

Watchic Lake Homeowner's Guide



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Watchiclake.org

Welcome to Watchic Lake

You are among a fortunate few who have the privilege of living on a lake as lovely as Watchic. It is a quiet, small lake with a country atmosphere. For your information, here are a few statistics about Watchic Lake.

The surface area of Watchic is 448 acres ($\frac{3}{4}$ mile x $1\frac{1}{2}$ miles long) The lake is spring fed and has two inlets: Page Brook and Paine Brook. The outlet at the dam end of the lake is Watchic Brook and it empties into the Saco River. There is currently no public access for boats to enter the lake.

The water level of the lake is controlled by a dam at the North end of the lake. The dam was constructed in 1850 and was deeded to WLA by Central Maine Power in 1956. It is voluntarily manned. The dam is opened to lower the water level on November 1st and is closed again to raise the water level shortly after ice-out. This helps to avoid shore damage from ice. Depending on rainfall during the season, the dam is opened and closed in an attempt to maintain the water level in the lake. Maintenance costs come from Memberships and donations.

The first cottage was built on Watchic lake in 1895 and there are now approximately 250 properties around the lake, some directly on the waterfront and others with right of way access to the lake. Each property has its own impact on the water quality and maintenance of the lake. Shorefront zoning regulations are in effect on this lake. Please consult Standish Town Hall and/or the Department of Environmental Protection for information on any changes to your property. Expansion, tree removal and drainage are all closely monitored. Landscaping products that are acceptable in an urban environment may create problems in a shorefront location. Phosphorus from runoff is our worst enemy.

The Watchic Lake Association was formed to take ownership of the dam and to monitor the water quality of our lake. We have volunteer water quality monitors that actively sample the water and submit reports to the Lake Stewards of Maine. The reporting system makes comparisons to previous year's quality and points out problems. The information is available at our annual meeting and is published in our WLA newsletter. We invite you to join our efforts to maintain Watchic Lake. Please visit watchiclake.org

We are privileged to have loons on Watchic Lake. They usually arrive within a few days of ice out. They generally nest on one of the islands. Please respect their space when boating. They are a source of entertainment and pleasure for all residents.

There are many birds to enjoy around the lake. You will see Baltimore Orioles, Kingfishers, Cormorants, Chickadees, Titmouse, Grosbeaks, Finch, Woodpeckers, Doves and bald eagles.

When boating, please respect the 200 foot off-shore distance at any speed other than headway. This helps keep erosion at a minimum and protects our lake. Remember that when skiing and tubing, you must have a spotter on board in addition to the driver according to Maine law.

In 1998, the Watchic Lake Association completed a watershed survey funded by a Maine Department of Environmental Protection grant awarded in late 1997. Volunteers identified erosion and stormwater runoff issues throughout the watershed, documenting concerns that were evaluated by the DEP and Cumberland County Soil and Water Conservation District. The survey led to the development of a Watershed Management plan focused on protection and improving the lake's water quality. Today, that responsibility belongs to all of us. As stewards of Watchic Lake, we encourage every property owner to become involved in the Association. Membership dues support watershed management, resident education through our newsletter, and other efforts that help preserve the lake and protect our property values for future generations.

REMEMBER: WATCHIC LAKE IS FOR EVERYONE

When planning your activities, please remember that Watchic lake is not only a place for boating, waterskiing, and other family fun, but also a place for those who appreciate its quiet and solitude.

A YEAR IN THE LIFE OF A LAKE

It is early spring, and the warmer weather has begun to cause big changes in the lake surface. Below the ice, the waters are uniformly cold and stagnant after a motionless winter. Finally the ice cover thins, releases its grip on the shore, and is driven downwind to shatter against the rocks, docks and other obstacles. The lake is free!

Winds that grow progressively warmer circulate and mix the frigid waters. The “spring turnover”, sometimes “kicks up” nutrient rich bottom sediments which can cause small plants (algae) to grow, or bloom, in massive numbers, causing a reduction in water clarity. The warmth of the winds and air slowly heats the lake.

As this warming process continues into mid-summer, the lake stratifies into temperature layers. The top layer, which extends down to about 25 feet is warm and continues to mix with wind action. The bottom waters below become isolated and motionless. There it is cold and dark, as little light penetrates to this depth. Oxygen has been “mixed” into these deep waters in the spring wind action. But after stratification, there is no more mixing, and the supply of oxygen is no longer replenished. Cold water fish rely on this limited oxygen supply to last until the lake fully mixes again. Certain species may be unable to survive if oxygen becomes severely depleted.

