Crescent Lake NPS Watershed Protection Project, Phase II

#2014RR03

Waterbody Name: Crescent Lake

Location: Raymond and Casco - Cumberland County

Waterbody Status: NPS Priority Watersheds, Most At Risk

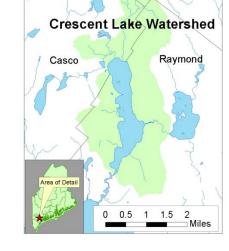
Project Grantee: Town of Raymond

Project Duration: March 2014 – October 2016

319 Grant Amount: \$82,049

Local Match: \$80,369

PROBLEM:



Crescent Lake covers 716 acres and has a direct watershed of 6.1 square miles. Several smaller lakes flow into Crescent Lake, which then flows into Panther Pond and Sebago Lake, a public drinking water source for over 45,000 households in Southern Maine. Crescent Lake is developed with over 290 seasonal and year-round homes, a commercial campground, several private youth camps, two public beaches, one formal boat access, and an extensive network of private unpaved camp roads.

The Maine DEP and Raymond Waterways Protective Association (RWPA) have monitored Crescent Lake's water quality since 1974. Water quality is considered above average; however, there is significant depletion of dissolved oxygen in the hypolimnion in late summer. The Raymond Conservation Commission spearheaded a watershed survey in 2000, and the Raymond Pond and Crescent Lake BMP Demonstration Project (#2001R-03) addressed 13 NPS sites and provided technical assistance to 12 landowners in the watershed. In 2009, the Crescent Lake Watershed Association (CLWA) formed and joined the Maine Lake Society's LakeSmart program. That same year, project staff and volunteers visited sites from the 2000 watershed survey and identified 70 priority areas. From 2011 to 2013, Phase I of the Crescent Lake NPS Watershed Protection Project (#2011RR03) installed conservation practices at 21 of the identified priority sites and provided small matching grants to address 11 residential sites.

PROJECT DESCRIPTION:

The main purpose of this project was to significantly reduce the pollutant load to Crescent Lake through implementation of conservation practices that reduce the erosion and export of sediment and phosphorus. This Phase II project built on the momentum generated by Phase I, and benefited from the support of an active steering committee and community partners. The project addressed erosion issues at 25 sites, including roads, driveways, youth camps, the public boat launch, beach parking, and residential properties. The combined work of Phases I and II resulted in the reduction of 81 tons of sediment and 68 pounds of phosphorus into the lake. Future work and outreach will be supported through local partners and the continuation of the LakeSmart program.



CLWA volunteers planted bushes and spread Erosion Control Mulch at Town Beach

PROJECT OUTCOMES:

- The project fixed a total of 25 NPS sites in the watershed. This included 11 priority erosion problems, such as the public boat launch, public beach parking area, private gravel roads, and town road ditches. Another 10 residential sites were addressed through a small matching-grants program.
- The project successfully engaged two of the lake's summer camps, Camp Agawam and Camp Laurel South. Four erosion sites were addressed, including remediation of a large, visible, high-priority site at Camp Laurel South. The steep eroding slope known as "ski beach" was stabilized with coir log terraces, plants, erosion control mulch, and access stairs. This site work was completed with \$4,000 in grant funding and \$9,912 in match.
- Twenty-eight landowners in the watershed received free technical assistance. Two public workshops
 were held, including a hands-on buffer planting at the Raymond Town Beach. Several brochures and
 other outreach materials were completed, including the Lake-Friendly Living brochure that was
 mailed to all CLWA members.
- Pollutant loading to Crescent Lake was reduced by an estimated 56 tons of sediment and 46 pounds of phosphorus per year (Region 5 Method and WEPP Model).





Remediation of the highly eroding "ski beach" at a youth camp

PROJECT PARTNERS:

Crescent Lake Watershed Association FB Environmental Associates Cumberland County SWCD Raymond Waterways Protective Association Town of Casco

CONTACT INFORMATION:

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Suggested Citation: