

LAKE HOPATCONG LAKE-FRIENDLY LIVING GUIDE

**Simple ways you can help
protect Lake Hopatcong**

LAKE HOPATCONG
FOUNDATION



lakehopatcongfoundation.org



Studies have linked water quality with property values in lake communities throughout the U.S. Lake communities are in demand, and the value of properties within these communities depends upon the quality of the lake. All property owners in the Lake Hopatcong watershed, not just lakefront property owners, can make a difference. If we all practice lake-friendly living we will all be able to enjoy the beauty and health of Lake Hopatcong for years to come.

This guide addresses three main ways to protect the water quality of Lake Hopatcong and your investment in your property.

MINIMIZE RUNOFF

Runoff picks up pollutants and carries them to the Lake. Minimize the hard surfaces that create runoff.

ELIMINATE POLLUTANTS

Eliminate pollutants at their source. Avoid using fertilizers, household toxins, and other chemicals. Prevent soil erosion and failing septic systems.

CAPTURE & INFILTRATE

Capture and infiltrate any pollutant-carrying runoff, which you didn't eliminate before it reaches the lake, with shoreline buffers, rain barrels, and rain gardens.



To learn more about how you can help protect Lake Hopatcong, visit lakehopatcongfoundation.org, email info@lakehopatcongfoundation.org, or call 973-663-2500.

Working together to protect Lake Hopatcong

Lake Hopatcong has become a popular destination for people who want to enjoy the beauty and tranquility of lake community living. More and more homes, driveways, and fertilized lawns have replaced trees and natural shoreline. Small summer homes have given way to larger year-round homes. The cumulative effects of those changes to the landscape have meant big changes to the health of Lake Hopatcong. By changing the natural environment to a suburban landscape, the lake ecosystem can no longer function properly.



Leaving the natural topography and vegetation of the forest floor around your house protects the lake.

15 simple strategies to protect Lake Hopatcong

MINIMIZE RUNOFF

1. Reduce Impermeable Surfaces
2. Limit Lawn Size
3. Use Water Wisely

ELIMINATE POLLUTANTS

4. Minimize Erosion
5. Be Smart About Lawn Care
6. Use Phosphorus-Free Fertilizer
7. Maintain Your Septic System
8. Don't Flush Your Drugs
9. Maintain Your Vehicles
10. Conserve Water
11. Reduce Household Hazardous Wastes

CAPTURE & INFILTRATE

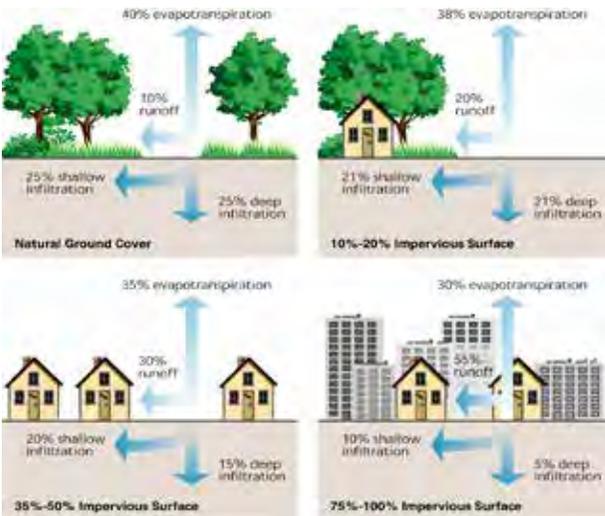
12. Install a Vegetative Buffer
13. Plant a Rain Garden
14. Go Native

15. Support the Lake Hopatcong Foundation!

STORMWATER RUNOFF



Stormwater runoff isn't just a problem along roads and commercial areas. Residential properties generate runoff as well. Stormwater runoff from developed areas poses a significant threat to the water quality of Lake Hopatcong.



What is stormwater runoff?

After a rain event, water that falls on natural surfaces infiltrates the ground and eventually into the groundwater. Water that falls on impervious surfaces, such as roads, rooftops, and other paved surfaces, cannot soak into the ground. Instead, it flows over surfaces, picking up pollutants, such as oils, salts, debris, sediments carrying phosphorus, and other chemicals and depositing them into the lake.



What are the effects of stormwater runoff?

- A decline in water quality and clarity from pollutants and sediment.
- Impeded navigation due to sediment.
- Increased weed and algal growth due to excess nutrients.
- Unsafe water for swimming due to bacteria and pathogens.
- Harm to aquatic life from debris, as well as hazardous materials (pesticides, paints, motor oil, etc.).
- Erosion of stream banks and loss of habitat.

All of the above lead to a loss in water quality, damaging the economy and impacting tourism, property values, and quality of life.



