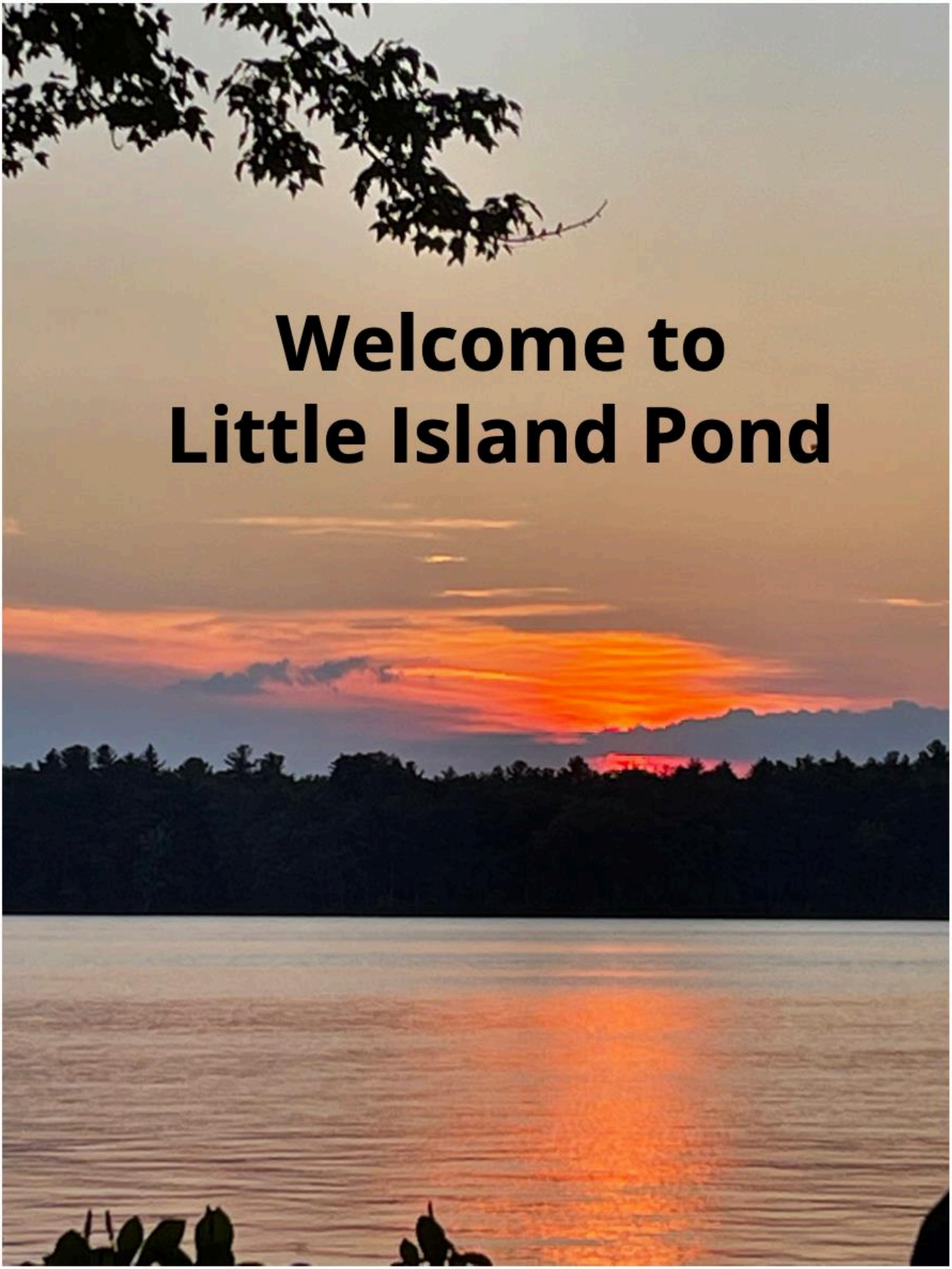
Welcome to
Little Island Pond

Introduction to Little Island Pond Association (LIPA)

Little Island Pond is free of invasive plant species (like Milfoil) and it has high-quality water. Access to the Pond is only available to people who own property with access rights the pond. There is no public access to the pond

In 2018 LIPA, in its current form, was created with the following objective (from the Bylaws):

> "To maintain the pond's water quality, protect our wildlife, and promote community fellowship by organizing social gatherings, creating educational programs, volunteer opportunities, and work towards meeting regularly to provide a voice to all members while maintaining camaraderie."

We have an active membership participating in many activities such as:

- Educational events on cleaning and draining boats, loons, other topics.
- The management of an organized team of "weed watchers" to make sure we will be able to detect invasive plant species as soon as they appear, so we can nip them in the bud.
- The inviting State, University and environmental organizations to give presentations on many relevant topics.
- The management of a weed mitigation team to address weed issues in the pond.
- The organizing of July 4th activities and festivities.
- Maintaining a facebook page and website to share information and provide a forum to discuss events and activities around the pond.
- Fund raising activities.

LIPA has funded a water quality assessment and a quantitative plant community study. As a result of the significant increase in native plant species in the water, esp. clasping pondweed, LIPA set up a weed mitigation team which has been working hard to deal with these weeds. LIPA is also working with UNH and the state in doing regular water testing to track the water quality over time and keep our finger in the pulse in case issues arise.

LIPA has around a hundred member households and has raised funds from its members and from other activities to create the funds needed to address current water testing and weed control activities, and to be prepared to deal with the appearance of an invasive species (an event we work to avoid)

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"LAKE LIVING" TESTIMONIALS

When I grew up here in the 50's through the 80's, we never had loons because their populations had been decimated by DDT. Fortunately DDT has been banned in the US, and that has made a big difference in the survival of many species. In 2000 when I moved back here after my mother died, I heard one adult Loon!! Then, the next year there were two adults - then, two chicks the year after that. Every year since we have had one or two chicks. The clear water, one suitable nesting site, and fish to eat have made it a suitable place for our loon pair. So I love the lake for it's beauty, and the wonderful diversity of plants and critters that live here making it a dynamic, fascinating system. But I also love it for my neighbors. People here care deeply about this lake. Many are willing to learn about it, understand that all of us have an impact on it, and are willing to pay attention to how they live here, even rolling up their sleeves to help take care of this incredible shared resource because we … plants, animals and people ...are all interconnected in this community of Little Island Pond.

Julia

****

We love paddle boarding in the early morning when the pond is like glass. Ed is head of the Weed Watcher program so we combine the love of paddle boarding with the search of new weeds in our area. We also have a group of Weed Watchers who live around the pond and have designated areas to search for unknown weeds. If an unknown weed is found. It is bagged and labeled and driven to Concord for clarification. The Weed Watcher Program is the first defense against invasive weeds. We are very fortunate because we do not have any invasives in Little Island Pond. In the evening we watch the sunset over the pond as a way to end the day.

Cindy & Ed

****

My association with Little Island Pond began on my 1st Birthday. My grandparents received the key to our camp on the east shore on that day. It was clad in roughly cut lumber that resembled logs. It had one bedroom, a kitchen,
a larger gathering room and a wonderful screened porch over looking the water with an old couch tucked to one side perfect for my Papa's afternoon nap.
Much has changed over the years, the old place has been torn down and a new home sits in its place. Sometimes it's hard to remember what the "camp" looked like but we have plenty of photos to remember it by. However, there is much that still is the same. There is the beautiful calming view of the water first thing on the morning while having that first cup of coffee, the boat rides around the shoreline that never get old, the water skiing, the swim races, the beautiful sunsets (the west shore has the sunrise), and the memories of my youth spending most of the summer at LIP. I am the third generation to live on the pond and I'm sure there will be a forth someday. Living here is like having a little slice of paradise. I am blessed and so grateful that my Nana and Papa had the foresight to buy the "camp"!!

Judi Bevin Smith Habeeb

****

“Being a 4th generation Little Island Ponder..... Little Island Pond has been a part of my life since before I can remember. In my younger years I was familiar with water safety, water sports, swimming, boating and was always told our lake is incredibly clean and the water was tested regularly. Maybe a bit naive on what I can do personally or as a property owner to keep the lake clean.

Now living on Little Island Pond full time, I’ve educated myself as to how to live on waterfront. It has been a learning experience and I am constantly thoughtful about what I do around my property. For instance, not using Round Up that kills amphibians (frogs, toads, salamanders) and mechanically digging up dandelions instead. Not fertilizing my grass. Pumping out my septic annually. To name just a few things. Joining LIPA has continued my waterfront living education process.... I’m always learning something new.”

Leanne W.

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“ I moved to Little Island Pond in 2016 with some knowledge of lakes in regards to shoreline protection and wet lands but certainly not the complete breath of it.

Through hearing other’s stories, doing some research and getting involved, I’ve become more and more educated. I never really thought about how fertilizer, chemicals and runoff can age the lake much faster than nature intended. Cyanobacteria? I had never heard of that either and didn’t experience it until, I think, 2019. My lawn isn’t as pretty as at my previous property where I fertilized and chemically treated it, but now I just raise my eyes to the lake and who cares what the lawn looks like, right? Sacrificing a perfect lawn is worth it for all the fun, relaxation , beauty and nature experienced at the lake. My little piece of paradise!!!

Fun fact – did you know that a tree absorbs about 10 gallons per 1 inch of truck diameter per week? A 12’ tree would absorb 120 gallons per day. If there is unlimited water, there are records of trees absorbing 150 gallons of water in a single day - WOW! It makes sense that when you cut down a tree (or trees), the water flow, water table and lake quality can change.”

Angela H.

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HELPFUL LAKE INFORMATION

We are in this together

WAYS WE CAN ALL CONTRIBUTE TO KEEP THE LAKE CLEAN AND BEAUTIFUL!

- Fertilizer Post
- Yard Leaf Waste
- Light Pollution
- Landscaping at the Water's Edge
- Algal Blooms
- Trees & Water Quality
- Grey Water
- Alternative Household Products
- Vegetation Management for Water Quality
- Site Assessments when selling your home
- Septic Replacements
- Shoreline Protection Laws
- Lake Boating Rules
- Marine Patrol Laws

LITTLE ISLAND POND ASSOCIATION

MEMBERSHIP

http://littleislandpond.com/

Little Island Pond neighbors with legal pond access, are encouraged to join LIPA!

Check out our website for membership information and levels of membership.

We provide informative information, board of directors, lake facts, meeting notices and events,

Have a fun annual meeting to get to know one another,

Host fundraising events to

help Preserve Little Island Pond

LITTLE ISLAND POND FACEBOOK PAGE

If you just moved here, please join our Little Island Pond Facebook page. It is full of fun sharing and useful information about weed control & water quality. Check back frequently to hear from your fellow neighbors.

https://www.facebook.com/groups/LittleIslandPond/

Group rules from the admins

- Everybody in this group must have a physical connection to the lake... that is you either own land or reside at Little Island Pond.

- We're all in this together to create a welcoming environment. Let's treat everyone with respect. Healthy debates are natural, but kindness is required.

- Being part of this group requires mutual trust. Authentic, expressive discussions make groups great, but may also be sensitive and private. What's shared in the group should stay in the group.

- Make sure everyone feels safe. Bullying of any kind isn't allowed, and degrading comments about things like race, religion, culture, sexual orientation, gender or identity will not be tolerated.

Fertilizer Post

Tips for a Green and Eco-Friendly Lawn

You can have a green and healthy lawn this summer that is safer for the environment and looks attractive!

Many lawn care practices can cause local water quality problems. Excess nitrogen and phosphorus from fertilizers can run off our lawns and into our local waterbodies, triggering algal blooms that can be harmful to our health, our wildlife, and cause us to lose the ability to recreate in our waters. Here are some easy, simple tips to have an eco-friendly lawn.

