

What you can do...

- 1. Always check your boat, trailer, and equipment for plant material.
- 2. Respect shoreland zone restrictions.
- 3. Control polluted run-off from roads, paths, driveways, and roof.
- 4. Cultivate flowers, shrubs, or trees as a shoreline buffer.
- 5. Limit lawn size AND:
 - A. Don't use fertilizers.
 - B. Use phosphorus-free or low-phosphorus fertilizers.
 - C. Use low, slow release nitrogen fertilizers.
- 6. Don't stress the septic system.
- 7. Dogs, humans, and boats should never be washed in the lake.
- 8. Observe headway speeds within 200 feet of Maine shores and 150 feet of NH shores
- 9. When replacing a boat motor, choose a clean 4-stroke engine.
- 10. Pick up pet wastes.
- 11. Volunteer as a lake host.
- 12.Get a free AWWA site assessment.
- 13. Support your local and regional lake



AWWA YCC project on Province Lake - Water bars and Erosion control mulch (ECM)

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Acton Wakefield Watersheds Alliance

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www.AWwatersheds.org

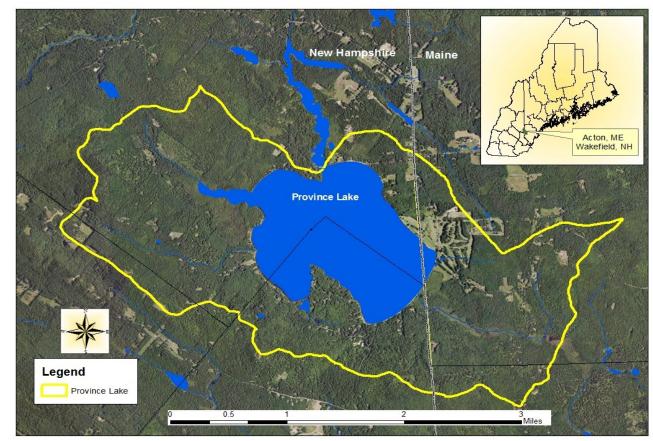
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References:

- ♦ NH Granit Database
- www.provincelake.org
- www.lakesofmaine.org
- ◆ NH Fish and Game
- Maine Department of Inland Fisheries and Wildlife
- ◆ Great East Lake Improvement Association (www.greateastlake.org)

Province Lake



Get to Know Your Lake, Your Lake's Watershed, and the People Who Support It **Province Lake Association:** The PLA is a group of people interested in maintaining the quality of Province Lake. It is a non-profit organization of approximately 100 members paying dues of \$25 annually. There are many volunteers who provide water testing, weed watching, loon observation and other valuable services to the association.



View of Province Lake during the fall. Photo courtesy of the Province Lake Association (www.provincelake.org)

Programs:

- ◆ Province Lake started a Lake Host Program in 2012 with funding from the Town of Wakefield, NH Lakes, and membership dues. The PLA is seeking funding and volunteers for their Weed Watchers Program.
- Acton Wakefield Watersheds Alliance: Since 2005, AWWA has been protecting and restoring water quality in the Wakefield, NH and Acton, ME lakes region by affecting land use policies and practices through education and remediation of polluted runoff.
- Youth Conservation Corp: The AWWA employs local high school students for summer work in their YCC program. The YCC installs erosion control measures to prevent polluted runoff from degrading the health of the lakes. The program also offers technical assistance for homeowners wishing to help protect the lake on their own.



AWWA YCC project on Province Lake - Infiltration steps and rip rap.

Physical Synopsis:

Province Lake does not **stratify** (in other words, the lake is so shallow that in winter and summer, the lake remains at a relatively constant temperature throughout). *Stratification* refers to distinct layers of water in a lake differing in temperature and density. Deep lakes commonly stratify into three distinct layers: the epilimnion (upper), the metalimnion (middle), and the hypolimnion (bottom).

Watershed Characteristics:

Location: Parsonsfield, York County, ME and Wakefield and Effingham, Carroll

County, NH

Coordinates: 43°41'24"N 70°59'32"W Major Drainage Basin: Saco River, Saco Bay,

ME

Subdrainage Basin: South River to the Ossipee

River

Drains to: South River **Inlets**: Hobbs Brook **Outflows**: South River

Watershed Area: 4,672 acres (7.3 mi²)



AWWA YCC project on Province Lake - Rubber razors.

Lake Characteristics:

Mean Depth: 9 feet (2.7 m)
Max Depth: 17 feet (5.2 m)
Max Length: 1.7 miles
Max Width: 1.4 miles
Surface Elevation: 480 feet
Surface Area: 1.008 acres

-Parsonsfield, ME: 58 acres (6%) -Wakefield and Effingham, NH: 950 acres (94%)

Volume: 11,268,500 m³ (~2.9 Billion gallons) **Perimeter (Shoreline):** 58,950 feet (11.2 mi) **Average Time Water Remains in Lake:** 1 yr

> -In other words, it takes 1 year for water that enters the lake to leave the lake.

Average Transparency: 7.2 feet (2.2 m)

Lake Classification: The lake is classified as mesotrophic or partially not supporting by NH water quality standards.

Water Quality Monitoring Began: 1991 2009 Phosphorus Concentration: 15 parts per billion

*Phosphorus Concentration needs to be lowered **Dissolved Oxygen:** higher than adequate in the deep part of the lake because the lake does not *stratify* (see stratification in *Physical Synopsis*).

Wildlife: Province Lake is home to several fish species including; large and smallmouth bass, chain pickerel, yellow perch, sunfish and horned pout. The lake also has a populations of Common Loon, eagles, great blue herons, the occasional merganser and also has snapping turtles!

Fishing Rules and Regulations:

For information regarding daily bag, possession limits, minimum legal lengths, and seasonality please visit: www.maine.gov/ifw/laws_rules/fishing/fishing.htm for the Maine part of Great East Lake and www.wildlife.state.nh.us/Fishing/fishing.htm for the New Hampshire part of Great East Lake.

Asian Longhorned Beetle: The Asian Longhorned Beetle is usually 0.75 to 1.25 inches in length, with long antennae and a black body covered in white spots. The insect is an invasive species that has **NOT** yet been detected at Province Lake, but the Province Lake Association asks that property owners and renters use only local firewood and if you suspect that you have found evidence of the beetle, please call **866-702-9938** to report your possible discovery.