MINIMIZE RUNOFF

Reduce Impervious Surfaces

1

Pervious surfaces allow water to infiltrate and soak into the ground. Impervious surfaces do just the opposite. When water hits this kind of surface, instead of soaking in, it runs off. This is what creates stormwater runoff. The larger the area of impervious surface, the greater the volume of stormwater runoff.

Ways to lessen your impervious footprint.

- Keep paved driveways as small as possible. Use pervious surfaces for driveways and overflow parking areas that aren't needed on a regular basis. While gravel driveways may start off pervious, over time the compaction makes them nearly as impervious as regular asphalt.
- Rooftops are impervious too - so keep your home a modest size and build up - not out - when possible.
- Use stone pathways, or stepping stones across your lawn, instead of poured concrete or asphalt paths.
- Try one of the newer pervious pavement technologies. There are pervious paver systems, asphalt, and concrete - so you can get just about any look you want. Prices vary, and while all options are generally more expensive than traditional pavements, it is money well spent.



2

MINIMIZE RUNOFF

Limit Lawn Size

Natural wooded areas have multiple layers of vegetation. A canopy of tall trees, an understory of smaller trees and shrubs, and a groundcover of ferns and other plants. Branches and leaf litter from these plants build up on the forest floor over time and break down into a layer, called duff, that covers the ground.

Duff protects the soil from the impact of rain, keeping it in place instead of letting it erode away. Roots of plants and trees also hold the duff in place. Water soaks into the ground, filtering pollutants and replenishing groundwater.



Plants and leaf litter on the forest floor lessen the impact of rain and allow it to soak into the ground instead of running off across the surface.

Lawns absorb less rainfall than natural areas.

Studies have found that areas of lawn can create more runoff than similarly sized wooded areas.

- Grading a lot to create a lawn removes the natural topography of the land. Low spots where water would naturally collect and have time to soak in are lost.
- Heavy machinery and equipment compact soil during construction, leaving no space for water to soak in.
- Without the branches and leaves of trees and shrubs to intercept the rainfall and lessen its impact, rain hits the ground hard and runs off across the surface.



When building a new home, think about how you will use your lawn. Would you like an area for children to play? Or for a pet to exercise? Then, plan accordingly. Only create as much lawn area as you need.

If you have a large existing lawn that you don't use, start making it smaller by planting more trees and shrubs around the edges and eventually working your way in.

MINIMIZE RUNOFF

Use Water Wisely

3



Using water wisely around the yard helps prevent pollution from runoff.

If you have an irrigation system:

- water your lawn and garden in the morning or evening, when temperatures are cooler, to minimize evaporation;
- adjust sprinklers so only your lawn is watered and not the house, sidewalk, or street;
- install a rain sensor on your irrigation controller so your system won't run when it's raining;
- choose shrubs and groundcovers instead of turf for hard-to-water areas such as steep slopes and isolated strips;
- spread a layer of organic mulch around plants to retain moisture and save water, time and money;
- use drip irrigation for shrubs and trees to apply water directly to the roots where it's needed.



Wood Anemone, a native spring perennial

Landscape with native plants that won't need irrigation once they are established. This will save water and save you the cost of the installation and maintenance of an irrigation system!

Other ways to prevent runoff from your property.

- Install a rain barrel to collect runoff from your roof and to use for watering your garden.
- Direct downspouts onto your lawn or into a rain garden, away from driveways and other impermeable surfaces.
- Install covers on pools and spas and check for leaks around pumps.
- Check for leaking outdoor faucets.
- Use a broom instead of a hose to clean driveways and sidewalks.



Patios provide space that doesn't need to be watered. These useful "outdoor rooms" can also add value to your property. Just be sure to keep it pervious!

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ELIMINATE POLLUTANTS

Minimize Erosion

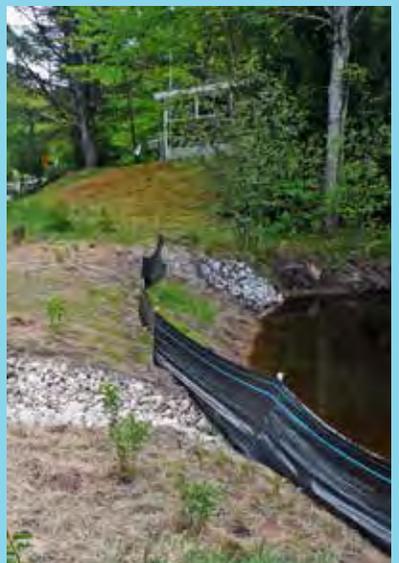
When planning a construction project, check with your local municipality to determine whether or not you need a permit. Be sure to have an erosion control plan in place before you begin. Depending on the type of project, there are many steps you might need to take to protect water quality in Lake Hopatcong.