It is this bottom layer in late summer that the symptoms of water quality problems show up vividly. August testing is critical because conditions are usually at their worst, demonstrating the seriousness of any phosphorus loading problems. This is the process which causes those problems as seen during stratification conditions.

1. The deeper, isolated waters have no way to mix and replenish their oxygen concentrations. They are left with only the oxygen mixed in by wind and waves in the spring.
2. Runoff carries phosphorus (a fertilizer) into the lake, either in a dissolved form or attached to soil particles.
3. The more phosphorus the lake receives, the more algae grown in the water.
4. Algae live for about two weeks then die and drift by gravity to the lake bottom.
5. The algae are then decomposed by bacteria in a process which consumes oxygen. If the phosphorus supply to the lake is great enough, the resulting algae growth, death and decomposition cycle can rob the bottom waters of all their oxygen. When lake bottom oxygen is gone, a chemical change occurs which allows phosphorus previously locked in bottom sediments to be released into the

lake waters. This “phosphorus recycling” presents the lake with a second source of phosphorus to contend with in a situation which is already out of equilibrium.

The important testing for oxygen and temperature profiles, clarity and phosphorus concentrations are done to monitor how the nutrient load of the lake is being handled. The more algae grown by the introduction of more phosphorus, the more serious the oxygen depletion and phosphorus recycling problems become.

Phosphorus is called the “limiting factor” for the growth of algae, because it is usually not present in the concentration necessary to cause an algae bloom. As the amount of phosphorus reaching a lake increases, the algae growth responds in direct proportion. It is the openwater algae farming that seriously threatens Maine lakes. The change of land uses in a lake’s watershed from its original forested state causes more runoff, erosion and phosphorus to reach the lake, drastically accelerating this natural aging process.

In September, cooler air starts lowering the temperature of the Lake’s surface waters. As this process intensifies, those cooler waters begin to fall in the water column because of their greater density. At about the same time, fall winds sweep across the lake. Eventually, the combination of these two forces causes the breakdown of summer stratification and the lake experiences the “fall turnover.” Soon the top waters will skim over with ice, and the cycle will have been completed.

REMEMBER

We are the stewards of our lake and the decisions we make today will affect us and our lake forever!

THE LOON

The loon has become a symbol of Maine's lakes. Their beauty and haunting echoes are, along with clean waters and pine-forested shorelines, what defines a Maine Lake. Loons had almost disappeared from this setting, but now seem to be making a strong comeback. **Here are some facts which will help us to protect loons and keep them coming back:**

1. The most critical time for loons is the nesting period which lasts from mid-May through mid-July. During this time, the nests should not be disturbed in any way. Even canoes venturing too close to a nest may cause the egg(s) to be abandoned. Stay far away from any known nesting sites during this time.
2. Boat wakes and fluctuating water levels can "wash out" a nest. If you know of a nest that is in jeopardy, please notify the president of the lake association so the appropriate agency can be contacted.
3. After the young loons hatch, they use nursery areas, which are usually within ¼ mile of the nest. These are shallow, sheltered coves and bays where it is important to avoid disturbing the swimming loon family.
4. It is unlawful to harass loons, If you see this going on, contact a game warden. See phone numbers listed for agencies on the back cover of this handbook. You should take pictures, descriptions, and boat registration numbers to turn over to the warden for follow-up.
5. Loons must be able to see underwater in order to fish. Activities which bring phosphorus into a lake will eventually cause visibility to drop due to algae growth. Do your part to protect water quality.
6. Loons are damaged or killed by being tangled in fish line and by ingesting lead sinkers. Be sure to not litter, especially these items. Here are some interesting facts about loons:
 1. Loons fly at about 90 mph, some have flown over 110 mph.
 2. Loons use their feet as rudders while flying.
 3. Loons can out-swim fish underwater.
 4. Loon's red eyes are especially adapted to seeing underwater.
 5. Loons need about ¼ mile of open water for takeoff.

ENJOY THE LOON BUT DON'T FEED THE DUCKS

Allowing ducks to forage for themselves encourages their natural life-style, migration and nesting habits. Encouraging them to congregate for feedings can cause “swimmers itch” and e-coli contamination from fecal waste.

LAWS PROTECTING WATER QUALITY

THE SHORELAND ZONING LAW- This law is administered and enforced at the local level with oversight from the state. Its purpose is to protect water quality, prevent erosion in shoreland areas, preserve vegetation and wildlife, and conserve natural beauty through the regulation of lot size, sewage disposal, alteration of vegetation and construction.

