



Sunset Lake Association

PO Box 135
Hampstead NH 03841

<http://www.slahampstead.org/>



A Note from your Sunset Lake Association Board of Directors

As you are aware, there is a gate that was installed at the town beach boat launch right-of-way. Waterfront property owners with hardship situation or anyone with deeded lake rights to Wash Pond/Sunset Lake may apply for a launch permit. Launch permit stickers must be renewed ANNUALLY.

There have been several instances where vehicles from out-of-state, or people that do not have deeded rights to Sunset Lake have launched their watercraft from the beach access area. Our concern is they may be transporting invasive plants and animals from other bodies of water. The cost to eradicate these invasive species, once they find their way to our lake, is very expensive and would take a major effort to clean up.

The lake is a very important part of our life and we need to protect it and our investment.

The gate will be secured with a combination lock, from April 1 to November 1. A launch permit application is required and can be obtained at the Hampstead Town Hall or you can also download the application and regulations from our website. Clicking here will bring you to our SLA website for more information on boat launching. When you provide proof of deeded rights to the lake and submit your application to the Administrative Assistant at the town hall, you will be given a

sticker and the combination to access the launch ROW. Launch hours are 6-9 am and 6-9 pm.

If you have deeded rights to the lake and live out-of-state you can send your information electronically to the Hampstead Town Office. If additional information is required, call the town office at 603-329-4100 ext 100.

During the off season months the gate will remain open for winter activities.

Following our Annual Meeting on, July 21, we are planning to celebrate the installation of the gate by having a cookout for Sunset Lake residents. Immediately after the cookout we will have a kayak tour around the lake. So, please be sure to attend and bring your neighbor. Your Board of Directors work hard to protect Sunset Lake, so please help us by becoming a member. It's only \$25 per year or lifetime membership of \$200.

Thank you,

SLA BOD





Upcoming Events

6/30 - Booth at Hampstead fireworks

7/21 - Annual meeting at Hampstead Town Meeting House. Doors open at 9am for registration, meeting begins at 9:30am.

Our guest speaker is Bob Craycraft from UNH. He will speak about the test results and water quality of our lake.

7/21 – Cookout with hamburgers and hotdogs on the beach to celebrate installation of the gate, and kayak tour following cookout.

Moonlight kayak - date TBD

Float in Christmas Parade



Water Safety Tips and Resources

The Sunset Lake Association (SLA) actively promotes the safe use of its waters and works to retain the scenic beauty of our lake and its surroundings. As a resident or visitor, it is important to familiarize yourself with lake living. Resources include:

* The SLA website: <http://www.slahampstead.org/>

* Your local SLA delegates:
<http://www.slahampstead.org/board-of-directors.html>

* The New Hampshire Lakes Association website:
<https://nhlakes.org/>

* New Hampshire Marine Patrol Unit website:
<https://www.nh.gov/safety/divisions/nhsp/fob/marine-patrol/boating-education/>

Here, we highlight a few points about safe operation of watercraft on Sunset Lake:

* All petroleum powered motorboats traveling in excess of headway speed (greater than 5 miles per hour) must travel in a counterclockwise direction around Sunset Lake while keeping a minimum distance of 150 feet from other boats, swimmers, rafts, docks, and shore. This regulation excludes powerboats used in emergency situations where line of travel is required and appropriate.

* For the safety of our residents and visitors, skicraft (1 and 2 seat “jet skis”) are not permitted on Sunset Lake. Violators will be escorted off and fined.

* New Hampshire has a mandatory boating education law. Everyone 16 years of age and older who operates a motorboat over 25 horsepower on New Hampshire waters must have a boating education certificate. Please refer to the New Hampshire Department of Safety web site to learn more:
<https://www.nh.gov/safety/divisions/nhsp/fob/marine-patrol/boating-education/>

* Children, 12 years old and younger, must wear a US Coast Guard approved life jacket when being transported in a boat.

An Introduction to SLA's Water Sampling and Quality Reports

The Sunset Lake Association's team of volunteers collects samples of runoff and stream water for testing and the UNH Extension program provides water quality testing. Additionally, each year, a team of scientists and interns from UNH Extension visits our lake to measure lake water properties at various points accessed only by boat. Testing reports are posted for your review on our web site: <http://www.slahampstead.org/water-quality-testing-.html>.

While many values are reported, here we highlight several of the values that directly affect the viability of our lake's aquatic life. These values are interrelated.