- Preserve existing vegetation where possible to prevent erosion. Avoid parking or driving heavy machinery near trees as soil compaction can damage their roots.
- Build a gravel access drive to limit compaction of your site and to limit mud tracked out to the street from vehicles.
- Properly install a silt fence or straw bales to trap sediment on the downslope side of your lot.
- Protect soil piles with silt fences and by keeping them covered with tarps or plastic. Locate the piles away from the road or nearby water to lessen the chance of sediment being transported off site.
- Replant the area as soon as possible so that there is not bare soil. Cover lawn areas with 4-6" of topsoil and then seed and mulch with straw.
- Fence the construction area to limit activity to only the necessary area of the site. This will help reduce erosion and unnecessary soil compaction of the rest of your property.
- Divert runoff around disturbed areas to minimize erosion.

Silt fences are a last line of defense for stopping sediment from washing off your site. They should not be relied upon as the sole solution for erosion control and they must be installed properly in order to be effective.

This site was seeded and mulched with straw to cover the bare soil and the silt fence stayed in place until the grass seed had a chance to grow and stabilize the soil. Larger plants were also planted to help revegetate the disturbed area. It is important to keep erosion control measures in place until the site has been stabilized.



ELIMINATE POLLUTANTS

Be Smart About Lawn Care

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Fertilizers, leaves, grass clippings, animal waste, and eroded soil are all sources of phosphorus. When they are swept or washed into the street or nearest storm drain, they end up in a nearby stream or the lake. Lawn care practices can have a big impact on water quality and the environment.

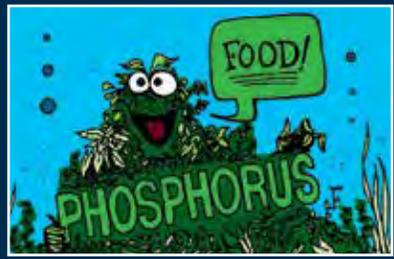
Follow these tips for smart lawn care with water quality in mind.

- Apply fertilizer at the recommended rate and time. Don't fertilize before a storm. Never apply to frozen ground. **Or better yet, skip the fertilizer altogether!**
- Yard waste can contribute significant amounts of phosphorus to waterways. Keep soil, leaves, and lawn clippings out of the street, ditches, storm drains, and streams by bagging them, composting them, or leaving them right on the lawn as a natural fertilizer.



- Mow higher. Keep grass length to 3 to 3½ inches. It is healthier for your lawn and means you can mow less often!
- Pick up pet waste. Pet waste can contain harmful bacteria, as well as phosphorus. Flush it in the toilet or place it in the garbage.
- Build healthy soil using compost and other natural amendments. Healthy soils are more resistant to disease and insect problems.
- Learn about Integrated Pest Management (IPM) and use pesticides sparingly and only when really needed. Do not apply pesticides as part of a 'routine maintenance plan'. When use is needed, be sure to follow the label. Often the timing of the application is critical to its success. There are many organic products available at store—try these first—and only use chemicals as a last resort.

PHOSPHORUS & WATER QUALITY



What is phosphorus?

Phosphorus is a natural element and an essential nutrient for plant growth, but is found only in small amounts in lakes and streams. Even small increases in phosphorus can have a devastating impact on the water quality of a lake or stream. Increased phosphorus can stimulate algae and excessive plant growth. Boating, fishing, and swimming can become difficult and lake property values and tourism can also be negatively impacted.



Green and gross

Excess phosphorus can lead to an explosion of algal growth in the lake. **A single pound of phosphorus can support more than 1,100 pounds of algae in Lake Hopatcong!**



More phosphorus, less fish

As algae die and decay, water is robbed of dissolved oxygen. This can devastate fish populations if it occurs for a long period of time or the fish have nowhere else to go.

Where does phosphorus come from?

Phosphorus has many sources. Small amounts of phosphorus exist naturally in lakes and streams, but human activities from residential and agricultural areas contribute a significant amount of phosphorus. Stormwater runoff travels across land, picking up phosphorus from fertilizers, eroded soil particles, septic systems, and pet waste along the way and discharging it into nearby streams and the lake.



ELIMINATE POLLUTANTS

Use Phosphorus-Free Fertilizer

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What do I look for?

The three numbers in fertilizer bags show the N-P-K nutrient analysis. The middle number is the phosphate (phosphorus) content. A “zero” in the middle means it is phosphorus-free.



Will phosphorus-free fertilizer keep my lawn green and healthy?