1. **Avoid overwatering.** Overwatering can make nutrients move out of the root zones and flow into waterbodies or groundwater. About 1 inch of water a week from irrigation or rain is usually enough.
2. **Mow smarter, not harder.** Cut no more than one-third (1/3) of the grass blade to encourage stronger and longer root systems. Leave the grass at least 3 inches high. After mowing, leave your grass clippings so their nutrients can return to the soil.
3. **Get your soil tested.** You can learn more about the specific needs of your lawn by having your soil tested. Contact UNH Cooperative Extension to learn more: extension.unh.edu/programs/soil-testing-services
4. **Pick the right grass seed.** Seed mixes that include low maintenance varieties with a higher percentage of fine-leaf fescues and turf or compact-type tall fescues, and a lower percentage of Kentucky bluegrass and perennial rye grass are the best mixes.

***Only* if your lawn requires added nutrients from a fertilizer:**

5. **Choose a safe fertilizer.** Fertilizers with zero or low phosphorus are the best to choose unless a soil test says your lawn needs otherwise. Slow-release nitrogen fertilizer is the most preferable fertilizer type. However, any fertilizer being overapplied can cause local water quality problems.
6. **Don't overapply.** Apply no more than 4 times a season. Measure the area where you plan to apply and calculate the square footage. If your lawn is 10+ years old, apply half the amount recommended for your square area only once per season. Newer lawns may need an extra application.
7. **Know the best times and places to apply.** Only apply after spring "green up" and before mid-September. Avoid applying in the middle of the summer. *Never* apply near storm drains or waterbodies.

PELHAM, NH
CLEAN WATER INITIATIVE

For more tips, visit https://extension.unh.edu/tags/home-lawn-care

Yard Leaf Waste

Why Does it Matter?

Your leaves, grass clippings, and yard waste can contribute to the pollution of our waters. However, you can turn it into a source of nutrients for your lawns and gardens at home and at your businesses.

Ways to Help Your Yard Bloom

- Leave grass clippings when mowing your lawn. Clippings are a source of nitrogen which plants need to grow. Adding nitrogen to your yard stimulates biological activity in the top layer (organic layer) of soil.
- Start backyard composting to create your own natural fertilizer! This practice can save you money. NHDES has an informational brochure on how to create your own compost pile, how composting works, and different composting methods. Follow this link for more information: https://bit.ly/354ihVO

What Happens if You Dump Your Yard Waste?

Decaying yard waste in waterbodies kills the aquatic critters.

Leaves, yard waste, and grass clippings take up a significant amount of oxygen when decomposing underwater. Organisms such as fish, snails, dragonfly larvae, and mussels need oxygen to survive.

The riparian zone (the natural vegetation on waterbody banks) can be smothered by yard waste.

When yard waste is dumped on the banks of waterbodies, the vegetation becomes too covered to have sunlight. The natural variety of plants in the riparian zone helps to feed and provide cover to multiple species including ducks, chipmunks, turtles, and deer. When the vegetation is inaccessible, the animals are also impacted.

Yard waste dumped near waterbodies adds to algal growth & foul odors.

Seepage from the yard waste can occur and will slowly flow into the nearby waterbody. Algae thrives on increased nutrients and will form large, odorous green mats on the surface of the water. The agal blooms also take up oxygen and can further harm aquatic critters.

Lastly, dumping yard waste into NH waterbodies is against the law!

The NH legislature passed a law (RSA 482-A:3) that prohibits filling streams and wetlands with waste. This law was passed in order to protect the wetlands and surface waters of NH.

PELHAM, NH
CLEAN WATER INITIATIVE

The Town of Pelham cares about clean water and is doing its part to help protect water quality in local waterways by sharing helpful tips and pollution prevention information with our residents.

This outreach message helps our community meet U.S. Environmental Protection Agency (EPA) stormwater permit requirements as part of the MS4 program.

What You Should Know About Bird Migration and Light Pollution

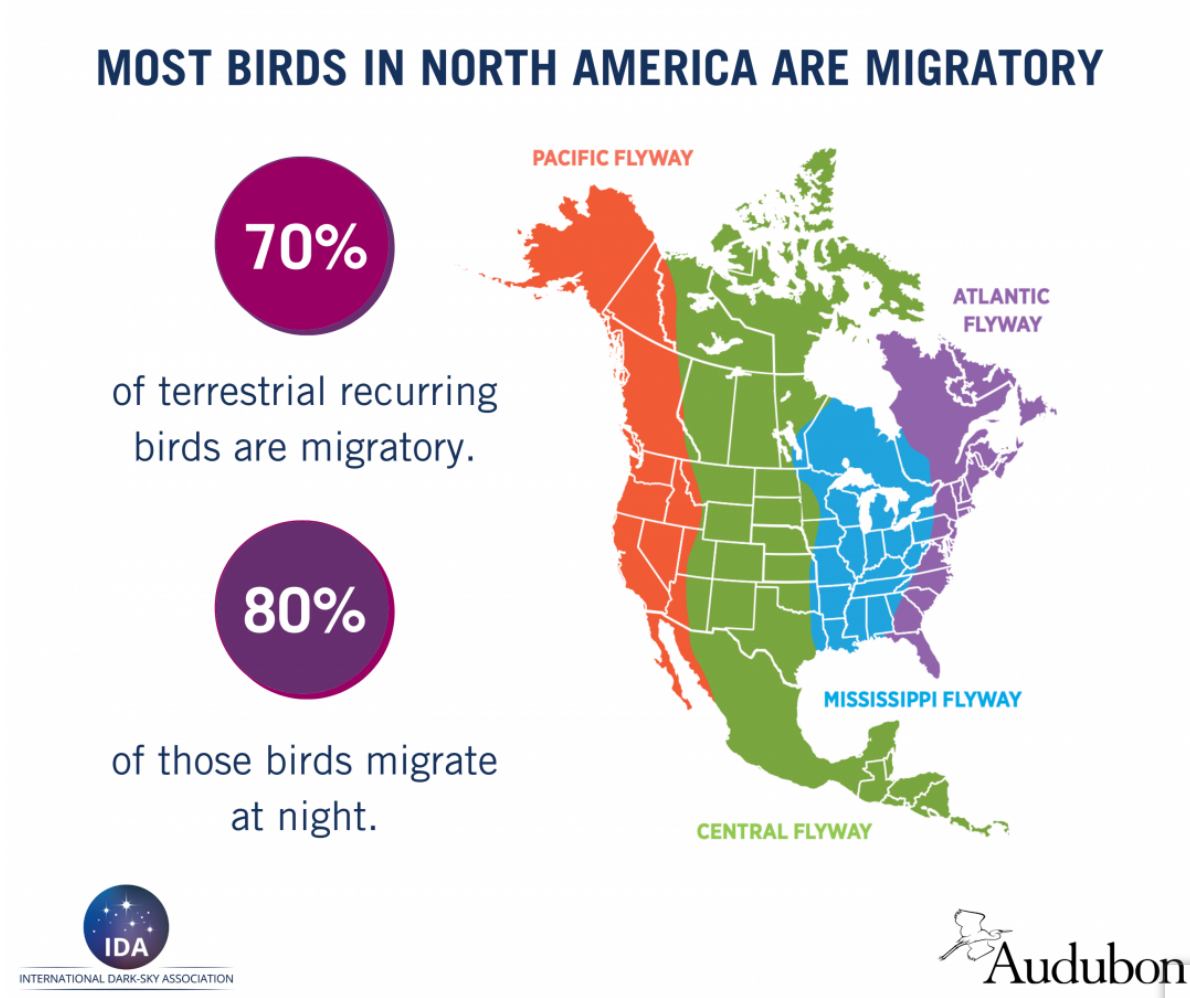
on SEPTEMBER 14, 2020

Support IDA

We are pleased to announce a new partner in the critical work of protecting the night from light pollution: the National Audubon Society. The two organizations are an excellent fit! Encompassed in Audubon's mission to protect birds and the places they need is the conservation of critical habitat, including the sky, creating a natural intersection with IDA's focus on protecting the night from light pollution.

As IDA joins forces with Audubon, we aim to expand and strengthen our efforts to return the night sky to a more natural state, creating opportunities for joint projects and collaboration among local Audubon and IDA chapters. This partnership will allow us to provide both our networks and the communities they serve with the tools and resources to protect the night sky for both birds and people.

The first of these projects seeks to protect millions of migratory birds as they head south this fall to their wintering grounds.



Across the United States in the spring and fall, the sight and sound of Canada geese flying overhead is a clear sign that bird migration is underway. Less visible are the millions of birds

that travel while we are sleeping, in the dark, during the migration seasons. But according to the National Audubon Society, 70% of birds in North America migrate and more than 80% of them make their seasonal flights at night.

Many songbirds like warblers, thrushes, and sparrows are nocturnal migrators. Without the light of the sun, these travelers use the moon and the stars to navigate during their long journeys, which can span thousands of miles and traverse continents. Artificial light at night (ALAN) can disrupt bird migration in a variety of ways, including disorienting birds from their routes and causing collisions with buildings, resulting in millions of bird fatalities each year.

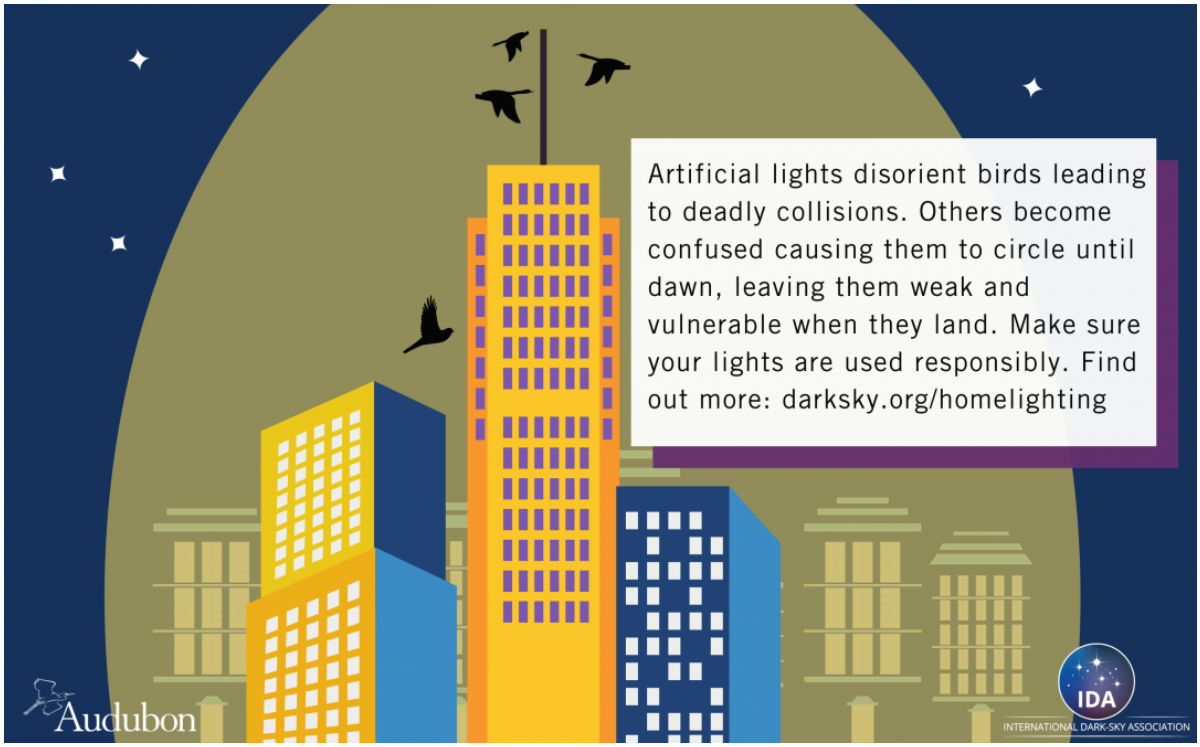
Lights Out Programs Across the US

Across the country, bird lovers, conservationists, and amateur astronomers are working together to help birds safely migrate between their seasonal homes. Inspired by the FLAP program in Canada, advocacy organizations are working together to encourage individuals and businesses to participate in Lights Out Programs, which help participants learn about the effects of ALAN on migrating birds and take action to reduce light pollution. The National Audubon Society established its first Lights Out Program in Chicago in 1999 and keeps a growing list of over thirty active Lights Out Programs in the United States.