Water Transparency (also called water clarity): relates to the depth that light will penetrate the water. Light is necessary for photosynthesis. Sunset Lake's transparency is 5 meters. This value classifies the lake in the "oligotrophic" or "excellent" range, meaning that there is relatively low algae production and clear waters.

Chlorophyll a: a green pigment in algae responsible for a plant's ability to convert sunlight into energy. A measurement of concentration, Sunset Lake's Chlorophyll *a* value is 2.7 ppb (parts per billion). This value classifies the lake as "oligotrophic" or "excellent", meaning that there is relatively low algae production and clear waters.

Total Phosphorus: relates to the concentration of phosphorus in the lake water. Phosphorus is required for plant growth. A low value of phosphorus keeps plant and algae growth to a minimum. Sunset Lake's total phosphorus value of 11.1 ppb (parts per billion) classifies the lake as "mesotrophic" or "fair" with a moderate amount of plant growth. To be classified as "oligotrophic" or "excellent", the total phosphorous should be < 8.0 ppb.

Dissolved Oxygen: relates to the concentration of oxygen in the lake water and is affected by lake temperature. Oxygen is necessary to many forms of aquatic life including fish and plants. Sunset Lake's dissolved oxygen value is 4.9 mg/L (milligrams of oxygen per liter of water) in the deeper, cold waters.

This value classifies the lake as "mesotrophic" or "fair" with a moderate amount of dissolved oxygen to support aquatic life. The dissolved oxygen concentrations are excellent in the warm surface waters.

In summary, the health of Sunset lake is very good with *Water Transparency* and *Chlorophyll a* both in the excellent range, *Dissolved Oxygen* in the fair range, but very close to excellent, and *Total Phosphorous* in the fair range, but close to the poor range. As residents and visitors of Sunset Lake, we can directly contribute to improved lake health by:

- Eliminating the use of phosphorus containing cleaning products and fertilizers in and around homes abutting the lake and nearby streams
- Keeping septic systems up to date and operating properly
- Using landscaping techniques that reduce the amount of runoff into the lake

Following these guidelines will not only reduce the Total Phosphorous levels in the lake, but also positively improve the results for Water Transparency, Chlorophyll *a*, and Dissolved Oxygen, since they are all negatively impacted by undesirable plant and/or algae growth. We can all have a positive impact on the health of our lake!

Additional resources:

"Landscaping at the Water's Edge: An Ecological Approach": https://extension.unh.edu/resources/files/Resource004159_Rep5940.pdf

"New Hampshire Homeowner's Guide to Stormwater Management: Do-It-Yourself Stormwater Solutions for Your Home": <https://www.des.nh.gov/organization/commissioner/pip/publications/wd/documents/wd-11-11.pdf>
SOAK Up the Rain New Hampshire website: <https://www4.des.state.nh.us/SoakNH/>



Watershed Planning Field Investigations and Additional Data Gathering

In some cases, there may be enough existing data to support development of your watershed plan. More often than not, additional field investigations and data gathering will be needed to update an older data set, provide data from new sampling locations, or provide some valuable types of information that are missing. The sections below summarize some common types of watershed field and data gathering investigations. Some of the categories below may not be a high priority in all watersheds...and it will usually be necessary to focus your efforts to stay within a planning budget. For example, field assessment of nutrient loading from livestock may be critical in a watershed with extensive agriculture, but not needed in an urban watershed. Prioritize additional data gathering based on the existing data, water quality issues, stakeholder concerns, and watershed goals that you identified in Steps 1 and 2 of your planning effort.

Water Quality Monitoring Reliable water quality data is one of the most important ingredients for any watershed plan. Monitoring data can be used to understand the type and severity of water quality impairments and help in setting achievable targets for improvement. Water quality monitoring can also indicate long-term trends and identify critical thresholds that are approaching, such as increasing phosphorus levels that could result in frequent algae blooms if not addressed.

Unless specifically conducted for regulatory compliance or to determine the environmental impact of a specific activity or event, design of water quality monitoring programs usually fall into two categories:

Survey monitoring:

- * Used to characterize existing conditions over a specified geographic area.
- * Provides more of “snapshot” inventory than a true monitoring process and does not address changes over time. Can be done on a relatively infrequent basis.

