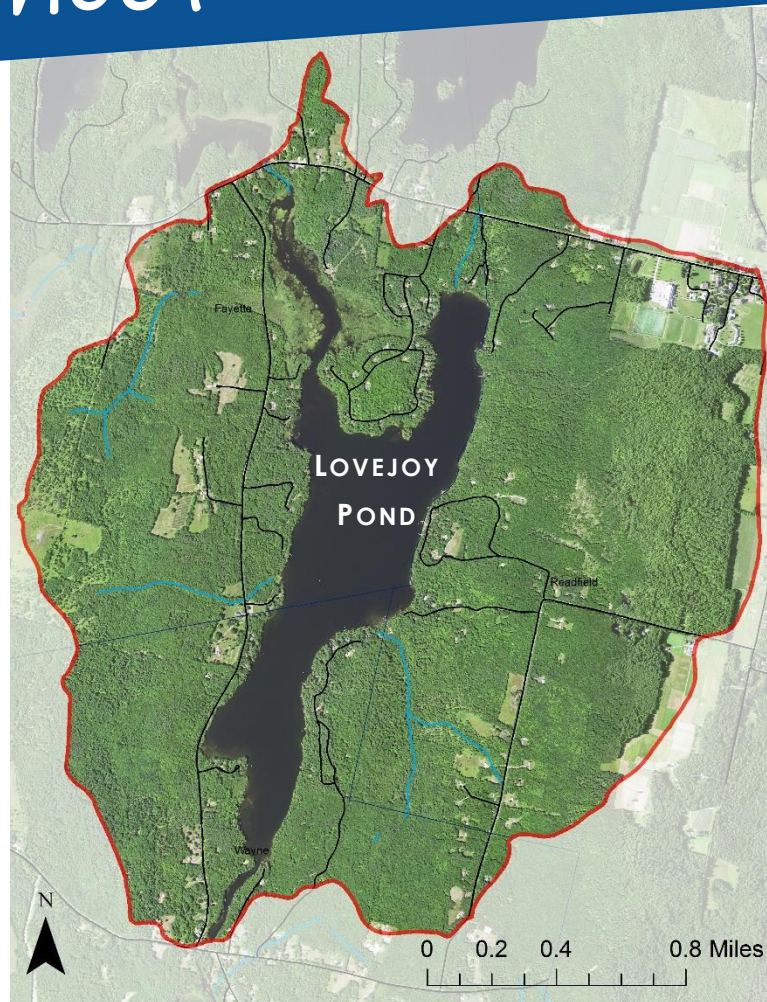
## Purpose

Soil erosion is the #1 source of contamination to Maine lakes. Soil particles carry **phosphorous** - a nutrient that algae use to grow. Soil carried in stormwater runoff deposits phosphorus into nearby streams and lakes, where it is taken up by algae. Too much phosphorous leads to an increase in algae.

Over time, phosphorus builds up in lake sediments. It can be released from lake sediments in a process known as **internal loading**. This happens when oxygen loss occurs at the bottom of the pond, triggering a reaction that releases phosphorus from the sediment back into the water column.

Lovejoy Pond is listed on **Maine DEP's NPS Priority Watershed List** due to its sensitive sediment chemistry. This means that the sediments in Lovejoy Pond are more likely to release phosphorus should oxygen loss occur at the sediment-water interface.

The survey was designed to identify soil erosion that may contribute excess phosphorus to Lovejoy Pond.