“Shoreline areas” are defined as the land within 250 feet of the normal high water line of any lake or river and within 250 feet of the upland edge of freshwater wetlands of ten acres or more. Many tributaries are zoned with protective buffers which extend 75 or 100 feet from their shorelines. They affect building and structure size, setback and location, sewage disposal, earth moving, and clearing and cutting of trees, bushes and ground cover.

Since these ordinances regulate many activities, you must call the town office before planning or starting any construction or vegetative cutting. Ask the Code Enforcement Officer for information and assistance.

THE NATURAL RESOURCES PROTECTION ACT- This law is administered and enforced at the state level. Its purpose is to protect Maine’s natural resources (everything from sand dunes to lakes, wetlands to fragile mountain areas from damage due to development or improper use). Projects that plan to build, drain, dredge, fill or otherwise change the land or water within or adjacent to these protected resources require a permit from the state. Examples include permanent docks, and moorings, shoreline rip-rap, beach repair, bridges, marinas and retaining wall repairs. Call DEP.

THE SITE LOCAL LAW (state) and THE LOCAL SUBDIVISION LAW: These laws Regulate land developments which subdivide property. Larger projects require review and approval under both laws by the state and local boards. Smaller projects are reviewed on the local level by the municipal planning board. The purpose of both laws is to provide standards and safeguards for soil erosion, water quality, traffic safety, water supplies, sewage disposal, solid waste disposal, scenic or natural beauty, and wildlife habitat.

THE CONVERSION OF SEASONAL DWELLINGS LAW: This law is administered at the state level, but enforced locally. The purpose is to make sure that seasonal sewage disposal systems can function under year round use without polluting nearby waters or causing other health hazards. In order to convert a seasonal cottage into a year-round dwelling, the local plumbing inspector must grant you a conversion permit. The inspector will issue the permit if records show that the existing sewage system meets the State Plumbing standards, or if you can show that the site conditions will allow for the installation of a sewage system that meets state standards. Contact your local Code Enforcement Officer (who is usually the plumbing inspector) for information.

PERMITS: Permits and fees are required for alterations to your cottage or septic system, clearing of land, change in grading and in general any major changes on your property. Contact the Standish Code Enforcement Officer.

INVASIVE AQUATIC PLANT LAW: Boaters may not place a boat that is contaminated with invasive aquatic plants on inland waters of the State of Maine. Fines are not less than \$500 nor more than \$5000. Fines cannot be suspended. Thoroughly clean boat and trailer before launching. Place vegetation in a trash bag and dispose at landfill.

WHAT YOU CAN DO: REDUCING PHOSPHORUS TO SAVE YOUR LAKE

SITE DISTURBANCE, YARDWORK, CLEARING LANDSCAPING

DO keep site disturbance to minimum, especially removal of natural vegetation and exposure of bare soil. REASON: Site disturbance dramatically increases surface runoff and erosion which contribute to phosphorus to lakes. Trees and shrubs cannot be removed in the 75 foot buffer zone. Contact the code enforcement officer before removing any trees or shrubs near the shoreline.

DO seed and mulch bare soil within two weeks of clearing and install hay bales or silt fence down slope of cleared areas. REASON: Hay bales and silt fence trap sediments and the phosphorus they carry.

DO leave naturally vegetated areas (buffer strips) along lake shores, streams, rald ditches, intermittent streams. REASON: Buffer strips intercept runoff and filter sediment and phosphorus from water before it can reach the lake or stream.

DO plant deep-rooted, woody vegetation along lake shores, streams, road ditches. REASON: Plant roots stabilize shorelines, prevent erosion, and take up nutrients carried by water before they can reach the lake. Contact local nurseries and explain what you are trying to accomplish.

DO preserve natural topography and natural systems. REASON: Natural drainage systems evolve over years and effectively control sediment and phosphorus.

DO NOT use fertilizer. Straw mulch is preferable. REASON: Solid, inorganic fertilizers are readily dissolved by water and are transported in runoff.

DON'T use herbicides and pesticides. REASON: Many of these products are toxic.

DON'T put leaves, branches or any kind of organic matter into the lake. REASON: Plant debris adds phosphorus and other nutrients directly to the lake.

TREE CUTTING, FORESTRY

DO leave trees along the shoreline or streamfront. Consult with Shoreland Zoning laws before cutting-harvesting limitations apply. REASON: Trees and natural cover best protect against shoreline erosion and sediment of lakes. Trees take years to grow and only minutes to cut down.