* Examples include synoptic lake surveys for invasive species; fish gut monitoring for mercury

Trend monitoring:

* Monitor at regular intervals to detect subtle changes over time and long-term problems, such as increasing phosphorus levels due to changes in land use. Frequency can vary based on budget, but should aim to reflect both the typical range of water quality conditions and periods when water quality is usually at its worst. For example, rivers and lakes will typically exhibit their lowest levels of dissolved oxygen and highest levels of algal productivity during the late summer.

* Monitor over a long period (i.e., 10 years or more) to ensure that true trends are detected.

* Maintain consistent frequency, location, time of day, collection method, and analytical techniques to minimize sampling variability.

Flow Monitoring Streamflow measurements are key to modeling watershed pollutant loads. A stream with high flow volume but low concentration of a pollutant such as phosphorus (P) can often deliver a higher annual pollutant load to a waterbody than a smaller stream with a higher P concentration. Streamflow data are also used to assess the relationship between precipitation and streamflow (e.g., how quickly streamflow reaches its peak), which can vary significantly depending on the level of watershed development.

For streams that already have U.S. Geological Survey gauges, both current and historical flow data can be found at <http://waterdata.usgs.gov/nwis>. For other streams, continuous flow data can be collected by (1) installing a data-logging pressure transducer to record water level and (2) establishing a known relationship between water level and flow volume. In smaller streams, the relationship between flow and volume can be established by installing a volumetric weir such as a v-notch weir. For larger streams, it may be necessary to develop a “stage-discharge curve” by carefully surveying a cross section of the stream under a range of flow conditions.

**TOWN OF HAMPSTEAD
HARDSHIP REQUEST
for
BOAT LAUNCHING AT THE HAMPSTEAD TOWN BEACH**

Date of Request: _____

Name of Owner: _____

Address: _____

Location of Property: _____

Map/Parcel: _____

Decal #: _____

Reason for Request (check one)

Deeded rights to Town Beach

Deeded Rights at _____ (location)

Waterfront property

Copy of deed showing right-of-way must be attached.

Conditions:

- The Town of Hampstead assumes no responsibility for any injuries occurring in or on town property.
- Damage through misuse is to be repaired immediately by above person.
- Positively **NO** alcoholic beverages are allowed in or on town property. Any person obtaining this permit is responsible for the enforcement of this ban.
- Other (specify):

Any violation of the above conditions will result in the revocation of this permit pending investigation by the Recreation Commission.

Approved: _____ / _____
Town of Hampstead Signature of Owner

Date: _____ Date: _____

HAMPSTEAD TOWN BEACH RULES

RE: BOAT LAUNCHING

1. The Town Beach opens the Saturday of Memorial Day weekend and is open through Labor Day. Launching of boats is not allowed while the beach is open with a lifeguard on duty. Launching is only allowed between 6 AM – 9 AM and 6 PM – 9 PM.
2. Boat launching permits will be given to anyone with a deeded lake access right-of-way over the Town Beach. Sticker for one vessel will be given once a copy of a deed showing the deeded rights is submitted.
3. Waterfront property owners or anyone with deeded lake rights, other than the Town Beach, on Wash Pond/Sunset Lake may apply for a hardship permit to launch a boat.


Applications for a hardship permit may be obtained from the Town Clerk/Tax Collector and returned to the Selectmen's Office. Permission will be granted or denied within one business day, based on the criteria that the applicant has deeded lake access, right-of-way or waterfront property as shown in their deed. The burden of proof is on the property owner.

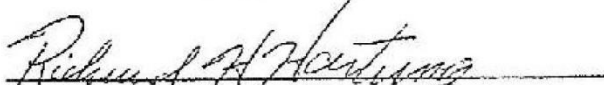
The Administrative Assistant will keep a list of all approved applications. It is a one-time application and a boat sticker will be issued from the Selectmen's Office, renewable each year with proof of registration. One sticker will be issued to be displayed on the rear of the vessel.

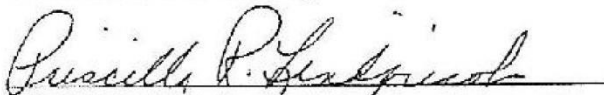
4. Foot traffic to launch non-motorized vessels via the beach (i.e. canoes and kayaks) is permitted as long as it is done at the extreme edge (side) of the beach and no swimmers or sunbathers are disturbed.

Environmental and safety education literature is available through the Sunset Lake Association. (slahampstead.org)

HAMPSTEAD BOARD OF SELECTMEN


Sean P. Murphy, Chairman


Richard H. Hartung


Russell P. Lepore

March 25, 2013
Date