## Lovejoy Pond Water Quality

**Water Quality:** Average

**Potential for Algae Blooms:** Moderate

**Dissolved Oxygen Depletion:** Low

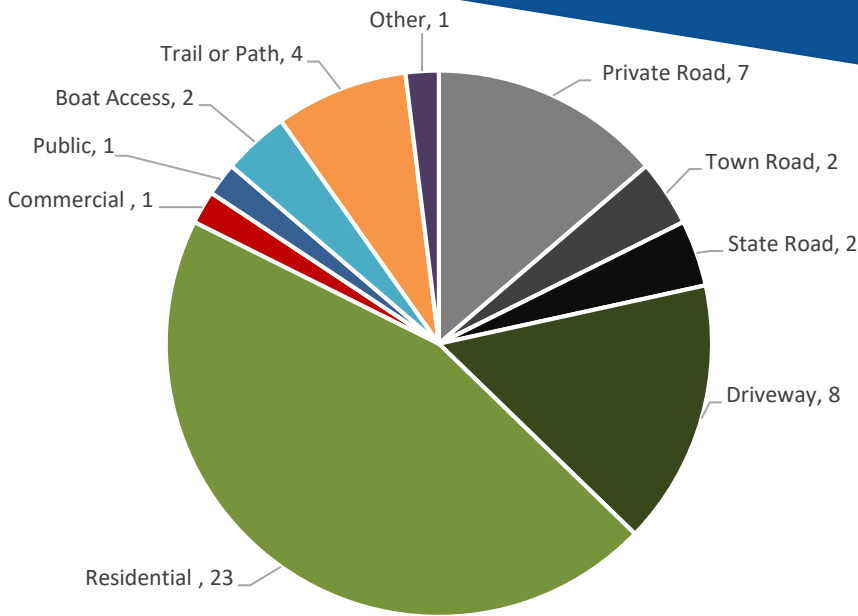
**Internal Recycling Potential:** Moderate

**On NPS Priority List:** Yes- "threatened"  
due to sensitive sediment chemistry



Photo: Survey volunteers and technical leaders

# SURVEY RESULTS



	IMPACT RATING			TOTAL
	High	Med	Low	
Private Road	2	2	3	7
Town Road	0	2	0	2
State Road	0	2	0	2
Driveway	5	3	0	8
Residential	3	6	14	23
Commercial	1	0	0	1
Municipal/Public	0	1	0	1
Boat Access	2	0	0	2
Trail or Path	1	1	2	4
Other	0	1	0	1
<b>TOTAL</b>	<b>14</b>	<b>18</b>	<b>19</b>	<b>51</b>

## Key Survey Findings

Survey volunteers and technical leaders identified a total of **51 sites** across ten different land uses that are likely impacting water quality in Lovejoy Pond. Findings include:

- 27% (14 sites) were determined to be **high impact**, and 35% (18 sites) were identified as **medium impact**. High and medium impact sites contribute higher amounts of pollution to the pond, and should be of highest priority for remedial action.
- High and medium impact sites were documented on a wide range of land use types, highlighting the fact that EVERYONE has a role to play in lake protection.
- 37% of all identified sites were classified as **low impact** to water quality (19 sites). Nearly ¾ of all low impact sites were found on residential properties. Though low impact sites likely contribute less pollution individually, many sites can collectively have a big impact.
- 45% of all identified sites were documented on **residential properties**.
- Sites associated with **roads and driveways** made up almost 40% of all sites and had varying impact ratings: 7 high impact, 9 medium impact, and 3 low impact sites.

## Next Steps

### Individual Citizens:

- Join LPIA today!
- Address any erosion sites identified on your property. Contact LPIA and 30 Mile for guidance.
- Stop mowing and raking – let lawn areas revert back to vegetated, natural spaces.
- Install or improve the vegetated buffer on your shoreline by planting native shrubs.
- Avoid exposing bare soil – seed and mulch all bare areas.
- Maintain your septic system.
- Stop the use of fertilizers containing phosphorus.

### Lovejoy Pond Improvement Association (LPIA):

- Reenergize Lovejoy's [LakeSmart](#) program.
- Share information on “Best Management Practices” and how we can work together to help protect and improve water quality.
- Continue to collaborate with 30 Mile and towns on projects and ongoing monitoring.

### 30 Mile River Watershed Association (30 Mile):

- Distribute survey results to all landowners with identified sites and provide guidance for remedial actions.
- Provide the services of its Youth Conservation Corps to fix identified erosion problems.
- Support landowners on gravel roads in forming road associations and in proper road maintenance.
- Work with watershed towns and ME DOT to address problems on town and State roads.

For the full survey report, visit [www.30mileriver.org](http://www.30mileriver.org)