# Pleasant Lake / Parker Pond Conservation Project

#2009RR03

Waterbody Name: Pleasant Lake and Parker Pond

Location: Casco and Otisfield – Cumberland and

Oxford Counties

Waterbody Status: NPS Priority Watersheds, Most at Risk (Parker)

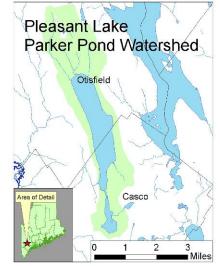
Project Grantee: Cumberland County SWCD

Project Duration: April 2009 – November 2011

319 Grant Amount: \$80,711

Local Match: \$78,293

## PROBLEM:

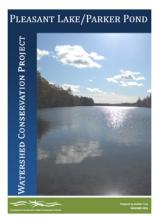


Pleasant Lake (1,077 acres) and Parker Pond (166 acres) have a combined watershed area of 6.7 square miles. The ponds, which are connected by Lilly Brook, drain into Sebago Lake via the Crooked River. The ponds' shoreline is developed with 150 homes, three summer camps (including the well known Seeds of Peace Camp), and two public boat launches. The ponds are also located adjacent to the village of Casco, which includes numerous businesses and municipal buildings.

The Pleasant Lake/Parker Pond Association (PL/PPA) formed in 1966 and has been monitoring water quality of both ponds since 1977 and 1978, respectively. Water quality of both lakes is considered to be above average; however Pleasant Lake is beginning to show signs of oxygen depletion in deeper areas. Pleasant Lake's low flushing rate of 0.2 times per year (the statewide average is 1-1.5 times per year) makes the pond more sensitive to increases in phosphorus. In 2007, PL/PPA and CCSWCD conducted a 319-funded watershed survey (#2007PP-11) and identified 17 NPS sites in the watershed of Parker Pond and 47 in Pleasant Lake. Twenty five percent of all the sites were associated with residential activities, 15 percent were related to private roads, and 17 percent were driveways.

### PROJECT DESCRIPTION:

The primary purpose of this project was to reduce erosion and export of sediment and phosphorus into Pleasant Lake and Parker Pond. Conservation practices to reduce erosion and runoff were installed at 38 priority sites throughout the watershed. Road drainage improvement work was done on several town and private roads, as was stabilization of eroding areas at Casco's town beach and Otisfield's public boat launch. Another project goal was to raise awareness about watershed problems and foster long-term stewardship. Goals were met through PL/PPA annual meeting presentations, newsletter and newspaper articles, mailings, a final project report, and landowner interactions through the small matching grants program. Project match totaled \$78,293, surpassing the planned amount by over \$23,000.



Project outreach report

## **PROJECT OUTCOMES:**

- The project installed conservation practices at 11 NPS sites in the watershed, including several priority road sites and high visibility sites such as the Casco Town Beach and the Otisfield Boat Launch.
- Pollutant loading to Pleasant and Parker Ponds was reduced by an estimated 83 tons of sediment and 71 pounds of phosphorus annually (WEPP Model and Region 5 Method).
- Watershed landowners took advantage of the project's 27 small matching grants (up to \$500 each) and installed shoreline plantings, waterbars, infiltration trenches, and erosion control mulch.
- Numerous conservation practices were installed at two of the lake's summer camps, Camp Arcadia and Hoop Camps. Work included construction of waterbars on roads and trails, roof dripline trenches for cabins, native plantings, a rain garden, and sediment basins.
- A 20-page report was created to showcase the on-the-ground work that was completed through the project and to provide landowners with ideas for continued work on their properties.



Work at Casco Town Beach included the installation of a large infiltration trench at the top of the beach (above). Straw wattles were also used to stabilize eroded shoreline areas.



Camp Arcadia installed a meandering pathway down to the lake. Erosion control mulch stabilized the previously eroded path, and stones and native plants helped direct foot traffic.

#### **PROJECT PARTNERS:**

Pleasant Lake/Parker Pond Association Town of Casco Portland Water District Town of Otisfield

#### **CONTACT INFORMATION:**

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#### Suggested Citation:

Maine Department of Environmental Protection (2012) "Nonpoint Source Management Program 2011Annual Report," Document # DEPLW-1237. Augusta: MDEP.