

# Nequasset Lake Watershed Improvement Project – Phase I

## #2007RR27

Waterbody Name: Nequasset Lake

Location: Woolwich, Dresden and Wiscasset –  
Sagadahoc and Lincoln Counties

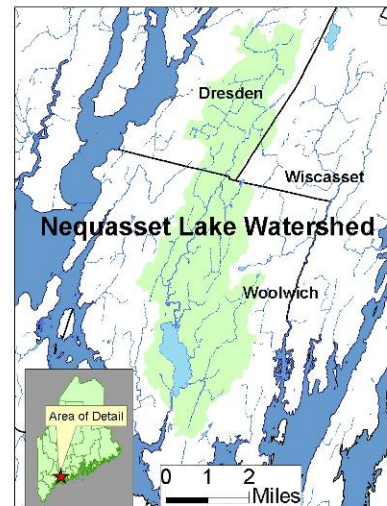
Waterbody Status: NPS Priority Watershed, Most at Risk

Project Grantee: Androscoggin Valley SWCD

Project Duration: January 2008 – August 2010

319 Grant Amount: \$67,225

Local Match: \$44,624



### PROBLEM:

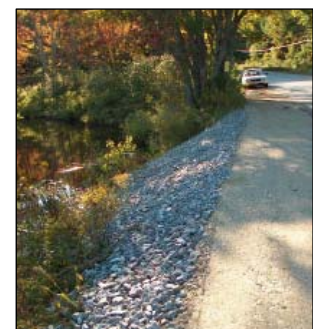
Nequasset Lake, which has a surface area of 465 acres and a direct watershed of 20.4 square miles, serves as the public water supply for over 15,000 people in Bath and its surrounding communities. Comparable high-yield, good quality surface water supplies are rare in coastal Maine. To protect the water supply, the Bath Water District (BWD) limits bodily contact in the lake and has purchased and protected 70% of the shoreline from development. Nevertheless, forested land in the watershed is quickly being developed for residential use.

For over 20 years, the DEP and BWD have monitored the lake's water quality. According to the DEP, water quality is below average and the lake's potential for nuisance algal blooms is high. Long term clarity measures about 4 meters, which is below the average for Maine lakes, and occasional algal blooms have reduced clarity to as low as 1.7 meters. A watershed survey completed in 2007 (#2006P-13) identified 66 sites that are currently impacting or have the potential to impact water quality through soil erosion and phosphorus pollution. Fifty-eight of these sites were associated with town roads, private roads and driveways.

### PROJECT DESCRIPTION:

The goal of this project was to significantly reduce erosion and transport of sediment and phosphorus into Nequasset Lake by treating 20 NPS sites with best management practices. Projects included road ditch stabilization, installation of ditch turnouts, shoreline stabilization and buffer plantings. The project also included technical visits to 27 sites to help landowners develop plans to curb erosion on their properties.

The project also included outreach and education to residents. Two forestry and erosion control workshops (12 participants) were held, and 27 volunteers attended two educational events that brought volunteers to the lake to help plant buffers. A youtube movie was created to showcase project activities.



Riprap installed to stabilize road shoulder

## PROJECT OUTCOMES:

- A total of 20 sites, including 13 high priority sites, were addressed to reduce erosion and help protect water quality. Management practices used include ditching, riprap on streambank sites and ditches, new culverts, vegetative buffers and turnouts.
- Estimates from ten of the 20 treated sites indicate that pollutant loading to Nequasset Lake was reduced by 23 tons of sediment and 21 pounds of phosphorus annually (Region 5 Method).
- Volunteers planted two buffers along 185 feet of shoreline on Bath Water District property.
- Technical assistance was provided for another 27 sites.
- An education video was developed for publication on websites to inform the public about implemented projects and effective practices to prevent and treat soil erosion. Available for viewing at [http://www.youtube.com/watch?v=cOCAIa\\_xXX8](http://www.youtube.com/watch?v=cOCAIa_xXX8).



Before - Erosion on Old Stage Road and roadside parking area washed directly into Nequasset Brook.

After - Parking areas were defined and stabilized with reclaimed asphalt, and the shoulders were stabilized with riprap. A turnout was stabilized, and boulders were placed to keep vehicles off vegetated areas.

## PROJECT PARTNERS:

Bath Water District  
City of Bath  
Maine Rural Water Association  
Town of Dresden  
Town of Wiscasset

## CONTACT INFORMATION:

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Suggested Citation:

Maine Department of Environmental Protection (2011) "Nonpoint Source Management Program 2010 Annual Report," Document# DEPLW-1205 2011. Augusta: MDEP.