In some locations, the program is a joint effort between regional IDA and Audubon chapters. With Audubon's commitment to birds and conservation and IDA's dedication to reducing light pollution, it's a strong, natural partnership that draws on the expertise of both nonprofit organizations. Successful Lights Out Programs in Bend, Oregon, Flagstaff, Arizona, and St. Louis, Missouri are run as collaborations between IDA and Audubon chapters. In Salt Lake City, Utah, a Lights Out Program is promoted by Tracy Aviary, a local conservation group.

These partnerships are growing into larger collaborations like Lights Out Heartland, which is bringing together more than a half dozen organizations from Missouri and Kansas toward the same vision, according to Don Ficken, president of IDA Missouri. Together, the groups work to educate the public about the ways that light pollution can endanger migrating birds, encouraging individuals and organizations to modify their use of artificial lights at night, especially during peak bird migration periods.

Support IDA



Take Action to Help Migrating Birds

According to Connie Sanchez, Bird-friendly Buildings Coordinator at National Audubon Society, Lights Out Programs typically consist of three elements: awareness, engagement, and advocacy. Many of these Lights Out Programs also involve a pledge, like the one published by Portland Audubon. Pledges usually involve a commitment to take actions like shielding outdoor lights, turning off ALAN during peak bird migration periods, turning off unnecessary indoor lighting, and contacting local decision-makers to advocate for bird-friendly lighting ordinances.

This national effort is beginning to see success in cities like Chicago, Illinois, where over 100 buildings have been involved. In New York, New York, buildings like the Chrysler Building and Rockefeller Center participate in annual Lights Out Programs, and state-owned and state-managed buildings have been turning off lights at night during migration periods since 2015. Also in New York City, volunteers help count birds caught in the beams of light projected each year during the 9/11 tribute, contributing valuable data to help scientists understand the impact ALAN has on birds. The research team working at the 9/11 tribute site has found that turning the light beams off for just 20 to 30 minutes can dramatically reduce the number of birds in the area.

lights in big cities are especially problematic for migrating birds. Cities like New York, Boston, and Philadelphia attract migrating birds with their skyglow, according to a recent study published in Ecology Letters. These cities distract migrating birds from their routes, causing the birds to burn valuable energy as they stray from their flight paths, reducing their chances of finding food at their stopover places and sometimes leading to collisions with bright, high-rise buildings. Birds are often left weak and vulnerable to predators after these unnecessary visits to bright cities.

No matter where you live, there are plenty of things you can do to help nocturnal migrators like vireos, gnatcatchers, and flycatchers safely find their way between their seasonal homes. If there's a Lights Out Program in your region, consider making the pledge to help birds travel safely during peak migration periods. Complete FLAP's BirdSafe self-assessment

Landscaping at the Water's Edge

https://extension.unh.edu/resource/landscaping-waters-edge-book

(downloadable book or you can purchase a hard copy)

Landscaping at the Water's Edge is a manual for NH landowners and landscapers that covers the concepts and practices of ecological design for water quality protection in lakes, rivers, streams and coastal areas. Whether you are a property owner or a landscape professional, the decisions you make affect the water quality and health of New Hampshire's environment. An ecological approach to your landscape will enhance the beauty and functionality of your surroundings.

This book will help you understand the basics of how watersheds and shoreland ecosystems function so you can use the strategies and techniques presented to help prevent soil erosion, nutrient and pesticide runoff, exotic plant invasions, and other detrimental processes associated with developed landscapes. Applying the principles of ecological landscaping will support wildlife and plant diversity and maintain or even improve water quality in our lakes, streams, rivers, bays and estuaries.

Besides "doing the right thing," your actions have a huge impact on human, environmental and economic health. Public health demands abundant supplies of clean drinking water and clean air to breathe, benefits that good landscaping practices help provide. The economic value of waterfront property and a significant share of the state's tourism revenues derive from the recreational opportunities and attractive views afforded by sparkling water, and healthy, diverse communities of plants and animals.

The 92-page book is fully illustrated in color. You may download and print it, or you can order it by clicking on the button below.

Algai Blooms

ALGAL BLOOMS

What are they?

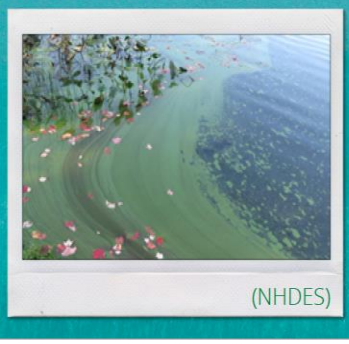
Algal blooms are colonies of algae that have grown out of control and can produce harmful or toxic effects to people, aquatic life, and birds. (National Oceanic and Atmospheric Association)

What causes algal blooms?

- Microscopic cyanobacteria that grow in freshwater and create their own food, just like plants do, are the main component of blooms.
- Environmental factors such as warm weather and poor water circulation allow cyanobacteria to make blooms.
- Human activities that result in increased phosphorus input to our waterbodies can also cause them.

What do they look like?

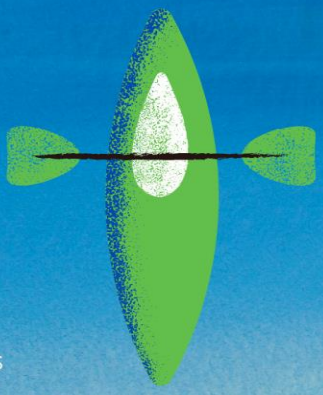
Blooms can appear as a blue-green scum on the surface, can turn the water greenish-blue, or can be floating globs/flecks of green.



(NHDES)

What are the health effects from toxins produced by algal blooms?

Cyanotoxins attack the liver, kidneys, central nervous system, and the skin. Ingesting the water can cause acute and chronic illnesses (NHDES) as well as symptoms such as:



- Skin irritation and rashes
- Stomach cramps
- Nausea
- Vomiting
- Fever
- Muscle and joint pain
- Difficulty breathing
- Mouth blisters and ulcers
- Diarrhea
- Burning or tingling in fingers and toes
- Drowsiness

What do I do if I see an algal bloom?

- Do not swim or wade in the water!
- Do not drink the water!
- Do not let pets or livestock into the water!

Call or text the NHDES Harmful Algal Blooms (HAB) hotline at (603) 848-8094 or email HAB@des.nh.gov. To help with identification, send pictures through text or email.

How can I help?

- Reduce usage of high phosphorus fertilizers by converting to phosphorus-free fertilizers or by using less overall.
- Pick up and properly dispose of pet waste in trash bins.
- Plant native vegetation around pond banks.

PELHAM, NH
CLEAN WATER INITIATIVE

LOOK OUT FOR

HARMFUL ALGAL BLOOMS

A **harmful algal bloom (HAB)** is an overgrowth of algae in a water body that could affect water quality and aquatic life. Some HABs produced by bacteria can create toxins that may also harm people, animals, and the local environment.

HOW TO IDENTIFY A HARMFUL ALGAL BLOOM

Algal blooms can make the water appear green, brown, gold, or red. They often produce scum, mats, foam, or paint-like streaks in the water or clumps on the shore. However, only professional water testing can confirm if HABs and toxins are present. State and local governments often test water for bacteria or toxins to protect water quality as part of their water quality standards program.

WHEN IN DOUBT, STAY OUT!

STAY AWAY FROM THE WATER WHEN YOU SUSPECT A HARMFUL ALGAL BLOOM IS PRESENT.

DON'T
Play with scum or mats on the shore

DON'T
Let animals drink water, eat algae, or swim

DON'T
Swim

DON'T
Fish or wade

DON'T
Boat or kayak

WHO CAN GET SICK FROM A HAB?

Adults and children

Household pets

Livestock

Fish and shellfish

ROUTES & SYMPTOMS OF EXPOSURE TO HABs

SYMPTOMS CAN VARY DEPENDING ON HOW THE PERSON OR ANIMAL WAS EXPOSED, AND WHETHER THE HAB IS IN SALT OR FRESH WATER.

ROUTES OF EXPOSURE

SKIN CONTACT

INGESTION

INHALATION

SYMPTOMS OF EXPOSURE

Ear, eye, nose, skin, and throat irritation, and headache

Paralysis, respiratory illness, and seizures

Abdominal pain, diarrhea, liver and kidney damage, and vomiting

Drooling, diarrhea, low energy, not eating, stumbling, tremors, and vomiting

WHAT TO DO IF EXPOSED TO A HAB

See a doctor or vet if symptoms occur

Contact your poison control center for advice

FOR MORE INFORMATION OR TO REPORT POSSIBLE HARMFUL ALGAL BLOOMS:

(603) 848-8094 | HAB@des.nh.gov

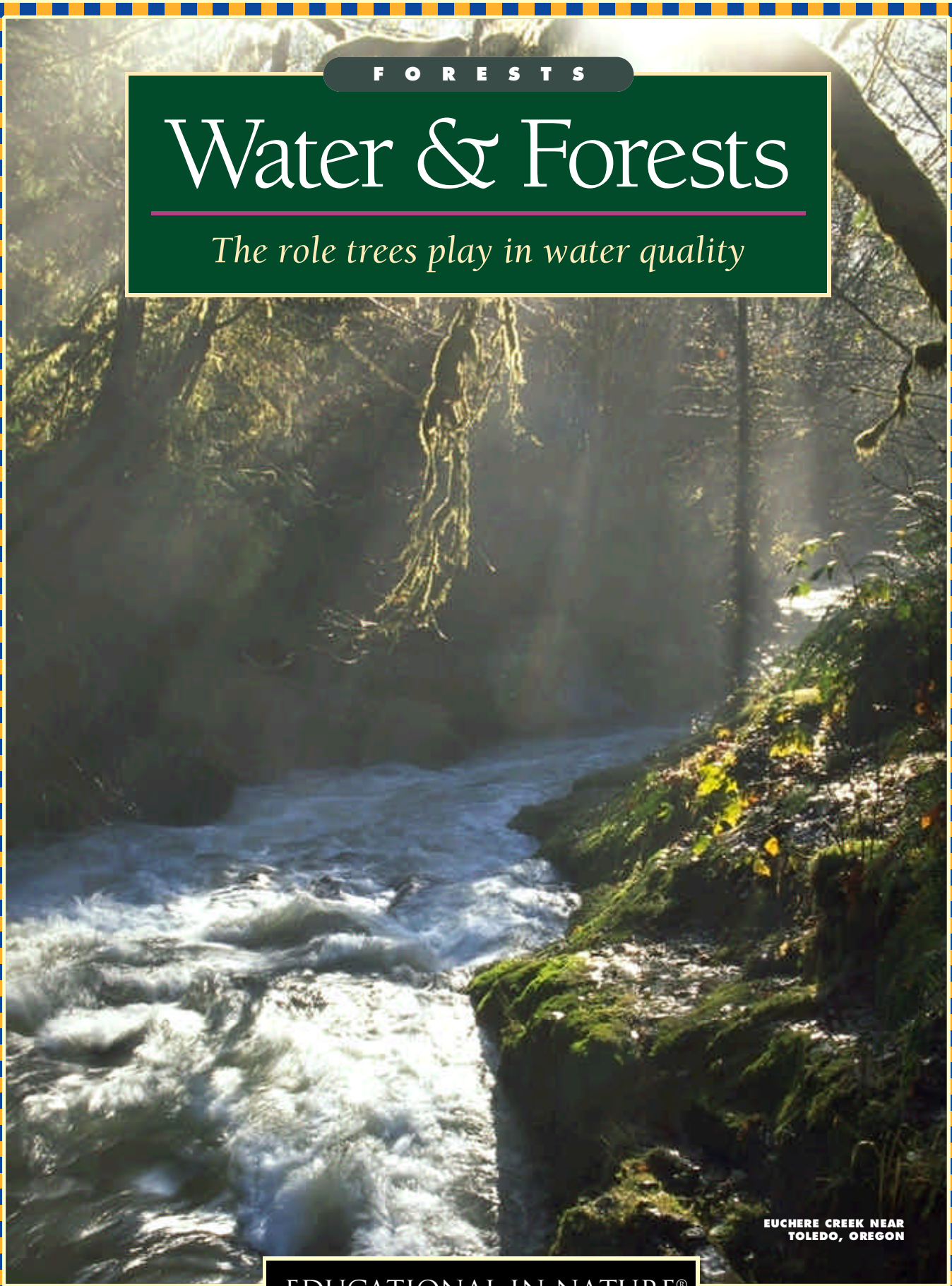
NEW HAMPSHIRE DEPARTMENT OF Environmental Services