Yes! Soils in most parts of New Jersey already have an adequate amount of phosphorus to grow a healthy lawn. In these instances, adding more phosphorus with fertilizer is not needed and will not benefit your lawn.



How do I find out what my soil needs?

Most lawns in the Lake Hopatcong watershed do not need a fertilizer with phosphorus. Homeowners can learn about what their lawns may need for proper application of various nutrients with a soil test through the Soil Testing Laboratory at Rutgers University.

Besides being lake-friendly - It's the law!

Since 2011, New Jersey State law:

- prohibits the use of phosphorus-containing lawn fertilizer unless you are establishing a new lawn or a soil test shows that your lawn does not have enough phosphorus;
- prohibits the application of fertilizer during or just before heavy rainfall, onto an impervious surface, or onto frozen ground;
- prohibits the application of lawn fertilizer within 25 feet of a water body. The buffer can be reduced to 10 feet if using any of the following, a drop spreader, rotary spreader with a deflector, or targeted spray liquid fertilizer;
- prohibits the application of any lawn fertilizer between November 15 and March 1 for consumers, and December 1 to March 1 for professionals;
- requires professional fertilizer applicators to undergo training and become certified.

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ELIMINATE POLLUTANTS

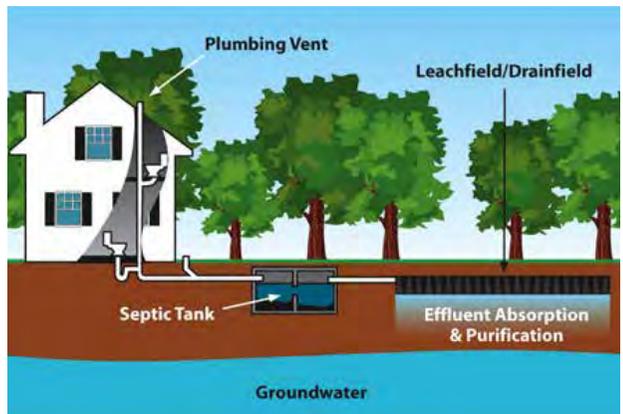
Maintain Your Septic System

Maintaining your onsite wastewater treatment system (septic system) not only protects Lake Hopatcong and nearby groundwaters from being contaminated, but also protects your health and your investment in your home. Typical pollutants found in household wastewater include nitrogen, phosphorus, and disease-causing bacteria and viruses. A properly designed, constructed, and maintained system can provide long-term, effective treatment of household wastewater. If not properly maintained, a failing system can cost tens of thousands of dollars to replace.

Know the signs of a failed system.

- Pooling water or muddy soil around the tank, drainfield or in your basement.
- A bad smell coming from the area of the tank.
- Toilet or sink backs up when you flush or do laundry.
- Bright green grass over the drainfield.

If you notice any of these signs, call a professional to have your system looked at right away.



A typical septic system has 4 main parts:

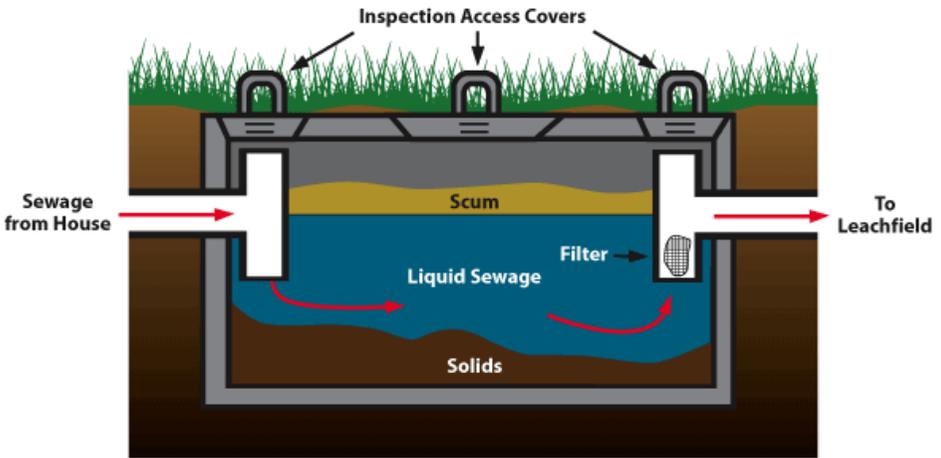
- a pipe from the home that carries the wastewater into the tank;
- a tank that holds the water long enough for solids to settle to the bottom and oil and grease to float to the surface;
- a drainfield where the water from the tank is discharged;
- the soil where the microbes provide the final treatment.

Alternative systems

Due to unsuitable soils, high bedrock or groundwater, or small lot size you may have a hard time making a traditional septic system work on your property.

