Raymond Pond and Crescent Lake Demonstration Project #2001R-03

Waterbody Name: Raymond Pond and Crescent Lake

Location: Raymond and Casco - Cumberland County

Waterbody Status: NPS Priority Watersheds, Most At Risk

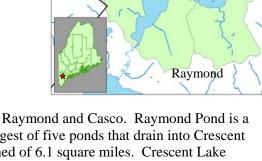
Project Grantee: Cumberland County SWCD

Project Duration: May 2001 – November 2004

319 Grant Amount: \$58,710

Local Match: \$88,529





Crescent

Lake

Casco

Poland

Raymond

Pond

Crescent Lake and Raymond Pond are located in the Towns of Raymond and Casco. Raymond Pond is a 346-acre lake and has a 4.4 square mile watershed. It is the largest of five ponds that drain into Crescent Lake. Crescent Lake covers 716 acres and has a direct watershed of 6.1 square miles. Crescent Lake flows into Panther Pond, which in turn, empties into Sebago Lake, a public drinking water source for over 45,000 households in Southern Maine.

Crescent Lake and Raymond Pond are developed with over 280 and 150 seasonal and year-round homes, respectively. Water quality on both ponds is threatened by rising development pressures and year-round home conversions. The ponds have been monitored since 1974 and the data indicates that both ponds have significant depletion of dissolved oxygen in the bottom waters in late summer. The Raymond Conservation Commission spearheaded watershed surveys for both ponds in 1998 and 1999, one with a 319 grant and one independently.

PROJECT DESCRIPTION:

The purpose of the Raymond Pond/Crescent Lake Demonstration Project was to demonstrate a variety of conservation practices that reduce erosion, raise awareness about watershed problems and foster long-term watershed stewardship. Staff and volunteers installed conservation practices at 15 demonstration sites, provided technical assistance to 22 landowners, conducted 11 hands-on workshops and hosted two public tours of completed sites. The project also coordinated a Community Watershed Forum, which brought together residents and officials to discuss long-term lake protection strategies.



Project fact fliers were sent to all watershed residents; numerous project updates were printed in local newspapers and newsletters; and "virtual tours" were presented to Town Select Boards. The Portland Water District also delivered their Hydrologics program to classes in the Jordan Small Middle School.

PROJECT OUTCOMES:

- 15 erosion sites were stabilized on a variety of sites including private roads, town roads, driveways, residential properties, a commercial campground and a summer youth camp.
- The large variety of conservation practices were installed including the following:

Open top culvert (2) Vegetated buffer plantings (5) Infiltration/dripline trenches (4)

Earthen waterbars (1) Turnouts (20)

Level spreaders (15)

Culvert inlet/outlet stabilization (5)

Ditch stabilization (7)

Re-grading/crowning roads (4)

Plunge pool (1)

Culvert sleeve (2)

Sediment basin (2)

Permanent mulching (2)

Riprap stabilization (2)

Waterbars (7)

Infiltration steps (7)

Culvert installation (6)

Infiltration basin (1)

Bank stabilization (1)

Trail mulching (2)

- Staff estimated that the 15 erosion control projects reduced pollutant loading to the lakes by 64 tons each year (US EPA, Region 5 Method and WEPP:Road model).
- The project's Community Watershed Forum brought together 34 participants to think about ways to achieve long-term watershed stewardship and helped prompt the local monitoring group, RWPA, to expand its role into active stewardship and hire its first Executive Director.





Before - This Right of Way experienced severe erosion that flowed directly into Crescent Lake.

After - 24 volunteers spread mulch and installed two waterbars, two open-top culverts and seven stairs to divert runoff into adjacent vegetation.

PROJECT PARTNERS:

Town of Raymond Portland Water District Raymond Waterways Protective Association Raymond Conservation Commission Camp Agawam Town of Casco

CONTACT INFORMATION:

Wendy Garland, DEP - (207) 822-6320, wendy.garland@maine.gov Jami Fitch, Cumberland County SWCD - (207) 856-2777, jami-fitch@me.nacdnet.org