EPA

FORESTS

Water & Forests

The role trees play in water quality



EUCHERE CREEK NEAR
TOLEDO, OREGON

EDUCATIONAL IN NATURE®

Why Is Water Important?

What's so special about water? It has no color, no taste and no smell. It is one of the simplest chemical substances, made of just three atoms. It appears to be everywhere — in clouds, oceans, ice and steam.

Water seems common, but you might be surprised to know just how uncommon it really is. As far as we know, Earth is the only planet in our solar system where water exists as a liquid. No living thing — plant or animal — can survive without it.

ABOUT 70% WATER

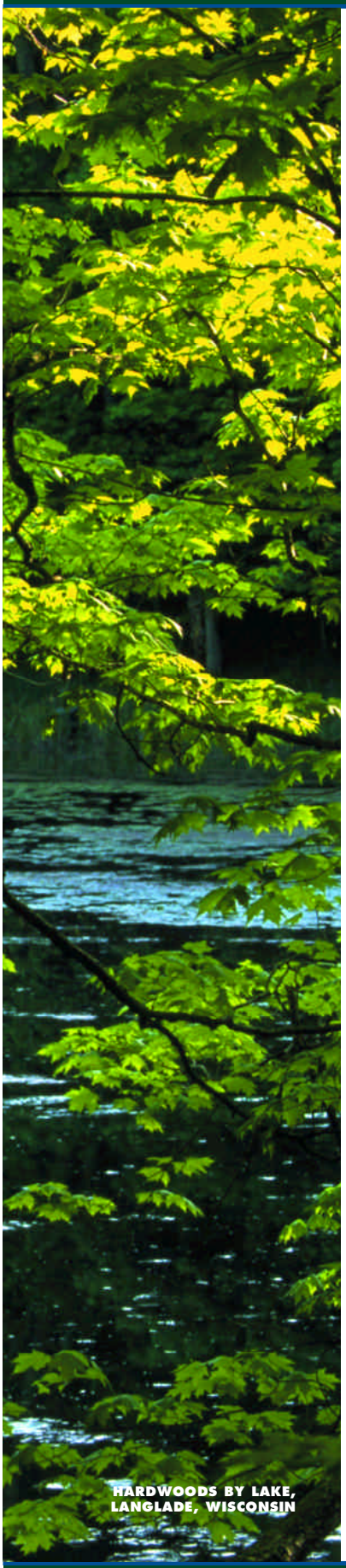
ABOUT 60% WATER

MORE THAN 50% WATER

In fact, water makes up a large percentage of all living things — and the Earth also! Water covers more than two-thirds of the Earth. About 60 percent of the human body is water. And more than 50 percent of a tree is made up of — you guessed it — water!

The water of the Earth's surface is mainly found in oceans (more than 97 percent) and frozen polar ice caps and glaciers (about 2 percent). Less than one percent of all the surface water on Earth is fresh water that you and I can drink.

Because water is necessary for life, it's important that we keep it clean. A forest plays a big role in maintaining and improving water quality.



HARDWOODS BY LAKE, LANGLADE, WISCONSIN

HOW DO TREES BREATHE?

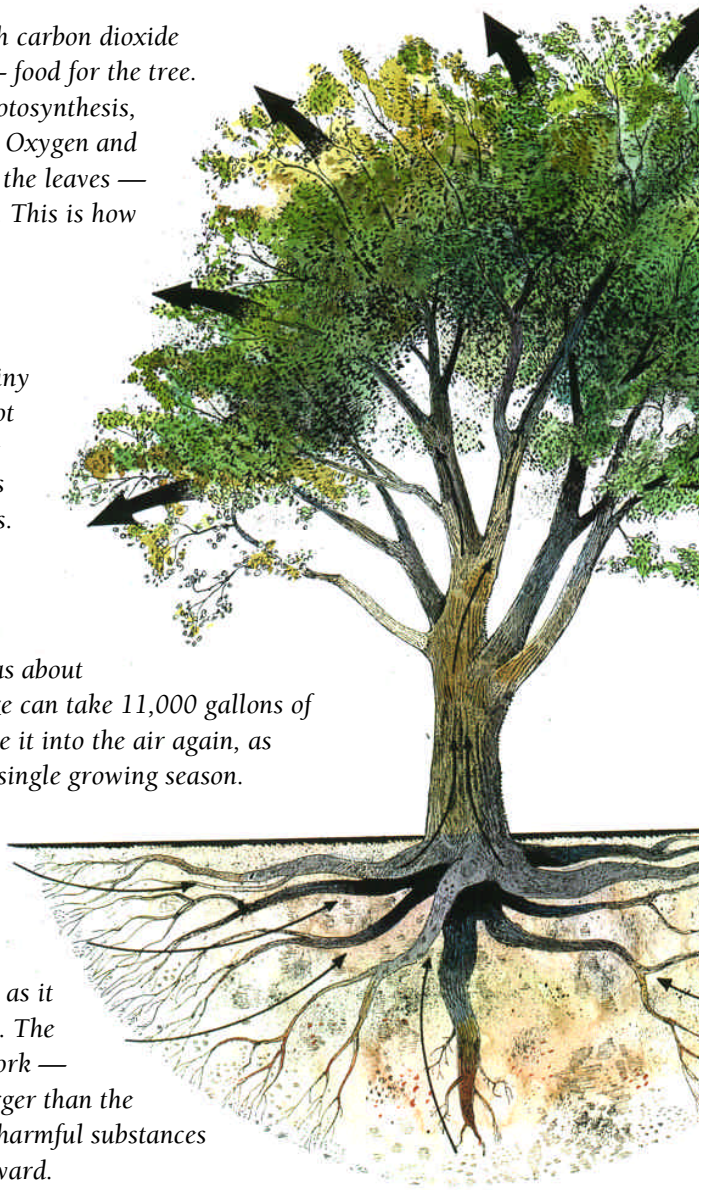
In leaves, water combines with carbon dioxide and sunlight to make sugar — food for the tree. During this process, called photosynthesis, the tree also produces oxygen. Oxygen and water then evaporate through the leaves — a process called transpiration. This is how a tree breathes.

HOW DO TREES DRINK?

Water in the soil passes into tiny hairlike roots. It enters the root loaded with minerals from the soil and is carried up the tree's trunk all the way to the leaves.

HOW MUCH WATER DOES A TREE DRINK?

A healthy 100-foot-tall tree has about 200,000 leaves. A tree this size can take 11,000 gallons of water from the soil and release it into the air again, as oxygen and water vapor, in a single growing season.



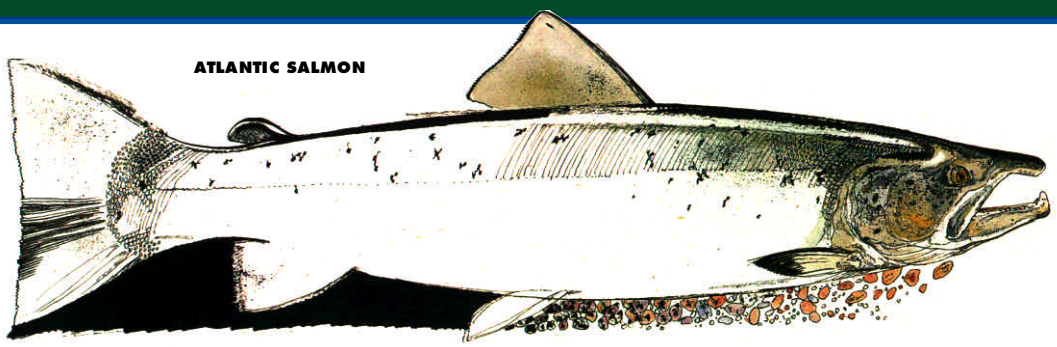
ROOTS DO MORE THAN DRINK

The roots of a tree grip the ground and act like thousands of "fingers" to anchor the tree as it keeps soil from washing away. The amazingly complex root network — often an area underground larger than the tree's branches — also filters harmful substances out of water as it soaks downward.

STREAMSIDE BUFFERS

Leaving stream and river banks as natural as possible — with the soil undisturbed and covered with trees, shrubs, wildflowers, mosses and ferns — helps prevent erosion. A stream bottom filled with pebbles — rather than a dirt-filled bottom — is one sign of a healthy stream.

ALTAMAHA RIVER, BRUNSWICK, GEORGIA



MADE IN THE SHADE

Many different animals live in forests near water. Otters, beavers, deer, herons, salamanders, snakes, alligators, frogs, turtles and many other creatures depend on forest lakes and streams for food, drink, homes and protection.

