



Parker, David, and Tilton Ponds WATERSHED SURVEY

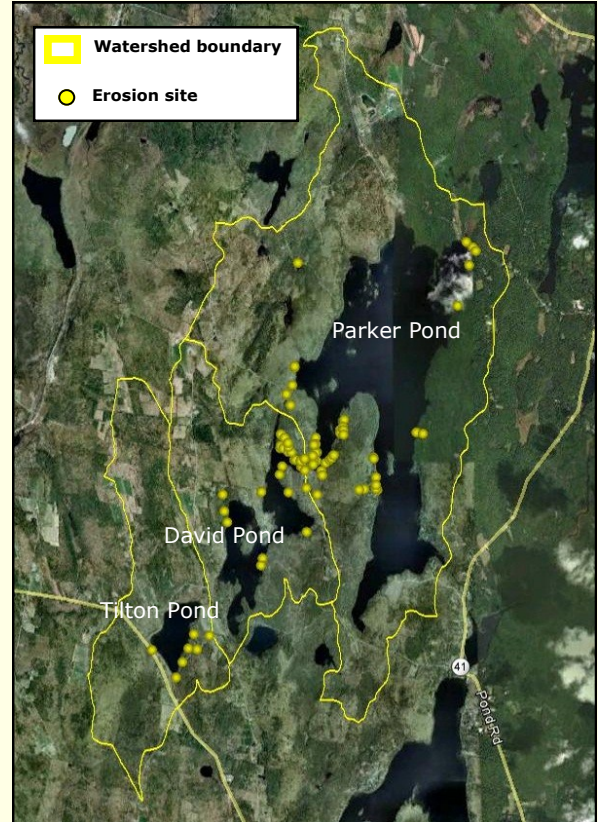
Summary Report

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BACKGROUND:

Over the spring and summer of 2011, the 30 Mile River Watershed Association, with the support of its partners and trained volunteers, conducted a watershed survey of Parker, David and Tilton Ponds, one of the northern branches of the 30 Mile River Watershed in Central Maine. The survey was conducted to protect and improve water quality in these lakes, by identifying sources of erosion and runoff that are or could be damaging to water quality, and recommending solutions to fix the problems.

Trained volunteers and technical leaders surveyed the developed areas of these three ponds' watersheds and identified 83 erosion sites that are impacting or have the potential to impact water quality. Data collected included information on the type of land use, a description of the problem, the level of impact on water quality and recommended solutions to fix each erosion source.



Volunteers and technical staff at the April 2011 Training

Project Partners:

30 Mile River Watershed Association, Basin-David-Tilton Ponds Association, Kennebec County Soil and Water Conservation District, Maine Department of Environmental Protection, Parker Pond Association, and the towns of Chesterville, Fayette, Mount Vernon, and Vienna.

Funding was provided in part by the U.S.EPA under Section 319 of the Clean Water Act and administered by the Maine DEP in partnership with EPA.

SURVEY PURPOSE:

Pollution from stormwater runoff is one of the biggest threats to these lakes.

The purpose of the watershed survey was to identify and prioritize for remediation existing sources of polluted runoff, particularly soil erosion sites, in these three watersheds. However, of equal importance was to:

- 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 pond protection strategy.
- Make general recommendations to landowners for fixing erosion problems on their properties.

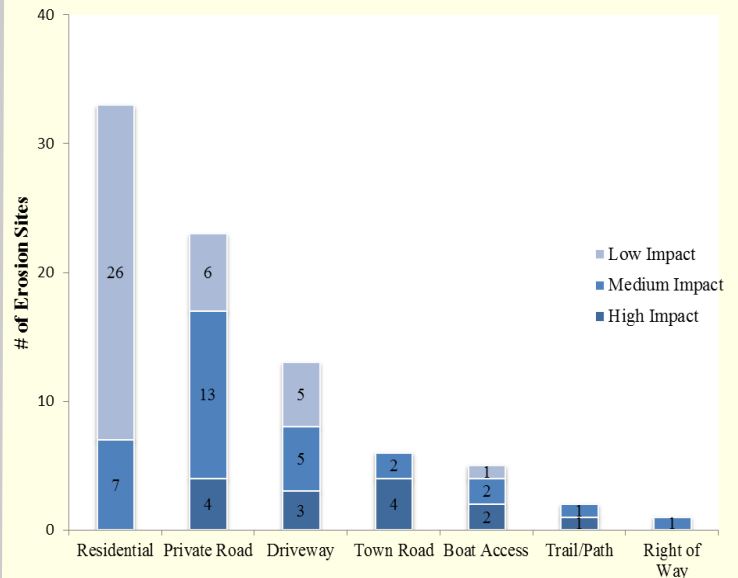
Once a lake's water quality has declined, it can be difficult or impossible to restore.

KEY SURVEY FINDINGS:

Within these three watersheds, volunteers and technical staff identified 83 sites that are impacting or have the potential to impact water quality. The full report provides the results and analysis of the survey. Some key findings include:

- 45 of the identified sites (55%) were found in residential areas (32 residential, 13 driveway). The majority of these sites (30) had less severe erosion and can be fixed easily at low cost. Individual landowners can play a big role in helping address these problems.
- 23 of the identified sites (28%) were associated with private roads (6 low impact, 13 medium and 4 high). These sites tend to be larger erosion problems with greater impacts on water quality. In most cases, comprehensive planning by a road association is critical to ongoing road maintenance.
- Relative to its lake size, David Pond had a high proportion of sites in its watershed compared to the other two: Parker Pond had 46 sites for a 1524-acre lake, David Pond had 30 sites for a 302-acre lake and Tilton Pond had 7 sites for a 116-acre lake.
- More than half of the sites (54%) can be fixed at low cost (under \$500), and an additional 29% can be fixed at medium cost (under \$2,500).
- The highest concentration of sites was in adjoining areas of Parker and David Ponds, in the most developed parts of both lakes. This land was all part of the same subdivision, and most lots were sold and developed during the 1960s. At that time, there was no shoreland zoning; therefore, development on these lots is much closer to the water, often with no vegetated buffer.
- Nearly half of the sites (46%) were identified as being low impact; however, the cumulative effect of all of the low impact sites is significant.

Erosion Sites by Land Use



NEXT STEPS:

Fixing the erosion sites identified in this survey will require efforts by individuals, road associations, municipal officials, lake associations and the 30 Mile River Watershed Association. Paying attention to run-off problems and identifying sites in need of work should be continual activities of those interested in protecting these lakes. This survey provided a snapshot of the situation of the surveyed areas on a particular day; new erosion sites develop, particularly after heavy rain or snowmelt.



Example of moderate surface erosion identified on a residential site.

The full report provides information about how landowners can find support in addressing erosion issues on their properties.

To obtain a copy of the full report, please visit www.30mileriver.org.

If you suspect an erosion problem on your property, please contact us at info@30mileriver.org or (207)670-7298.

The **30 Mile River Watershed Association** is a nonprofit coalition of lake associations, municipalities and land trusts with a shared mission to preserve and protect the land and water quality in the 30 Mile River Watershed.