SHORE FRONTAGE

DO leave existing rocks in place along the shore. Add rip rap if erosion control is necessary (DEP permit is required). REASON: Large rocks are the most effective buffer against erosion because they diffuse wave action.

SEPTIC SYSTEMS

DO check the sludge level in septic tank every two years. Pump when sludge fills half of the tank (average 2-3 years for year round residents, 5-6 years for seasonal residents. REASON: Septic systems must be maintained if they are to function properly. If settled solids are not removed from the tank, they will wash into and clog the leach field.

DO conserve water, and give the septic system time to “rest” after heavy use. REASON: The less water you use, the better your septic system will work.

DON'T flush strong cleaning agents (drain cleaner, bleach) into your septic system. REASON: septic tanks are living systems. Strong cleaners kill the microorganisms that break down the waste.

DON'T install or use an in-sink garbage disposal. REASON: ground garbage overburdens your septic tank and slows its functions.

DON'T use commercial products to clean your septic tank without pumping. REASON: these products can cause clogging of your leach field and may contain chemicals which can contaminate groundwater.

DON'T put paint or chemicals into the septic system. REASON: these hazardous products kill microorganisms in the septic tank, and contaminate drinking and lake water. Call Regional Waste at 207-773-1738 or 207-773-0380 or DEP at 800-452-4664 For instructions on proper disposal of hazardous materials.

DETERGENTS

DO use non-phosphate detergents. Check the labels. REASON: Phosphate detergents add more phosphorus to the lake and thus contribute to algal growth.

DON'T wash cars near lakes, streams, or drainage ditches. REASON: Runoff containing phosphorus will put phosphorus directly into the water. Runoff should be diverted to vegetated surfaces and allowed to seep into the ground where phosphorus can be removed.

SURFACE RUNOFF FROM DEVELOPED AREAS (ROOFS AND LAWNS)

DO prevent water from running directly into lakes and streams. Detain in depressions or divert flow to flat, wooded areas. REASON: Flowing water carries sediment and phosphorus. Detaining or dispersing water allows it to filter into the soil where sediments and phosphorus are filtered out.

DRIVEWAY AND ROADS

DO plant vegetative buffer strips along driveways and roads and stabilize road ditches by seeding or riprapping. REASON: Plants slow runoff from roads and help to remove sediment and phosphorus before they reach lakes or streams.

DON'T allow water to run directly off roads into lakes or streams. REASON: Water running off roads contains sediment, phosphorus, and pollutants from cars.

STRUCTURES

(Houses, Decks, Sheds, Docks)

DON'T build close to the water. All structures must meet the required setback from the water. REASON: State Shoreland Zoning Statute requires setback from shore because shoreline disturbance dramatically increases sedimentation of the lake.

SAND BEACHES

DON'T build new beaches. Use temporary docks as an alternative. REASON: Sand contains phosphorus which washes into the lake, where it accelerates filling of the lake and provides poor bottom habitat for fish and wildlife. Shoreland Zoning Laws prohibit sand from another location being placed on shoreline.

WATERCRAFT AND WATER SAFETY

State laws require power boats and personal watercraft observe the 200 feet water safety zone; give a wide berth to row boats, canoes, kayaks, sailboats and waterfowl; avoid marked swimming areas (Kiwamis Beach); maintain reasonable speed; and refrain from prolonged circling, racing, wake jumping or other repetitive activities that may harass others. Notify our local Game Warden at 800-452-4664 or 207-657-2345 or the state police when you observe illegal behavior. Watchic lake is routinely patrolled by the Warden .

ANNUAL REGISTRATION OF ALL MOTORIZED WATERCRAFT IS REQUIRED BY THE STATE OF MAINE IN ADDITION TO A MILFOIL STICKER.

Lack of a milfoil sticker results in a fine of not less than \$100 nor more than \$250 per violation. Fines may not be suspended.

SAFETY AT ALL TIMES

While boating, flotation devices must be accessible or life vests worn. An observer (at least 12 years old) is required when towing water skiers and tubes. This applies to personal watercraft as well as boats.

When swimming across the lake or toward the middle of the lake, do not swim alone - a boat should accompany the swimmer.

WATCHIC LAKE ASSOCIATION

The goals of the Watchic Lake Association shall include management of water levels, maintenance and improvement of water quality and public safety. This purpose includes social, education and advocacy efforts that benefit users of the natural environment of Watchic Lake.