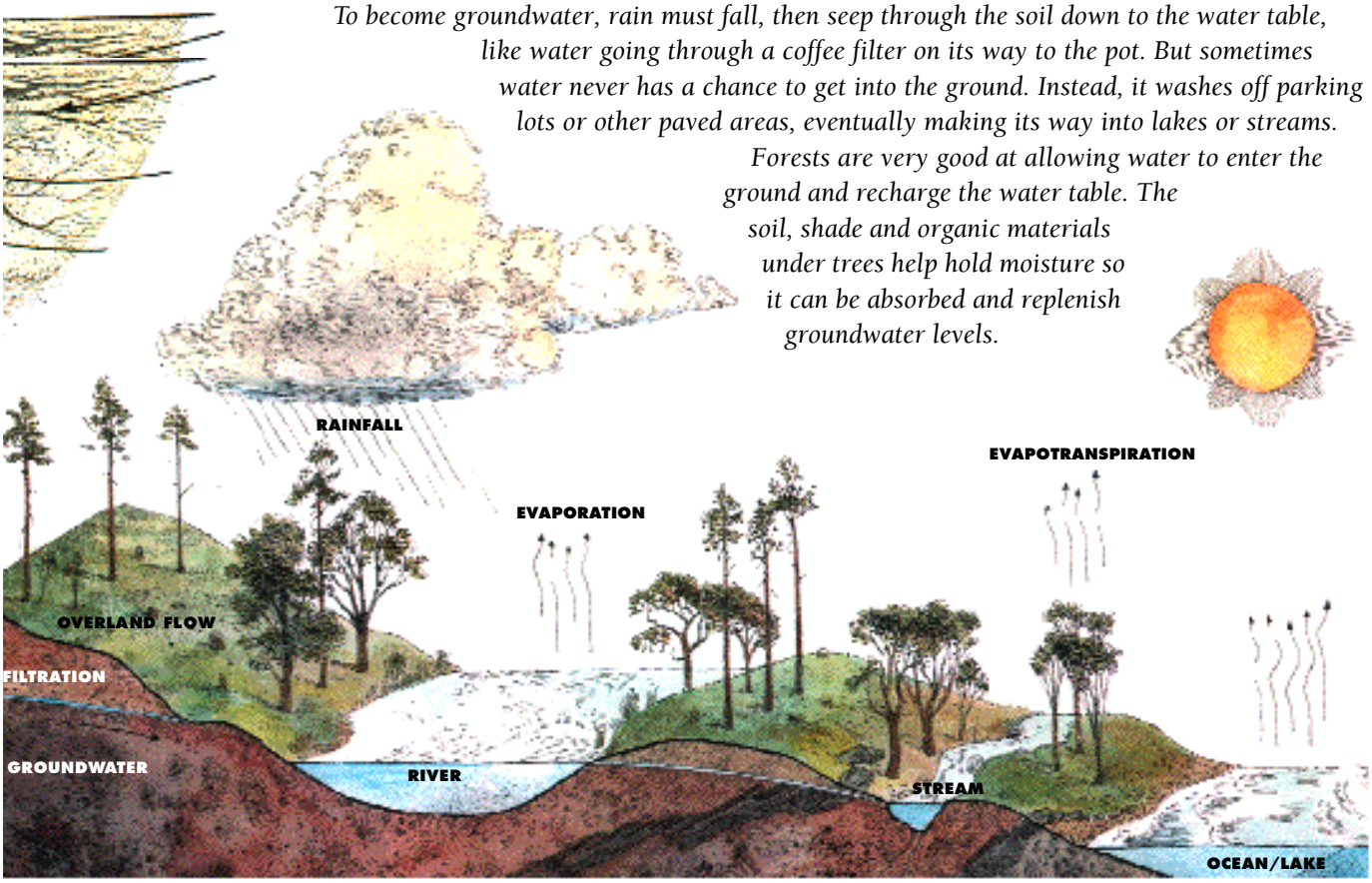
In some streams, the shade of trees plays an important role in the lives of certain fish. Brook trout and salmon are sensitive to changes in water temperature. These fish will lay their eggs only in cool water. If there are no trees or other plants along stream banks, direct sunlight will heat the water so the eggs won't hatch.

TWO-LINED SALAMANDER

FOREST SOIL HELPS THE WATER TABLE

To become groundwater, rain must fall, then seep through the soil down to the water table, like water going through a coffee filter on its way to the pot. But sometimes water never has a chance to get into the ground. Instead, it washes off parking lots or other paved areas, eventually making its way into lakes or streams.

Forests are very good at allowing water to enter the ground and recharge the water table. The soil, shade and organic materials under trees help hold moisture so it can be absorbed and replenish groundwater levels.



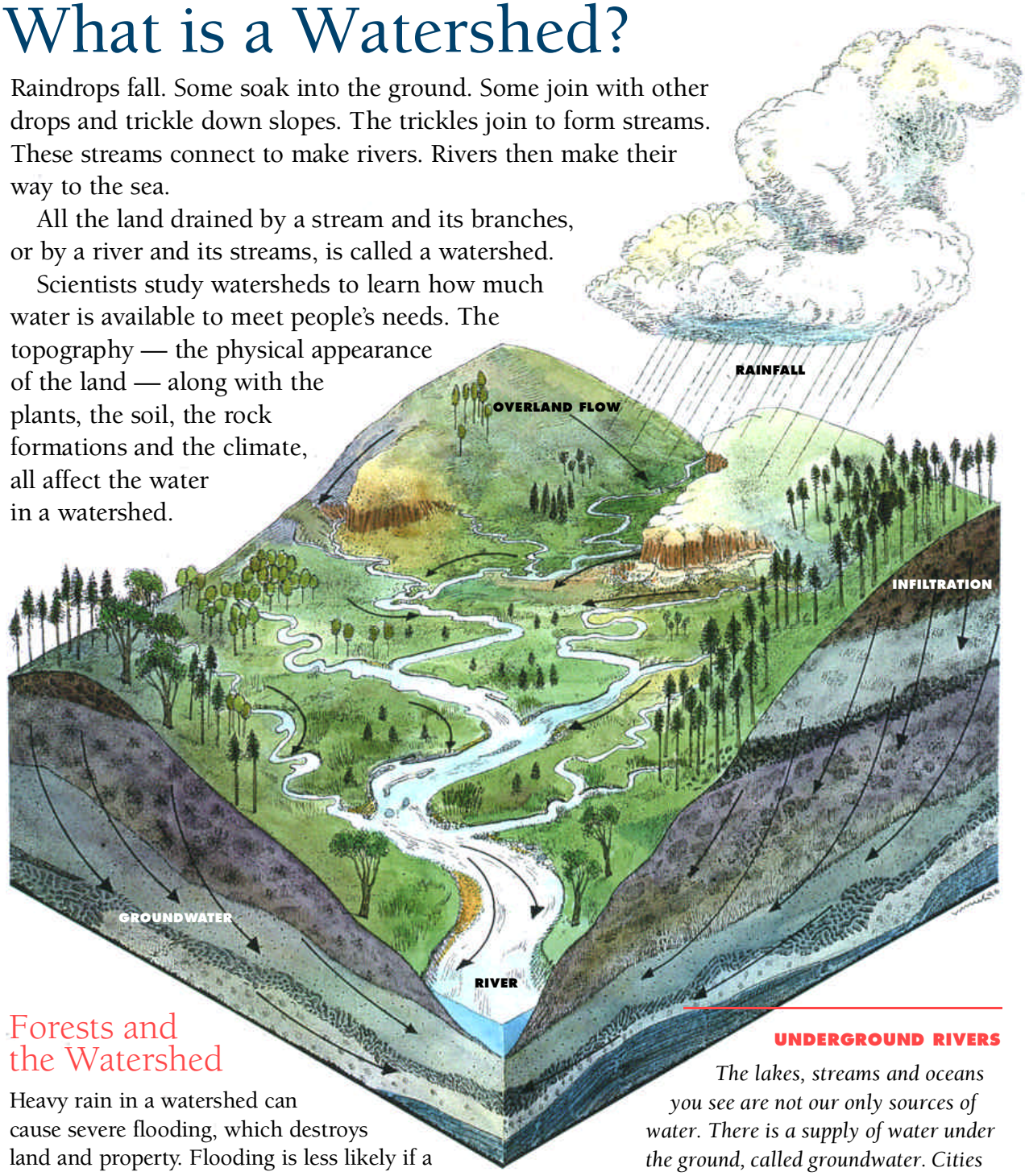
changes the environment, creating ecosystems full of life. It moves in various forms through a complex cycle of evaporation, transpiration and nsation. The sun and the Earth's gravitational pull ultimately provide the energy sources for this process.

What is a Watershed?

Raindrops fall. Some soak into the ground. Some join with other drops and trickle down slopes. The trickles join to form streams. These streams connect to make rivers. Rivers then make their way to the sea.

All the land drained by a stream and its branches, or by a river and its streams, is called a watershed.

Scientists study watersheds to learn how much water is available to meet people's needs. The topography — the physical appearance of the land — along with the plants, the soil, the rock formations and the climate, all affect the water in a watershed.



Forests and the Watershed

Heavy rain in a watershed can cause severe flooding, which destroys land and property. Flooding is less likely if a watershed has carefully managed forest areas or wetlands. (Wetlands are places that are flooded or boggy all or part of the year. Forests can be wetlands, too.)

Forest soils soak up water. The roots of trees also anchor soil and keep it from washing away — even after the trees are harvested. Wetlands — usually swamps and marshy areas — act as natural sponges, soaking up rainwater that might cause flooding.

UNDERGROUND RIVERS

The lakes, streams and oceans you see are not our only sources of water. There is a supply of water under the ground, called groundwater. Cities and towns use underground lakes and rivers, called aquifers, for drinking, watering crops, manufacturing and other purposes.

Groundwater may lie hundreds of feet down or be very close to the surface. The surface level of groundwater is called the water table.

ENVIRONMENTAL
Fact Sheet

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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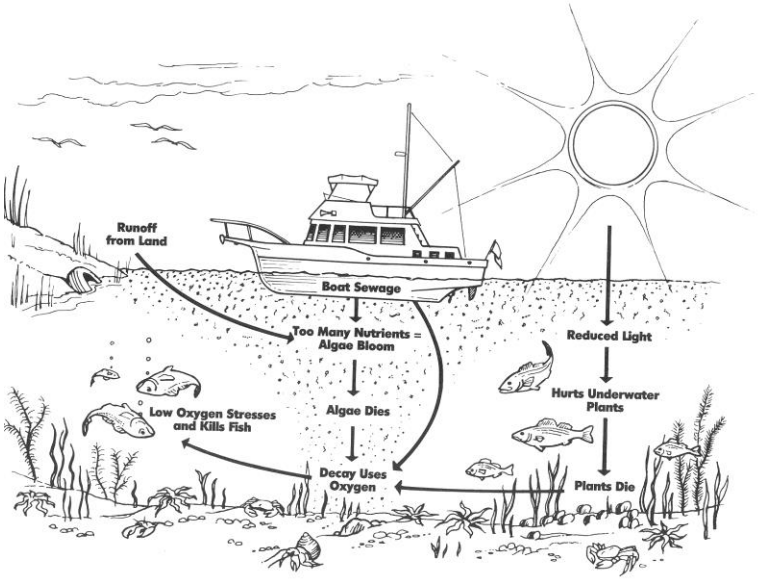
WMB-7 2019

Greywater: Keep It Out of Surface Waters

Greywater, like other pollutants, degrades the quality of water and limits or prevents its use. Greywater refers to laundry, dish, and bath/shower water; while toilet water is referred to as "black water." Greywater has adverse effects on aquatic life and public health by negatively impacting drinking water supplies, recreational activities, and wildlife.

Typically, greywater exhibits a much faster rate of decomposition than black water. The faster rate means some of the ***initial polluting effects of greywater can be significantly higher than that of black water***. In addition to decomposition, the concentration of pathogens, nutrients, and chemicals also contribute to degrading the quality of the surface water.

The nutrients found in greywater can increase plant growth, including cyanobacteria and algal growth. Nitrogen does not compose a significant portion of greywater, as it does with black water; however, phosphorus levels in greywater can *exceed* that of black water. Cleaning products contribute the majority of this phosphorus, which is why manufacturers have been required to limit the amount of phosphorus present in certain household cleaning products such as dish detergent.



Although black water generally contains more disease-causing organisms, many of these organisms can also be found in greywater and water contaminated with greywater. Some familiar organisms include coliform bacteria; fecal coliforms, including *E. coli*; *Salmonella* species; staphylococci species; viruses, including polioviruses and hepatitis virus A; and possibly *Giardia* cysts. The likelihood of these and other organisms being in greywater increases with the presence of sick individuals or children using diapers.