There are alternative systems now available that use new technologies to improve treatment processes, many of which need less space to function. Such systems use sand, peat or plastic media instead of soil to treat the wastewater. Some of these systems are already being used on Lake Hopatcong.

HOW TO MAINTAIN YOUR SEPTIC SYSTEM



1. Regularly inspect your system and pump your tank as necessary. It's a good idea to have your system inspected every 2-3 years. If your town has a septic management ordinance, make sure your system is in compliance. If you don't pump your tank routinely, the solids in the bottom can build up and make their way out into your leach field, clogging it and eventually ruining it. You might not know you have a problem until it is too late and you need a new leach field.

2. Don't dispose of household hazardous wastes in sinks or toilets. Avoid paints, chemicals, cleaners, gasoline, oil, or other toxic materials that could kill the good bacteria in your system. Avoid things that can clog pipes, such as diapers, coffee grounds, feminine hygiene products, paper towels, and grease and fat from cooking. Avoid frequent use of a garbage disposal. Normal use of antibacterial products, such as hand soap, is fine but excessive use might kill too many beneficial bacteria in your system and prevent it from working properly. Septic additives are not needed.

3. Care for your drainfield. Plant only grass or groundcover with shallow roots over or near your drainfield. Deep roots could clog and damage the drainfield. Don't drive or park vehicles on the drainfield. This could compact soil or damage the pipes. Keep roof drains, sump pump drains, and other surface water runoff away from the drainfield to avoid flooding it.

4. Use water efficiently. Using less water means less water going through your septic system. This helps it operate properly and reduces stress on your system and the risk of a failure.

Avoid overloading your system with more water than it is meant to handle.

- Don't do multiple loads of laundry all in one day. Spread it out instead.
- Don't drain a hot tub or pool into your tank or over your drainfield.
- Some water softeners or filters flush themselves daily. Make sure these aren't discharging into your system.

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ELIMINATE POLLUTANTS

Don't Flush Your Drugs

Until recently, consumers have been told to flush old drugs down the toilet, or pour them down the drain. We now know such actions can have many detrimental effects. Some drugs pass largely unaltered through wastewater treatment systems. A nationwide study found low levels of drugs, such as antibiotics, hormones, contraceptives and steroids in 80% of the rivers and streams tested throughout the U.S.



What should be done with unwanted drugs?

The best option is to take medications to a designated local collection site or event. (Most household hazardous waste collection events will not accept pharmaceuticals.) Go to projectmedicinedrop.com to find a prescription drug drop box in your area. The next best thing to do is to dispose of your medications in the trash, using the following steps.

- Add water and then mix ashes, dirt, cat litter, coffee grounds, or another undesirable substance to the medication.
- Hide all medications in an outer container, such as a sealable bag, box or plastic tub. Seal the container with strong tape.
- Dispose of drugs as close to your trash collection day as possible to avoid accidental or intentional misuse.
- Avoid crushing pills, as some medications can be harmful in powder form.
- To prevent consumption by scavenging humans, pets, or wildlife, do not conceal discarded drugs in food.

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ELIMINATE POLLUTANTS

Maintain Your Vehicle

Most people might link cars to air pollution, but all the fluids found in a car can be very detrimental to water quality, as well.

- Make sure your car is not leaking oil or other fluids onto your driveway or onto the road where it can be washed into nearby waterways.
- If you change your own oil, use an oil pan to catch any drips. If the oil spills, don't wash it into the nearest storm drain with the hose. Instead, clean it up with an absorbent material such as kitty litter and then dispose of it properly.
- Wash your car on your lawn. Or better yet, take it to a commercial car wash where the wash water is captured, cleaned, recycled, and reused.
- Soapy water contains phosphorus and other chemicals that can harm fish and water quality.

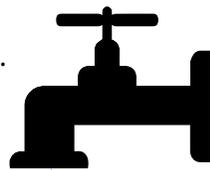
ELIMINATE POLLUTANTS

Conserve Water in Your Home

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Water conservation in the home helps maintain your septic system. Here are some ways to use water more efficiently around your home.

- Turn off faucets completely when not in use. Fix leaking faucets.
- Turn off faucets while shaving or brushing your teeth.
- Compost vegetable waste instead of using a garbage disposal.
- Don't use running water to thaw food.
- Run the dishwasher only when full.
- Install aerators in the faucets in your kitchen and bathroom.
- When taking a bath, fill the tub only halfway and save 10-15 gallons.
- Take shorter showers and save 5-7 gallons a minute.
- Install high-efficiency showerheads. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Replace old dishwashers, toilets, and washing machines with new, high-efficiency models. New washing machines with the Energy Star label use only 18-25 gallons of water per load (compared to 40 gallons per load for the typical machine) and save about 7,000 gallons of water a year.



