

# 2023 POCASSET LAKE WATERSHED SURVEY Summary Fact Sheet

## SURVEY FACTS

- Survey Dates:** September 28, 2023
- Lake Name:** Pocasset Lake
- Watershed Location:** Wayne & Fayette
- Watershed Area:** 6 square miles
- Total # of Sites Identified:** 69

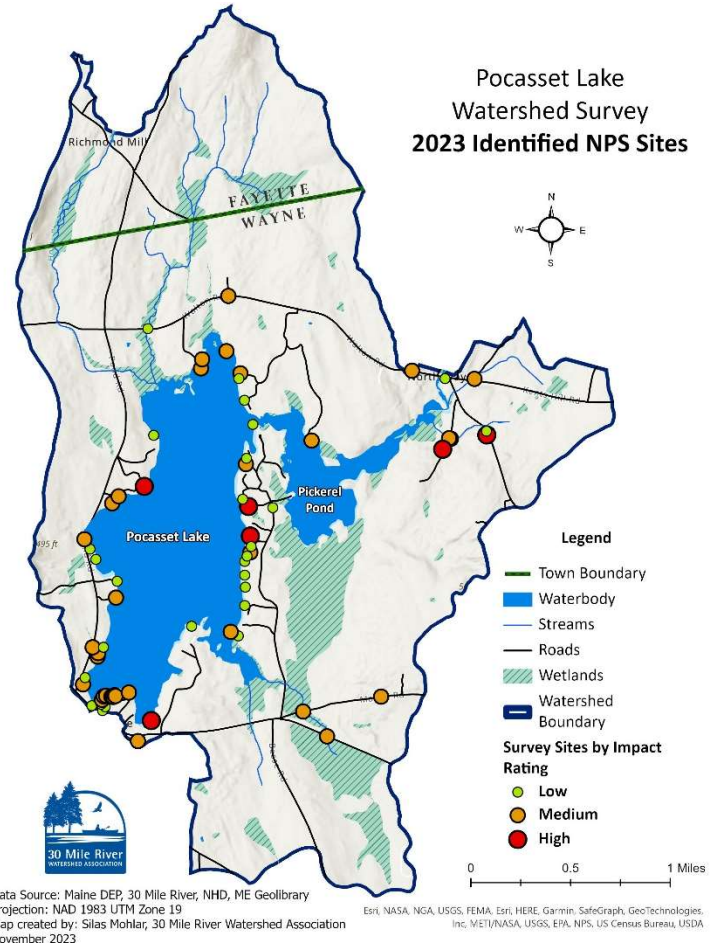
This survey was a collaboration of the 30 Mile River Watershed Association (30 Mile), Pocasset Lake Association (PLA), and Maine Department of Environmental Protection, with generous support from the Davis Conservation Foundation.

## Purpose

Soil erosion is the #1 source of contamination to Maine lakes. Soil particles carry **phosphorus** - 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 phosphorus leads to an increase in algae, or algae blooms.

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 lake, triggering a reaction that releases phosphorus from the sediment back into the water column.

With development pressures around our lake shores high, predicted changes in future weather patterns and an increase in precipitation, addressing erosion and runoff problems in developed areas is critical. This survey lays the groundwork for future stewardship in the Pocasset Lake watershed.



## Pocasset Lake Water Quality

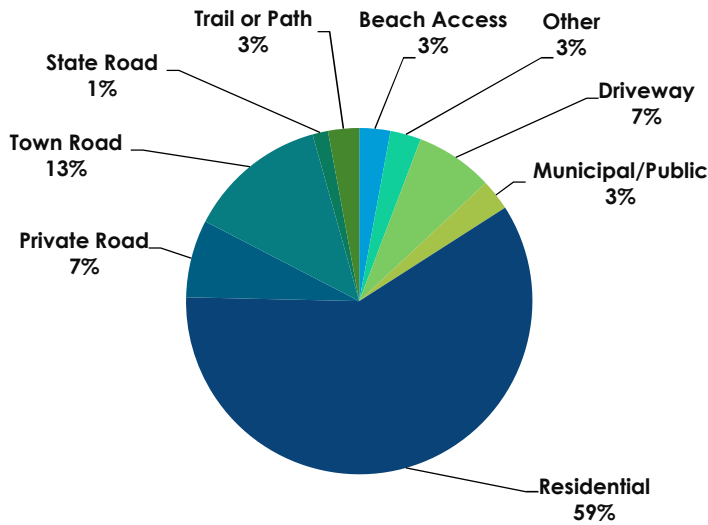
- Water Quality:** Average
- Potential for Algae Blooms:** Low
- Dissolved Oxygen Depletion:** Little
- Internal Recycling Potential:** Low



Photo: Watershed survey volunteers and technical leaders



# SURVEY RESULTS



	IMPACT RATING			TOTAL
	High	Med	Low	
Residential	3	17	21	41
Town Road	1	6	2	9
Private Road	0	3	2	5
Driveway	1	1	3	5
Trail or path	1	0	1	2
Municipal/Public	0	2	0	2
Beach Access	0	2	0	2
Other	0	1	1	2
State Road	0	1	0	1
<b>TOTAL</b>	<b>6</b>	<b>33</b>	<b>30</b>	<b>69</b>

## Key Survey Findings

Survey volunteers and technical leaders identified a total of **69 sites** across 9 different land uses that are likely impacting water quality in Pocasset Lake. Findings include:

- 9% (6 sites) were determined to be **high impact**, and 48% (33 sites) were identified as **medium impact**. High and medium impact sites contribute higher amounts of pollution to the lake 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.
- 43% of all identified sites were classified as **low impact** to water quality (30 sites). 70% 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.
- 59% of all identified sites were documented on **residential properties**.
- Sites associated with **roads and driveways** made up 29% of all sites (20 sites in total) and had varying impact ratings: 2 high impact, 11 medium impact, and 7 low impact sites.

## Next Steps

### Individual Citizens:

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

### Pocasset lake Association:

- Assemble a LakeSmart team.
- 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, grants, and ongoing monitoring.

### 30 Mile River Watershed Association:

- Distribute results to landowners with identified sites & provide guidance for remedial actions.
- Provide the services of the Technical Assistance (TA) program with free site visits to help with remediation projects.
- Support landowners on gravel roads, watershed towns, & ME DOT to address problems on private, town, & state roads.
- Apply for grants to help fund high-cost fixes at priority sites.

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