Chemicals, especially organic chemicals, cause a wide range of toxic effects on fish and aquatic life, including tumors and skin lesions and disruption of reproductive functions. Some of these chemicals accumulate in the environment, increasing their concentrations and their impacts. Additionally, chemicals associated with detergents, including the active cleaning agents for most detergents, surfactants, have recently been reported to disrupt normal hormonal functions. This growing concern has prompted studies into the health and ecological effects of these disruptors, however, many

questions have yet to be answered. For information about EPA's ongoing research visit their endocrine disruptor website.

What can you do to help?

- Make sure that all of your plumbing is functioning properly and no wastewater of any kind is discharged into surface waters.
- Don't throw greywater overboard.
- Consider installing or converting a holding tank to collect all greywater if needed.
- If boating in inland lakes, ask a marine professional to tell you if your boat complies with the state regulations for inland waters.

Contact Information

For more information, please email CVA@des.nh.gov or call (603) 271-8803.

For mail please use: ATTN: Watershed, CVA Program
NH Dept. of Environmental Services
29 Hazen Drive, P.O. Box 95
Concord, NH 03302-0095

Please visit the website for more information on practices that help keep our water clean!

On our website you'll find information on:

- Where to pumpout holding tanks, which is the best option when using marine toilets, sinks, or showers, and the ONLY legal option for boaters on freshwater/inland lakes in New Hampshire.
- Federally designated No Discharge Areas in New England and what it means for boaters in New Hampshire and transient boaters.
- The Clean Vessel Act program, which is the federally funded program that provides for education, boat inspections, and funding for the construction and maintenance of pumpouts.
- Information on related programs like the shellfish and beach inspection program.

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CO-24 2019

Alternative Household Products

Part of pollution prevention is "product substitution," that is, using a less toxic or nontoxic product to create a less toxic or nontoxic waste. The following is a partial list of substitutions to consider as alternatives to the toxic products you may be presently using in your home.

AIR FRESHENER: Simmer cloves and cinnamon in boiling water and/or leave an opened box of baking soda in the room.

ANT CONTROL:

- Mix 2 tablespoons of boric acid, 2 tablespoons of sugar and 1 cup of water. Soak paper towels with mixture, place flat on a dish, and set out for ants.
- Pour a line of cream of tartar where ants enter.
- Put a light coating of petroleum jelly around the base of your pet's feeding dish to keep ants out.

DRAIN OPENER: Use a plunger or mechanical snake. If that does not work…

- Pour 2 cups of baking soda and hot water into drain, then pour 1 cup of vinegar. This mixture will expand fast.
- Immediately plug the drain with rubber gasket or plunger and allow the clog to be pushed downward.
- Flush drain weekly with boiling water to prevent future clogs.

FLEA & TICK REPELLENT: Scatter pine needles, fennel, rue or rosemary on pet's bed. Feed pet brewer's yeast, vitamin B or garlic tablets.

CARPET & UPHOLSTERY CLEANER: Clean stains immediately with club soda. Sprinkle cornstarch on rug and vacuum. Use a soap-based, non-aerosol rug shampoo.

FURNITURE POLISH:

- Combine ½ cup olive oil with 1 teaspoon of lemon oil in a bottle.
- Shake well and pour into a microfiber towel.
- Rub onto finished wood furniture.

METAL POLISHES:

Steel/Chrome:

- Mix baking soda and water to the consistency of toothpaste.
- Rub paste into the grimy area with a sponge, adding more as needed.
- Rinse area with warm water.

Silver:

- Line the bottom of a large glass bowl or plastic bin with aluminum foil. Do not use a metal container.
- Place a generous amount of baking soda into container and then place the silver item to be leaned on top of the baking soda.
- Pour hot (not warm) water into container until the silver item is completely submerged.
- Soak silver for ten minutes to a half hour depending on the degree of tarnish. Tarnish will move to aluminum foil.
- Polish silver with clean dry cloth.

Copper:

- Mix 1 part of salt with 10 parts white vinegar.
- Submerge copper in solution and stir for 20 seconds (or more if needed.)
- Rub remaining tarnish off with a damp cloth.
- Rinse copper thoroughly with clean water when done.

Brass:

- Cover brass surface with regular ketchup; the salt and vinegar will remove the tarnish.
- Leave on surface for 10 minutes and then rinse clean. Repeat the process for heavily tarnished brass.

FURNITURE POLISH:

- Combine ½ cup olive oil with 1 teaspoon of lemon oil in a bottle.
- Shake well and pour into a microfiber towel.
- Rub onto finished wood furniture.

GLASS CLEANER:

- Mix 1 cup distilled (or filtered) water with 1 tablespoon of white vinegar. Distilled water works best because it has no minerals and will not leave residue on glass.
- Add 1 bay leaf and let soak overnight to reduce the vinegar odor.

MILDEW REMOVER: Dissolve ½ cup Borax and ½ cup vinegar in warm water.

INSECT SPRAY FOR PLANTS: Blend 6 cloves crushed garlic, 1 minced onion, 1 tablespoon dried hot pepper and 1 tablespoon pure soap in 1 gallon of hot water. Let sit 1 to 2 days; strain and use.

MOTHBALLS: Wrap dried lavender or cedar chips into small towels or cloth bags and place with clothes.

MULTI-PURPOSE CLEANER: Mix ½ cup ammonia, 1/3 cup vinegar and 1/4 cup baking soda in 1 gallon of warm water.

SHOWER HEAD CLEANER: Pour ½ cup vinegar into 1 quart water. Put shower head in mixture and boil for five minutes.

CARPET & UPHOLSTERY CLEANER: Clean stains immediately with club soda. Sprinkle cornstarch on rug and vacuum. Use a soap-based, non-aerosol rug shampoo.

TAPE ADDHESIVE REMOVER: Cover the tape residue with generous amounts of peanut butter. Let sit for five minutes and wipe clean with warm water.

WINDOW CLEANER:

- Mix 1 cup distilled (or filtered) water with 1 tablespoon of white vinegar. Distilled water works best because it has no minerals and will not leave residue on glass.
- Add 1 bay leaf and let soak overnight to reduce the vinegar odor.

For more information, contact the New Hampshire Department of Environmental Services Household Hazardous Waste Program at (603) 271-2047 or hhw@des.nh.gov.

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SP-5 2020

Vegetation Management for Water Quality

New Hampshire's waterbodies provide benefits we all enjoy: fishing, boating, and natural beauty to name a few. As communities grow and New Hampshire's landscape changes, the quality of our public waters depends on each of us managing the vegetation on our property. Nature's most economical and efficient water purification system is a combination of native shoreland plants.

Stormwater runoff is water from rain or melting snow that does not soak into the ground. Plants help remove the oils, salt, heavy metals, fertilizers, and other contaminants from stormwater runoff before they enter our lakes and rivers. Even the dense mats of leaves and needles under trees play a unique role in purifying our water. The best vegetation for healthy waterbodies are native plants, such as oaks, pines, willows, and blueberry bushes. Native plants slow down, absorb, and purify much more stormwater than plants with shallow roots typically found in lawns and mulched garden beds. Plus, birds, fish, and insects rely on the shade, protection, and fruits provided by native shoreland plants.

To protect water quality and wildlife habitat, the Shoreland Water Quality Protection Act (SWQPA) regulates the removal of ground cover, shrubs and trees within 150 feet of public waters. This distance is measured from the reference line. Within 150 feet of the reference line there are two regions, the **waterfront buffer** and the **woodland buffer,** shown below (Figure 1)**.** The regulations on vegetation management are different within these regions and are explained in the following pages.

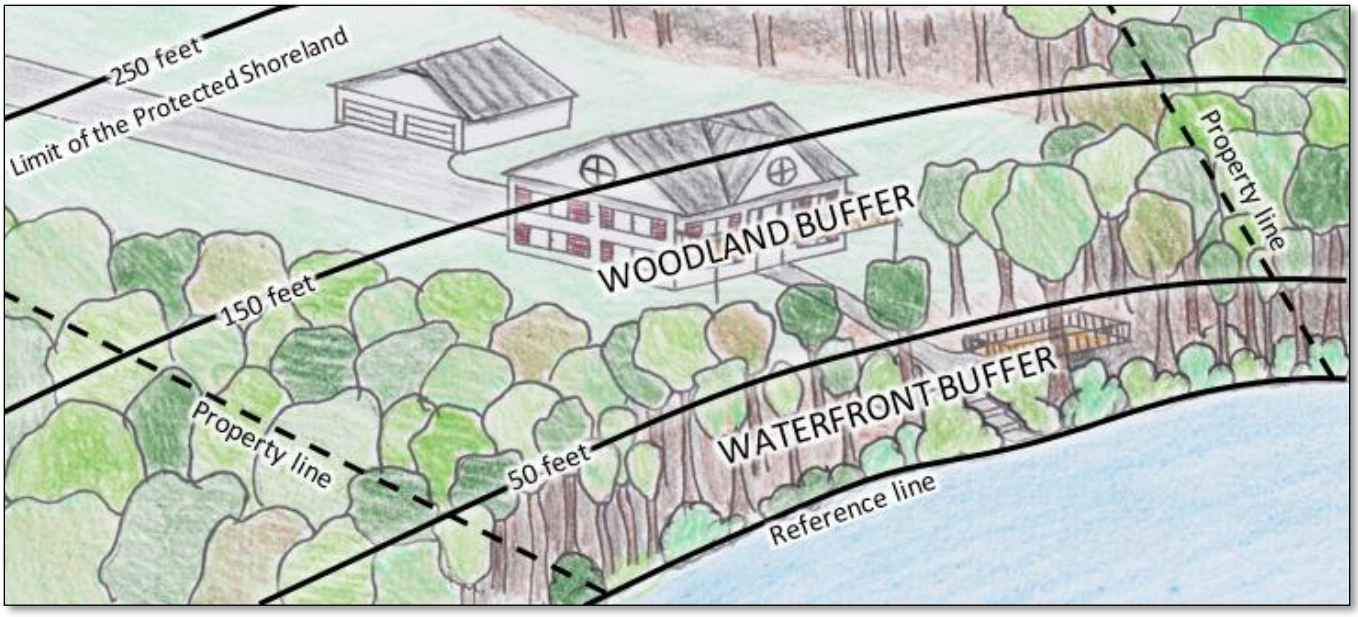


Figure 1 - *Areas within the protected shoreland. Distances are measured horizontally from the reference line.*

WATERFRONT BUFFER REQUIREMENTS

Within 50 feet of the reference line, ground cover and shrubs may **not** be removed and replaced with landscaping or lawn. They may only be removed to provide a single 6-foot wide footpath to the water or to structures in the waterfront buffer (a shoreland permit may be required). Ground cover and shrubs may only be trimmed to a height of no less than 3 feet (Figure 2).

Trees may also be pruned as long as the health of the tree is not endangered. Pruning only the bottom 1/3 of a tree is recommended to maintain property aesthetics and tree health. Always determine if a tree can be pruned before removing it. Pruning trees often increases views while providing wildlife habitat, privacy, and retaining shade.

