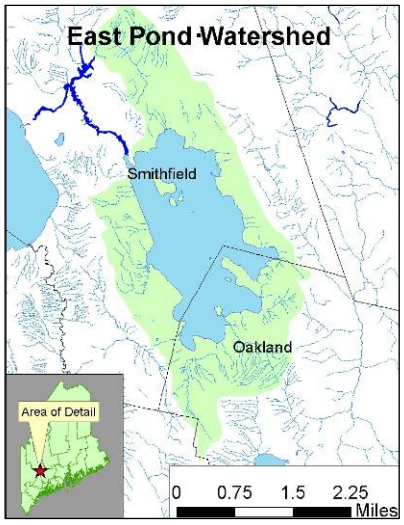
East Pond Watershed Restoration Project, Phase III

#2007RR-08

Waterbody Name:	East Pond
Location:	Smithfield, Oakland – Kennebec County
Waterbody Status:	Impaired, NPS Priority Watershed, Most at Risk
Project Grantee:	Kennebec County SWCD
Project Duration:	April 2007 – December 2008
319 Grant Amount:	$50,456
Local Match:	$43,307



PROBLEM:

East Pond, which is at the top of the Belgrade Lakes chain, has a surface area of 1,670 acres and watershed of 4.2 square miles. The pond has important bass and brown trout sport fisheries, a public boat launch, two youth camps, one commercial cabin operation, and approximately 400 residences (65% of which are seasonal). There are approximately 18 miles of roads in the watershed, eight miles of which are unimproved.

Listed as an impaired waterbody, East Pond has regular algal blooms and consistently high phosphorus levels. According to the TMDL report (2001), the main cultural phosphorus sources are roads (20%), shoreline development (31%), non-shoreline development (10%), and septic systems (10%). The high level of mixing due to the shallow depth of the pond (average 18 feet) and a slow flushing rate (once every four years) exacerbate phosphorus and algal problems in East Pond. Phase I and Phase II 319 grant projects (2001 – 2007) fixed 35 eroding roads and driveways in the watershed. The pond is currently undergoing a DEP biomanipulation project which removes targeted fish in an attempt to reduce algae populations in the pond.

PROJECT DESCRIPTION:

As with the previous phases of 319 projects, this project implemented practices recommended by the TMDL in order to reduce the external phosphorus loading, thereby helping to restore water quality of East Pond. BMP installations focused primarily on roads, but were also installed on driveways and a large recreational area in the watershed. The Belgrade Regional Conservation Alliance Conservation Corps also installed shoreline BMPs at several lower-tech sites.

Outreach to the local community and municipal officials was also an important part of the project. A local lawyer who specializes in legal issues concerning road associations led a well-received workshop on forming road associations. Project staff conducted site visits with town public works and private road commissioners to stress the importance of road maintenance and how poor maintenance leads to high maintenance cost and nonpoint source pollution. The East Pond Association continued to be an active partner by assisting in locating potential BMP sites and providing outreach to their membership.

PROJECT OUTCOMES:

- The project addressed 28 sites in the watershed, including work on six roads, two long driveways, and a large recreational area. BMPs included road crowning and rebuilding, creating and stabilizing ditches, constructing plunge pools, and installing and armoring culverts.
- The Belgrade Regional Conservation Alliance Conservation Corps completed another four projects, including shoreline rip-rap installation and drainage ditch stabilization.
- The project hosted a Road Association Development Workshop, which was led by a lawyer specializing in road association formation and function. The workshop was attended by residents representing five private roads in the East Pond Watershed.
- Pollutant loading to East Pond was reduced by an estimated reduction 20 tons of sediment, 20 pounds of phosphorus, and 27 pounds of nitrogen per year (EPA Region 5 Method and WEPP Model).

Final touches on a shoreline stabilization project.

Installation of riprap-lined ditch and plunge pool

PROJECT PARTNERS:

East Pond Association

Belgrade Regional Conservation Alliance

Belgrade Regional Conservation Alliance Youth Conservation Corps

CONTACT INFORMATION:

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