Did you know?

Average indoor water use in a typical single-family home is almost **70 gallons per person per day.**

ELIMINATE POLLUTANTS

Reduce Household Hazardous Wastes

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Household hazardous waste is any waste produced in and around the home, which is flammable, toxic, corrosive, or reactive. Common examples include gasoline, oil, solvents, paints, paint thinners, fertilizers, pesticides, cleaners, and batteries. Improperly disposed of, household hazardous waste can pollute local waters.

- Use hazardous substances in the smallest amounts possible.
- Use non-toxic, biodegradable products when possible.
- Recycle products whenever possible or share with a neighbor.
- Clean paint brushes and other supplies in a sink, not outside.
- Always follow the directions on labels and store properly to avoid leaks or spills.
- Store hazardous products until they can be safely disposed of at a household hazardous waste collection event.

12

CAPTURE & INFILTRATE

Install a Vegetative Buffer

As the homes around Lake Hopatcong were converted to year-round or second homes, homeowners often brought their ideas of a conventional yard with them, leading to grass lawns down to the lakeshore.



Traditional lawns on a lakeshore properties can cause:

- excessive plant and algal growth;
- shoreline erosion and sedimentation;
- loss of wildlife habitat;
- an increase in nuisance animals;
- loss of leisure time.

What is a vegetative buffer?

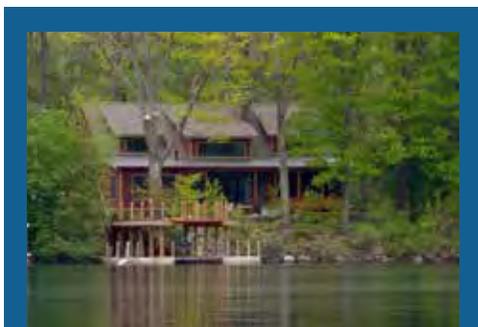
A vegetative buffer is a section of natural vegetation along the shoreline of a body of water, intended to intercept and slow stormwater runoff. Planted vegetative buffers, or simply allowing your landscape along the shoreline to return to its natural state, are vital for lakefront properties as they help prevent sediments, pesticides, and large amounts of phosphorus and nitrogen from entering the lake. Ideally, the vegetation should cover at least 50-75% of your property's lake frontage. By restoring the shoreline with native plants, you restore the ecological functions of the lakeshore.

Benefits of vegetative buffers include:

- stabilized soil and reduced erosion;
- filtration of pollutants and sediments;
- absorption of nutrients;
- privacy from lake users;
- save time and money in maintenance;
- food and shelter for local wildlife;
- deterrence of nuisance species.

Got geese?

Canada geese love short, tender grass and avoid tall grass where predators can hide. A shoreline buffer will send the geese packing.



A naturally landscaped yard adds value to your property and can also benefit Lake Hopatcong's water quality and overall health.



USE THE NATURAL LANDSCAPE AS A GUIDE



Lucky enough to have a natural vegetative buffer along your shoreline? Leave it! Mother Nature knows best. →



A canopy of trees above, shrubs and flowers in the middle, and groundcover below provides multiple layers to intercept rain. If you don't have room for trees on your property, use large shrubs, flowers, and groundcover to create your layers instead. ***You can protect the lake's water quality and still have an amazing view at the same time!***



← Not so lucky? That's ok. You can plant a new vegetative buffer along your shoreline, just as these homeowners did. It will mature in no time and will protect your investment in your property for years to come.

What should I plant?

The best vegetation strategy for buffers includes a mix of aquatic grasses, sedges, rushes, and other beneficial flowering species, along with plants growing on shore.

Right plant. Right place.

Lake Hopatcong is zone 6a of the plant hardiness zones, so be sure any plants you pick are meant for zone 6a or colder to play it safe. You will also need to consider the soil type, sunlight, drainage and slope on your site.