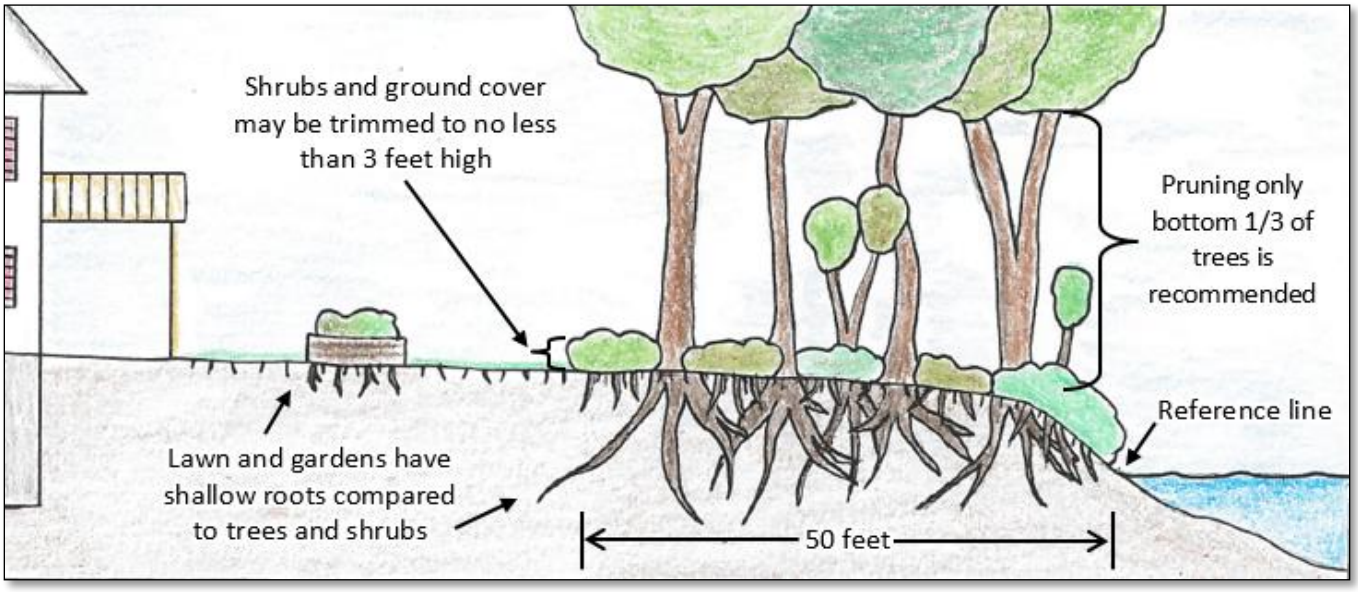


Figure 2 - *Waterfront buffer profile view.*

Removing trees and saplings within the waterfront buffer *may* be permissible, but there are limitations based on a *grid segment and point score* system. Property owners must maintain a minimum tree and sapling point score within each "grid segment" in their waterfront buffer. They cannot remove trees or saplings from a segment that does not meet this minimum point score. To determine if trees or saplings can be removed, beginning from the northern or eastern property boundary, divide the waterfront buffer into grid segments that are 25 feet along the shore by 50 feet inland (see Figure 3). Properties that have shoreland frontage that does not divide to an even number of 25-foot segments require points in the last segment in proportion to the area of the last segment.

Next, to determine if trees can be removed from a grid segment, calculate the grid segment's total tree and sapling point score. Each tree is awarded a point score based on its trunk diameter (width) 4½ feet above the ground (Figure 4). Dead, diseased or dying trees are not awarded points.

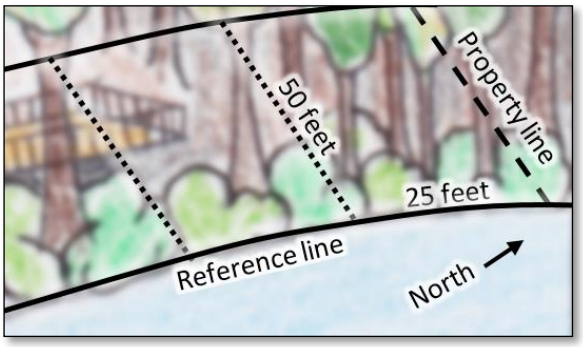
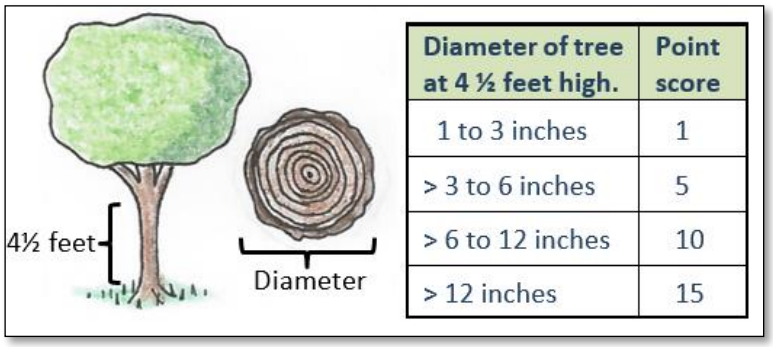


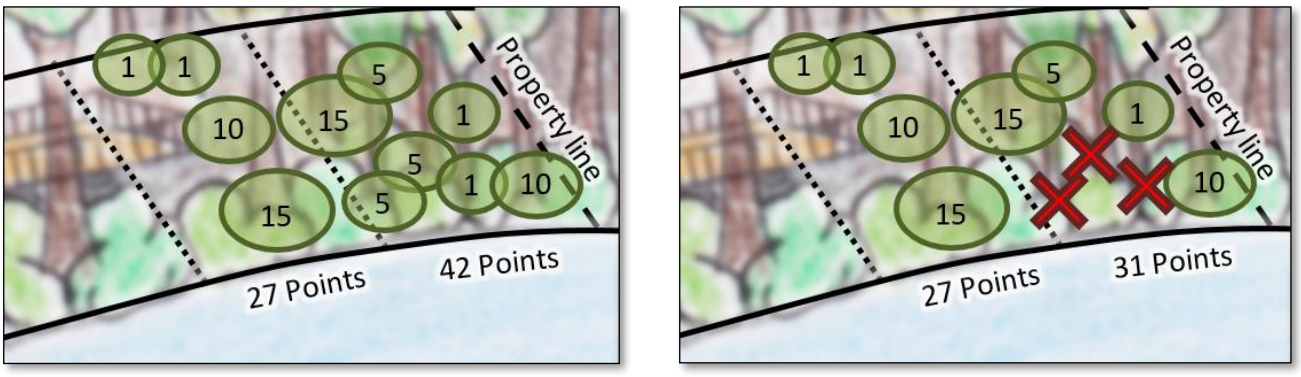
Figure 3 - *Mapping out each grid segment.*



Diameter of tree at 4 ½ feet high.	Point score
1 to 3 inches	1
> 3 to 6 inches	5
> 6 to 12 inches	10
> 12 inches	15

Figure 4 - *Scoring each tree by its trunk width.*

Trees or saplings may be removed from any grid segment provided that, after removing the trees or saplings, the sum of the tree and sapling point score within the affected grid segment will be at least 25 points (Figure 5).



Before management **After management**

Figure 5 -*Managing trees and saplings within the waterfront buffer. Trees and saplings are represented by green circles, labeled with their point scores. Trees and saplings to be removed are indicated by a red "X". In this example, three trees and saplings were removed.*

Property owners are encouraged to manage grid segments by strategically planting additional native saplings, especially within grid segments that do not meet the minimum point score so that, once the saplings are well-established and mature, and the grid segment's total point scores increases above 25 points, trees may then be removed.

Within the waterfront buffer, stump removal requires a permit. Stumps that are removed are to be replaced with pervious surfaces, new trees, or other woody vegetation.

WOODLAND BUFFER REQUIREMENTS

Between 50 and 150 feet from the reference line, at least 25% of this area must be managed as natural woodland where all existing native ground cover, shrubs and trees are allowed to grow. Property owners have the freedom and flexibility to select which region(s) are designated as natural woodland. This area does not have to be contiguous and many people place it on the edges of their property to provide a dense area of vegetation for privacy.

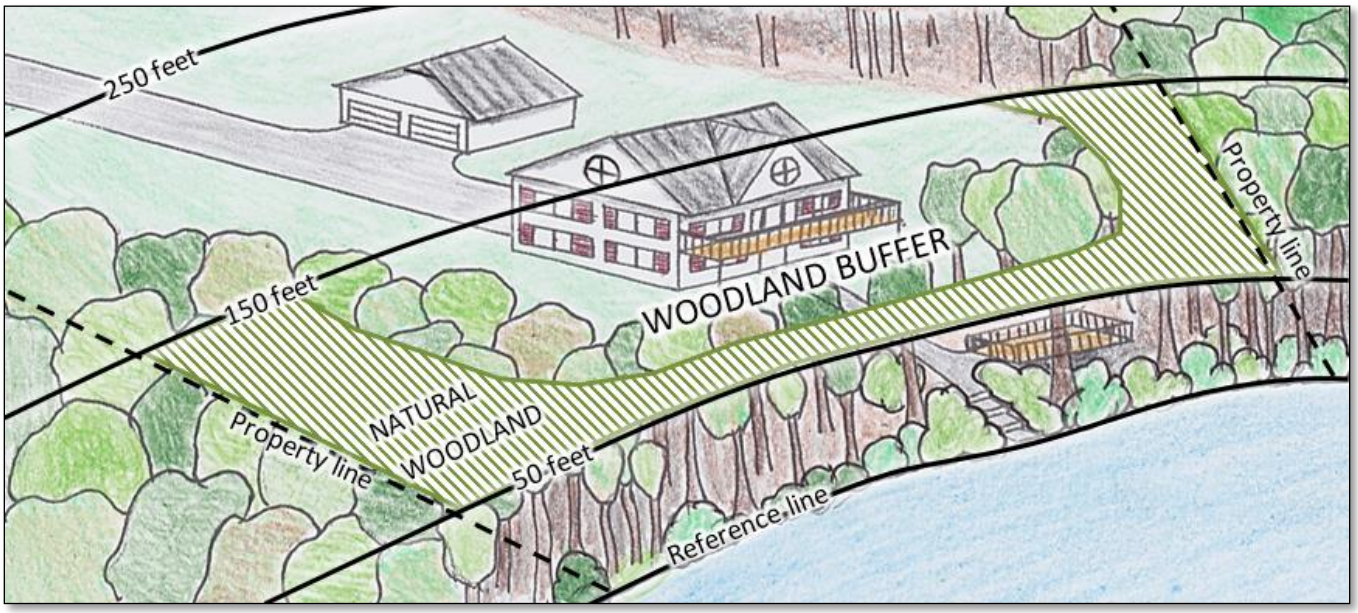


Figure 6 - *At least 25% of the area between 50 and 150 feet of the reference line must be designated as natural woodland to be maintained in an unaltered state or improved with additional vegetation.*

Areas of the property with the highest density of native trees, shrubs, and ground cover should be given priority for designating as natural woodland. Managing vegetation within the natural woodland is done by allowing the native plants to grow without cutting except as needed to maintain or improve plant health.

The natural woodland may appear very different depending on site conditions. See Figure 7 for some examples.

The natural woodland on either side of the path has native trees with some native shrubs for ground cover.

This area may have been an abandoned cleared area, but now qualifies as a natural woodland with native shrubs and ground cover.

This grandfathered lawn area contains a patch of native trees. Because of these trees, the area may qualify as natural woodland, although the grandfathered lawn may be maintained as such.