The Watchic Lake Association needs you. Without your interested, active and financial participation, we cannot maintain the dam, provide education information, conduct accurate seasonal water quality tests, supply you with a newsletter, be prepared to react to environmental emergencies and be interactive with other agencies who work to protect our lake and environment.

The Watchic Lake Association needs your support to continue to monitor and care for Watchic Lake. It's a small amount of money to pay for the work that gets done, Consider being involved- we need YOU.

JOIN AND PARTICIPATE IN THE LAKE ASSOCIATION. LOOK FOR MORE INFORMATION IN YOUR NEWSLETTER OR CALL THE NUMBER ON THE BACK OF THE BOOKLET.

THE CLEAN LAKE CHECKUP

Protect your lake by correcting problems on your own property. Lake water quality is deteriorating because of impacts from both old and new land uses. Vegetation has been removed, water drainage has been re-routed without proper precautions. New projects have used better standards and generally create fewer problems. Unless we can “correct” existing erosion and runoff sources to our lake, water quality will continue to slowly decline. The old problems need particular attention.

No matter how small a problem may seem, it is part of the overall cause of water quality decline and needs to be addressed. Here are some examples:

Roof runoff creates a channel carrying sediment to the lake.

A road or driveway built too close to the lakeshore or stream is eroding.

A sand beach, built before new laws that prohibit them, is losing sand to the Lake each time there is a big rainfall.

All of the bushes between the lake and your cottage were cut when this Activity was legal.

An existing lawn is being over fertilized.

Your camp road ditches are not vegetated and runoff builds up, increasing Erosion downstream.

As a result of our Watershed Survey in 1998, many problems were addressed and corrected with the help of information from DEP and Cumberland County Soil and Water. Future water quality depends upon education and awareness of property owners, being a good steward, following the rules and obeying the laws.

This is a period of time where development and environmental issues affecting lake quality can be detrimental to our properties and their values. Many lakes in Maine have been damaged or destroyed by invasive plants, septic issues, over development, lack of enforcement of restrictions on hazardous materials. It is important that each of us work diligently to ensure the long-term vitality of Watchic Lake.

COMMON SENSE REMINDERS

LITTER: Please pick up litter in the pond and on our roads and dispose of properly.
HELP KEEP WATCHIC CLEAN

PRIVATE PROPERTY: Be respectful of private property. Ask permission before gaining access.

LOOK OUT FOR YOUR NEIGHBORS: Report any suspicious activity to the authorities. Call Cumberland County Sheriff at 911.

FIRES: Open fires or brush burning are not allowed without a permit. Contact Standish Town Hall for a burn permit.

Speed Limit: The speed limit on our private roads varies, but most are posted. It would be safe to assume a speed no greater than 15mph for seasonal road conditions and congested residential areas.

Noise: Be considerate of your neighbors, especially after 10:00 PM. Keep noise to a minimum. Keep barking dogs indoors.

Fireworks: Check Local ordinance

Dogs: The town of Standish has a leash law. Pets should be under your control at all times. Any questions, call Animal Control Officer.

Trash: Trash pickup can be contracted by calling a local rubbish removal company or taken to the Transfer Station with a sticker purchased from the transfer station window . The hours of the transfer station are 8 am to 4 pm everyday besides Wednesday.

Bathing in Watchic Lake: Department of Environmental Protection regulations do not allow soap/ shampooing of people or dogs.

Diapers: Children should not swim in soiled diapers.

Rentals: Please be sure your renters have access to the information in this booklet. If you need extra copies, contact an officer or board member of the Watchic Lake Association.

IMPORTANT PHONE NUMBERS

Watchic Lake Association: Watchiclake.org

Standish Town Services

Fire-rescue:	911
Police:	911
Municipal Office:	207-642-3461

Public Safety:	207-642-4343
Animal Control:	207-893-2810
Public Works:	207-6742-5416
Burn Permits:	207-642-4343
Transfer Station:	207-642-5559
Information Line:	207-642-3461
Recreation:	207-642-2875
Code Enforcement Officer:	207-642-4571
Assessor:	207-642-3461

HOSPITALS

Maine Medical Center:	207-871-0111
Mercy Hospital:	207-879-3000
(Northern Light)	
Bridgton Hospital:	207-647-6000

OTHERS

Department Environmental Protection:	207-287-7688 (Augusta)
Department Environmental Protection:	207-822-6300 (Portland)
DEP-Spills (emergency)	800-482-0777 Or 207-287-7688
Maine Audubon Society:	207-781-2330
Maine Warden Service:	207-287-2345
Cumberland County Soil And Water Conservation District	207-892-4700

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