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CAPTURE & INFILTRATE

Plant a Rain Garden



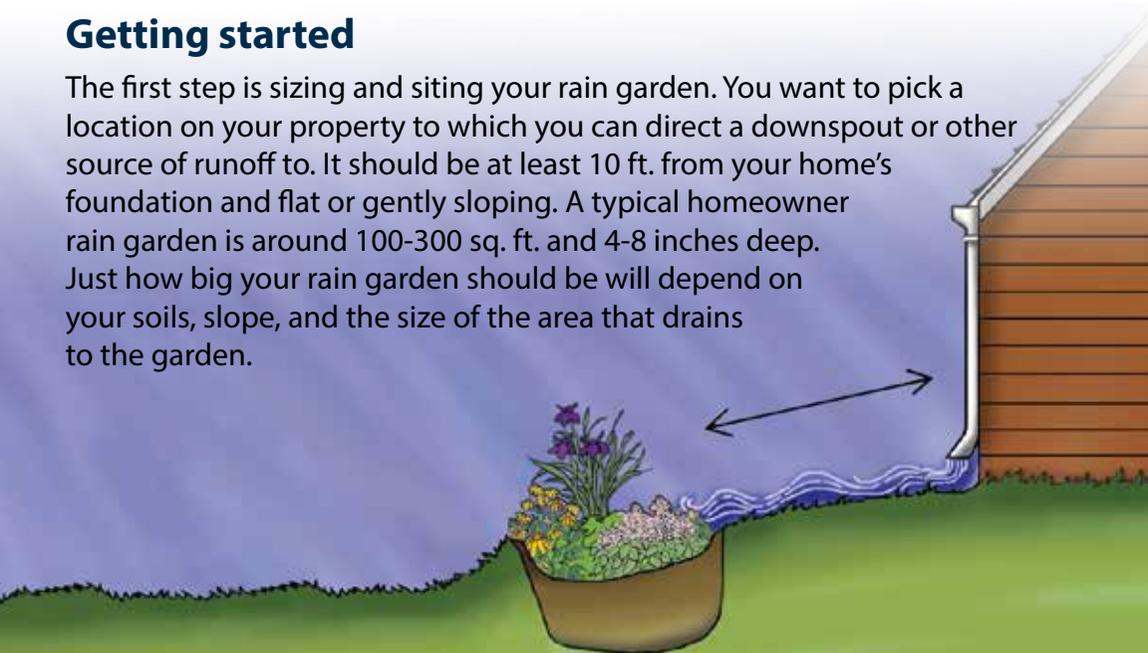
A rain garden is a vegetated depression that collects rainwater. This allows the rain that falls on rooftops, driveways, and patios to infiltrate into the ground instead of becoming stormwater runoff.

Rain gardens are beneficial because they:

- help keep water clean by filtering stormwater runoff before it enters local waterways;
- help alleviate problems with flooding and drainage;
- enhance the beauty of yards and communities;
- provide habitat and food for wildlife like birds and butterflies;
- reduce the need for expensive stormwater treatment structures in your community.

Getting started

The first step is sizing and siting your rain garden. You want to pick a location on your property to which you can direct a downspout or other source of runoff to. It should be at least 10 ft. from your home's foundation and flat or gently sloping. A typical homeowner rain garden is around 100-300 sq. ft. and 4-8 inches deep. Just how big your rain garden should be will depend on your soils, slope, and the size of the area that drains to the garden.



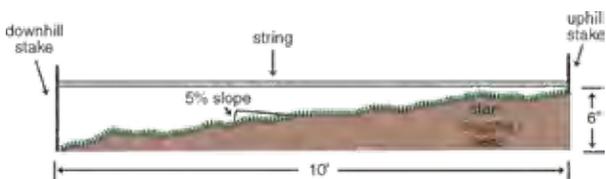


Oxeye sunflower

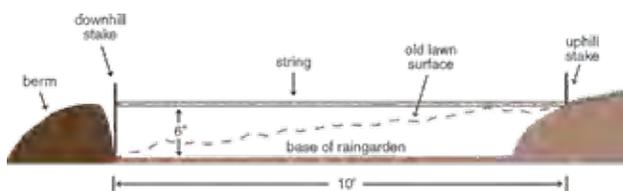
Time to dig!

After you have planned out your garden size, shape, and location, it is time to start digging. You can use a hose, string, or spray paint to outline the shape of your garden to help keep you digging in the right place. As you dig, use the soil you are removing to create the berm around three sides of your garden to hold the water in. The fourth side isn't built up because that is where the water flows in. You want the bottom of your garden to be level. You can 'eyeball' it - or get out a level to be sure.

Where to dig



Where to put the soil you've dug



Planting the garden

Since a rain garden is flooded periodically, you need plants that can live in both wet and dry conditions. You should also consider if your site is sunny or shady when selecting plants. You might want a variety of height, color, and blooming period as well. This way your rain garden is not only stopping stormwater runoff but is also providing a beautiful landscape to enjoy all summer long.

Native plants for rain gardens

Cinnamon fern

Winterberry

Broomsedge

Spicebush

Hackberry

Saltmarsh mallow

Buttonbush

Swamp milkweed

Silky dogwood

Southern arrowwood

Red elderberry

Highbush blueberry

Tussock cotton grass

Sweet pepperbush

***Plant a rain garden
and you'll be excited
when it rains!***



Swamp milkweed

14

CAPTURE & INFILTRATE

Go Native!