Figure 7 - *Examples of natural woodland areas. The area on the left has the highest density of native trees, shrubs, and ground cover and thus should be given priority for designating as natural woodland, followed by the area shown in the middle picture. If similar areas were not present on the property, the area shown in the right picture would qualify as natural woodland.*

PERMITTING REQUIREMENTS

- A NHDES shoreland permit is not required for vegetation management provided it occurs in accordance with the limitations described in this fact sheet.
- Any dead, diseased or unsafe tree which has a structural defect and poses an imminent hazard may be cut to ground level at any time without a shoreland permit. NHDES recommends property owners retain documentation of the tree's condition at the time of removal such as clear photos and written confirmation from a horticultural professional describing the tree's defect or condition.
- A NHDES shoreland permit is required for excavation, fill, or construction within 250 feet of the reference line. Examples include, but are not limited to removing stumps, constructing most walkways, patios, other structures, or grading. *Any earthwork or construction of structures on the bank, in the water, or on the bed of a waterbody are regulated by the NHDES Wetlands Bureau* and are subject to the NHDES Wetlands Permitting Process.
- Areas cleared of ground cover, shrubs, or trees prior to July 1, 2008, in excess of the limits described in this fact sheet, may be maintained but not enlarged. Examples of cleared areas include lawn and mulched landscaped areas.
- Before removing trees, always check local ordinances as well. Many municipalities have standards that are stricter than the NH Shoreland Water Quality Protection Act.

CHEMICAL APPLICATION

No fertilizer, may be applied within 25 feet of the reference line. Between 25 and 250 feet from the reference line, only slow or controlled release fertilizer may be used. Low phosphate, slow release nitrogen means fertilizer that is guaranteed, as indicated on the package label, to contain:

- At most 2% phosphorous, and

- A nitrogen component which contains at least 50% slow release nitrogen components.

No chemicals, including pesticides, such as herbicides, or fertilizers of any kind, can be applied to ground, turf, or established vegetation within 50 feet of the reference line, except by a professional licensed for pesticide application by the state of New Hampshire. This includes organic pesticides. For more details, please see the Shoreland Program fact sheet: “Pesticide Use Within the Protected Shoreland”.

FOR MORE INFORMATION

For more information, please visit www.des.nh.gov. You may also contact the Wetlands Bureau by phone at (603) 271-2147, via email at shoreland@des.nh.gov, or by mail at 29 Hazen Drive; P.O. Box 95 Concord, NH 03302-0095.

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NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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WD-SSB-10 2019

Selling Developed Waterfront Property
Site Assessment Study Required

Relevant Laws: RSA 4:40-A, 485-A:2 (definitions), 485-A:39, RSA 483-B:4
Relevant NHDES Administrative Rule: Env-Wq 1025

Statutory Requirements
Prior to executing a purchase and sale agreement for any "developed waterfront property" using a septic disposal system, an owner shall, at his or her expense, engage a permitted subsurface sewer or waste disposal system designer to perform an on-site assessment study.

"Developed waterfront property" means any parcel of land upon which stands a structure suitable for either seasonal or year-round human occupancy, where such parcel of land is contiguous to, or within, 200 feet of the reference line of all waterbodies protected under RSA 483-B, the (Shoreland Water Quality Protection Act). Waterbodies protected under RSA 483-B includes: All lakes and ponds greater than 10 acres, all 4th order and greater streams and rivers, all designated rivers and river segments under RSA 483-A (The Rivers Management and Protection Act) and all waters subject to the ebb and flow of the tide (including tidal marshes, rivers and estuaries). The Consolidated List of Waterbodies Jurisdictional under the Shoreland Water Quality Protection Act is a comprehensive list off all freshwater bodies protected under RSA 483-B. **Please note**: A *Site Assessment Study* must be conducted whenever any part of the property is within 200 feet of the reference line, not merely when the structure or septic disposal system is within 200 feet of the reference line.

The *Site Assessment Study* is a form prepared by a NHDES-permitted septic system designer that you, as the seller, hire to determine if your site meets the current standards for septic disposal systems established by NHDES. The Site Assessment Study form is **not** submitted to NHDES. The completed Site Assessment Study form is transferred from the seller to the buyer and becomes part of the purchase and sales agreement.

In instances where a subsequent sale of a developed waterfront property occurs for which a Site Assessment Study has already been conducted for a previous sale, if no changes occurred to the information required on the original Site Assessment Study, the property owner and assessor may certify that no change in the information required has changed in lieu of conducting a new site assessment study.

The site assessment study was originally required prior to listing or offering a waterfront property for sale but, since 1993, it has been required prior to executing a purchase and sale agreement and must include an on-site inspection. The site assessment form may be obtained from the Subsurface Systems Bureau, or on-line by selecting the following; site assessment form.

For More Information
If you have any questions concerning septic systems, contact the NHDES Subsurface Systems Bureau at (603) 271-3501, or 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095; Fax: (603) 271-6683; https://www.des.nh.gov/land/septic-systems

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SSB-1 2020

Replacement of a Failed Subsurface Disposal System

What is a Failed Subsurface Disposal System?
New Hampshire RSA 485-A:2 defines failure as "the condition produced when a subsurface sewage or waste disposal system does not properly contain or treat sewage or causes the discharge of sewage on the ground surface or directly into surface waters, or the effluent disposal area is located in the seasonal high groundwater table."

Special Requirements for Replacing a Failed Subsurface Disposal System.
To ensure prompt and effective replacement of a failed subsurface system, the following steps must be taken (Env-Wq 1004.20).

1. The town health officer, a permitted designer, or other local official responsible for health code enforcement, must prepare a written statement verifying that the existing system is in failure. This statement must be submitted to NHDES (New Hampshire Department of Environmental Services) with the application to replace the existing system.
2. If construction approval is granted, the construction must be completed within 90 days. Failure to complete construction and obtain operational approval of the system within the 90-day period will result in invalidation of NHDES approval.
3. In the event that your construction approval becomes invalid as a result of exceeding the 90-day construction period, a request for extension must be submitted to NHDES, Subsurface Systems Bureau. NHDES shall grant one 90-day extension. The request for extension must include all the information required by New Hampshire Administrative Rule Env-Wq 1004.13 (d).

This fact sheet is intended as a basic source of information concerning the replacement of a failed subsurface disposal system; it is not intended to replace the administrative rules contained in Env-Wq 1000. It is also important to remember that some municipalities have additional requirements, and you should check with your local officials before beginning any project.

For Further Information
If you have any questions concerning septic systems, contact NHDES Subsurface at (603) 271-3501, or 29 Hazen Drive, PO Box 95, Concord, NH 03302-0095; Fax: (603) 271-6683.

Additional Resources for Lake Living

Lake Boating Rules

https://assets.kalkomey.com/boater/pdfs/handbook/newhampshire-handbook-entire.pdf

New Hampshire law requires all PWC or boat operators who are 16 years old and operating a motorboat over 25 hp to pass a boater safety course and to carry a boater education card.

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Shore line protection laws changed in 2019

https://www.des.nh.gov/land/waterfront-development/protected-shoreland

Call prior to cutting trees or installing impervious surfaces, etc.

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Marine Patrol Laws

www.marinepatrol.nh.gov

New Hampshire law defines a “ski craft” as any motorized vessel that is less than 13 feet in length, is capable of exceeding 20 miles per hour, and has the capacity to carry no more than an operator and one other person.

It is illegal to operate a “ski craft” at greater than headway speed if within 150 feet of swimmers in the water, other vessels or “ski craft,” rafts or floats, docks, swimming areas, or mooring fields.

It is illegal to operate a “ski craft” within a cove (a bay or inlet that does not exceed 1,000 feet at its widest point) or within 300 feet of shore unless the “ski craft” is proceeding at headway speed directly to an area where “ski craft” operation is permitted.

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ENVIRONMENTAL
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NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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WD-WMB-25 2019

Impacts of Motorized Craft on New Hampshire's Waterbodies

In recent years the number and usage of motorized boats has dramatically increased on the state's lakes, ponds and rivers. Currently, over 93,000 motorized crafts are registered in New Hampshire. Popular recreational motor boating activities include fishing, water skiing, tubing and pleasure cruising. If done carelessly, motor boating is not only a safety hazard, but can also negatively impact water quality, disrupt wildlife, and interfere with native plant and animal life.

Various state agencies work together to ensure safe use, protection and management of New Hampshire's waters. Boaters can do their part by being aware of potential water quality impacts that could result from the careless use of motorized craft and minimizing these activities.

Environmental Impacts from Motorized Craft

Chemical Impacts: Boat maintenance, if done without caution, has the potential to contribute chemical pollutants such as solvents, paints, or oils, to the state's surface waters. In addition, many solutions for cleaning boats contain chlorine, ammonia and phosphates, or other chemicals that could impact fish and plankton growth. Oil spills from motors or at refueling stations contain hydrocarbons that have the potential to contaminate bottom sediments.

Physical and Biological Impacts: Motor boats and motor-boating activities create waves that have sufficient energy to cause shoreline erosion. The waves generated from boat wakes can be around a foot high, sometimes more, and, if too close to shore, can contribute to slumping banks and loss of shoreline vegetation. Additionally, re-suspension of bottom sediments can occur from even small motor boats (the table to the right shows the depth of influence of various popular horsepower engines). Increases in suspended sediment in waterbodies (also known as turbidity), can result in impacts to aquatic systems. Turbidity can cause lakes, ponds, and rivers to appear darker by allowing less light to penetrate into the water column, thereby stunting submerged plant growth. In turn, this may result in reduced habitat for aquatic life or interfere with their feeding capabilities. Further, boats can destroy habitat for aquatic animals directly by uprooting and cutting up aquatic plants especially in shallow areas where motors extend down near the plant growth. The cutting of plants can also lead to the

Horsepower	Depth Impacted
10	6 ft
50	15 ft
100	18 ft

spread of exotic and invasive species creating fragments that can move on to harm other areas of the same waterbody or that can tag-along on transient recreational gear and are then transferred to a new waterbody.

Sediments that end up in the water column from shoreline erosion or bottom re-suspension can bring nutrients, including phosphorus, that contributes to increased plant and algal growth. Excessive water column turbidity can clog the gills of fish and insects in the water, making it harder for them to take up oxygen.

Taken together, the factors outlined above can contribute to negative ecological impacts on the diversity and structure of aquatic life and interfere with the recreational opportunities that our surface waters provide, ultimately reducing the functional values of aquatic systems.

Existing Operational Rules and Regulations

The New Hampshire Department of Safety, Marine Patrol, is responsible for establishing and enforcing regulations that pertain to safe recreational boating activities, ensuring the safety of other water-users, and the protection of environmental resources. A number of reasonable boating rules and guidelines have been established and can be found online.

Additionally, some waterbodies have special restrictions in place to protect the resource and/or public safety, including bans on motorized boating or gas-powered engines, horsepower restrictions, and/or posted speed limits. For more details on specific waterbody, call the New Hampshire Marine Patrol at 1-877-642-9700 or visit www.nh.gov and search for "Marine Patrol."

Minimize Your Impact

There are a number of ways to minimize your impact as an owner/operator of a motorized craft such as:

- Follow manufacturer's guidelines for fuel type and filling of tank, as well as engine care.
- Don't wash your boat on the water, remove it and trailer it to a proper car wash facility.
- Use four stroke engines or newer direct-injection two-stroke engines as they are cleaner because they burn fuel more efficiently and conservatively.
- Follow "NO WAKE" rules and guidelines.
- Respect "safe passage" guidelines regarding speed and distance.
- Avoid boating in shallow near-shore areas and marshy areas, as they are more at risk for impacts resulting from motorized boating activities.
- Do not to run the propeller or skeg against or along the bottom substrates.
- Keep noise levels to a minimum at appropriate times of the day.
- Maintain an appropriate speed for the depth of waterbody and other recreational activities taking place within your vicinity.
- Avoid traveling through densely vegetated areas.
- Do not power load your boat onto your trailer.
- *Clean, Drain, and Dry Your Boat* before going to a new waterbody, to prevent the spread of invasive species.

LITTLE ISLAND POND MAP

https://www.wildlife.state.nh.us/maps/bathymetry/littleisland_pelham.pdf

Note: there is NO public access to the pond