Pushaw Lake Fishway

**Project:** Pushaw Lake Fishway, Pushaw Stream, Penobscot River Watershed

**Tributary:** Pushaw Lake is 11 miles from the main stem of the Penobscot River in the lower-central portion of the Penobscot watershed. The lake is 5,051 acres, with a maximum depth of 28 feet. Little Pushaw Lake, at 411 acres, is located approximately 5 miles upstream of Pushaw Lake. There are no barriers between the two lakes.

**Problem:** More than 50 years ago, a low-head, concrete dam was built at the outlet of Pushaw Lake to maintain lake levels. The dam had a gate that allowed for modest manipulation of lake levels, but did not allow for migratory fish passage, particularly sea-run alewives.

**Solution:** A Denil fishway was installed on one end of the dam to allow passage for migratory fish. The flow gate that had been in the middle of the dam was replaced with a new gate, located adjacent to the fishway. The new gate is fitted with removable slots to allow for emigration of post spawn adult and juveniles later in the season.
Anticipated Results: The Maine Department of Marine Resources has estimated the restoration potential of alewives into the Pushaw Lake system at 1.3 million adults, making it the highest priority restoration lake in the entire southern half of the Penobscot watershed. The restoration of a run of this size will have broad benefits to other fish such as endangered Atlantic salmon, freshwater mussels such as the brook floater, and birds of prey such as bald eagles and osprey. It will also result in a tremendous transfer of nutrients from the marine to the freshwater environment that should beneficially impact all of the aquatic food webs in the Pushaw Lake ecosystem.

Partners: ASF, Maine DMR, USFWS Partners for Wildlife Program, and the NOAA Fisheries Community-Based Restoration Program were the primary partners in the project that began in 2010 and was completed in 2012. ASF and DMR worked closely with the Kukunook Camp Owners Association throughout the project. The engineering design was performed by USFWS fish passage engineers and Renewable Power Consultants of Palmyra, ME. Construction was completed by Linkel Construction of Topsham, ME. Funding was provided by ASF, USFWS, NOAA, National Fish and Wildlife Foundation, The Nature Conservancy, Maine Corporate Wetlands Restoration Partnership, Maine Natural Resource Conservation Partnership, Maine Outdoor Heritage Fund, the Elmina B. Sewall Foundation, the Orvis Company, the Quimby Family Foundation, and the Davis Conservation Foundation.

Total Project Costs: $187,000
Project Completion: November 2012