What is a native plant?

A native plant is one that occurred naturally and has existed for many years in an area.



Japanese knotweed along roadway

What is an invasive plant?

An invasive plant is a non-native plant that grows out of control, out-competing native plants for nutrients, sunlight, and space. Invasives cause harm to the environment and the economy. Some can even be dangerous for our health.

Invaders for Sale

You may already know about common roadside invaders, such as Japanese knotweed, but it may surprise you that many popular plants still sold at garden and nursery centers are also invasive. Here is a list of plants you should avoid buying. The worst are bolded.



Burning bush is very popular for its red fall color, but it is extremely invasive and has been banned in some states.

Autumn olive *Elaeagnus umbellata*
Black locust *Robinia pseudoacacia*
 Border privet *Ligustrum obtusifolium*
Burning bush *Euonymus alatus*
 Callery (Bradford) pear *Pyrus calleryana*
Common buckthorn *Rhamnus cathartica*
 Periwinkle *Vinca minor*
Creeping jenny *Lysimachia nummularia*
 Crown vetch *Coronilla varia*
 English ivy *Hedera helix*
 Garden loosestrife *Lysimachia vulgaris*

Goutweed *Aegopodium podagraria*
 Cup plant *Silphium perfoliatum*
Japanese barberry *Berberis thunbergii*
Multiflora rose *Rosa multiflora*
Norway maple *Acer platanoides*
Oriental bittersweet *Celastrus orbiculatus*
Porcelainberry *Ampelopsis brevipedunculata*
Purple loosestrife *Lythrum salicaria*
Shrubby honeysuckles *Lonicera spp.*
 Wintercreeper *Euonymus fortunei*
Yellow iris *Iris pseudacorus*

Why go native?

Native plants are low maintenance, drought-tolerant, and environmentally friendly. With all the benefits native plants provide, you can feel good about enjoying the beautiful landscape all around you.



Wild blue phlox

Native plant benefits

- They help protect New Jersey's biodiversity by providing food and habitat for birds, butterflies, and other wildlife.
- They save you time and money. Natives have evolved in our environment over many years and are already adapted to survive here. They are low maintenance and don't need lots of fertilizer, pesticides, or watering.
- They help reduce stormwater runoff. The deep roots of natives absorb and filter runoff more effectively than the short roots of many turf grasses and other ornamental plants.



The extensive roots of native plants improve the ability of the soil to infiltrate water and to resist erosion. In fact, native plants often have more biomass below the surface than above. For example, little bluestem, a great bunch grass for the garden, only grows 2-3' tall, but can have roots up to 8 feet deep.

The shallow roots of turf grass are better than bare soil, but pale in comparison to native plants. Kentucky bluegrass is shown in the drawing above.

So many choices...

Native plants come in just about every size, shape, and color. You can design a native plant garden for interest in all 4 seasons, or a theme garden based on form or function. Here are just a few ideas to get you started.



Blue vervain

Butterflies

Milkweeds
Joe-pye weeds
Asters
New York ironweed
Woodland sunflower
Goldenrods

Hummingbirds

Cardinal flower
Wild columbine
Fireweed
Bee balm
Beardtongue
Trumpet honeysuckle

Wild Birds

Dogwoods
Viburnums
Bayberry
Serviceberry
Chokeberry
Cutleaf coneflower

Deer Resistant

Blue vervain ☞ Foamflower ☞ Culvers root
Sensitive fern ☞ Bergamot ☞ Bugbane

Salt Tolerant

Winterberry ☞ Summersweet ☞ Arrowwood
Elderberry ☞ Spicebush ☞ Witch hazel

The Lake Hopatcong Foundation holds a native plant sale each year in May. Experts are on hand to help you choose native plants that are right for your yard or garden!

15 Support the Lake Hopatcong Foundation

Established in 2012, the Lake Hopatcong Foundation is a non-profit 501(c)3 organization with a mission of protecting the lake environment and enhancing the lake experience, bringing together public and private resources to encourage a culture of sustainability and stewardship on and around New Jersey's largest lake, for this and future generations.

Our dedicated staff and local volunteers are devoted to fostering a vibrant and healthy Lake Hopatcong and its surrounding community. We do this through a variety of programs and initiatives in the following areas:



Support the Lake Hopatcong Foundation today!
lakehopatcongfoundation.org



This Lake-Friendly Living Guide is meant to give you an idea of some of the simple things you can do on your own property to help protect the water quality of Lake Hopatcong. Take a look at the ideas inside. They are easy to do, but have a big and lasting impact on water quality. You don't have to do them all. Choose what works for you and your property!



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