

**Testimony in SUPPORT of LD 1550, Resolve, Directing the Department of Health and Human Services to Amend Its Rules to Protect Water Quality by Reducing Nutrient Pollution from Septic System Pollution**

*Submitted to the Health and Human Services Committee*

*April 22, 2025*



Good afternoon, Chair Ingwersen, Chair Meyer, and distinguished members of the Health and Human Services Committee.

My name is Susan Gallo, and I am the Executive Director of Maine Lakes. Our membership organization includes more than 6,000 supporters, followers, and volunteers, including thousands of members who belong to our 95 member Lake Associations. We are dedicated to our mission of promoting, protecting, and enhancing lake water quality and habitat, and of preserving the ecological, economic, recreational, and aesthetic benefits of Maine's lakes for everyone.

Thank you for the opportunity to appear before you today to speak in support of LD 1550.

**LD 1550 will improve design standards for septic systems in specific sandy soil types in the shoreland zone, protecting Maine's lakes and ponds, and the wildlife and people who use them, by ensuring that future septic systems are constructed to reduce both pathogen and nutrient flow into lake water.**

Excess nutrients in Maine's freshwater systems, especially phosphorus, contribute to declines in water quality and clarity, degradation of lake habitat for fish and wildlife, and excessive algae growth or "blooms." Algal blooms turn lake water thick, green, and smelly. They are exacerbated by warmer water and air temperatures, and are detrimental to all lake users, including local lake communities, wildlife habitat, municipal economies, the outdoor recreation and boating industries, and both anglers and hunters.

If those algal blooms are composed of cyanobacteria (formerly called blue-green algae), they can emit cyanotoxins that can cause serious illness or death in pets, livestock and wildlife. These toxins can also make people sick, and in sensitive individuals also cause a red, raised rash or skin, ear and eye irritation.

Maine Lakes' flagship program, LakeSmart, works steadfastly with an incredible team of staff, volunteers, and shoreland homeowners to reduce phosphorus pollution in Maine's lakes. Our staff and volunteer teams evaluate properties for areas of overland erosion, a primary source of excess lake phosphorus. However, the hard work of LakeSmart teams and the hundreds of homeowners who invest time and money each year to reduce sources of erosion can be undermined by other sources of phosphorus pollution. Some, like phosphorus-rich soils on the lake bottom, cannot be easily managed. But others, like "short-circuiting" septic systems in sandy and gravelly soils, can

be managed to reduce nutrient pollution and better protect lake health. **The goal of LD 1550 is to manage this source of nutrient pollution into our water systems.**

Septic system design and regulation focus on the protection of public health by eliminating the pathogens from human wastewater that can make people sick. This is generally accomplished by getting the wastewater quickly infiltrated into the ground and with setback distances from drinking water wells and waterbodies. Pathogens live for a relatively short amount of time in a septic system environment, so this general design that allows for infiltration of toxins through the soils can adequately protect human health. But certain soil types that allow for the quick passage of wastewater “short-circuit” the intended design, allowing untreated wastewater to reach ground and lake water.

**Septic system design and regulations generally do not consider the fate of nutrients in domestic wastewater.** Unlike pathogens, nutrients do not die. Fortunately, in most soil types, septic systems offer some nutrient attenuation. However, in certain types of sand and gravel soils in the shoreland zone, septic systems will “short-circuit”, allowing phosphorus pollution to flow back into groundwater and impact surface waterbodies.

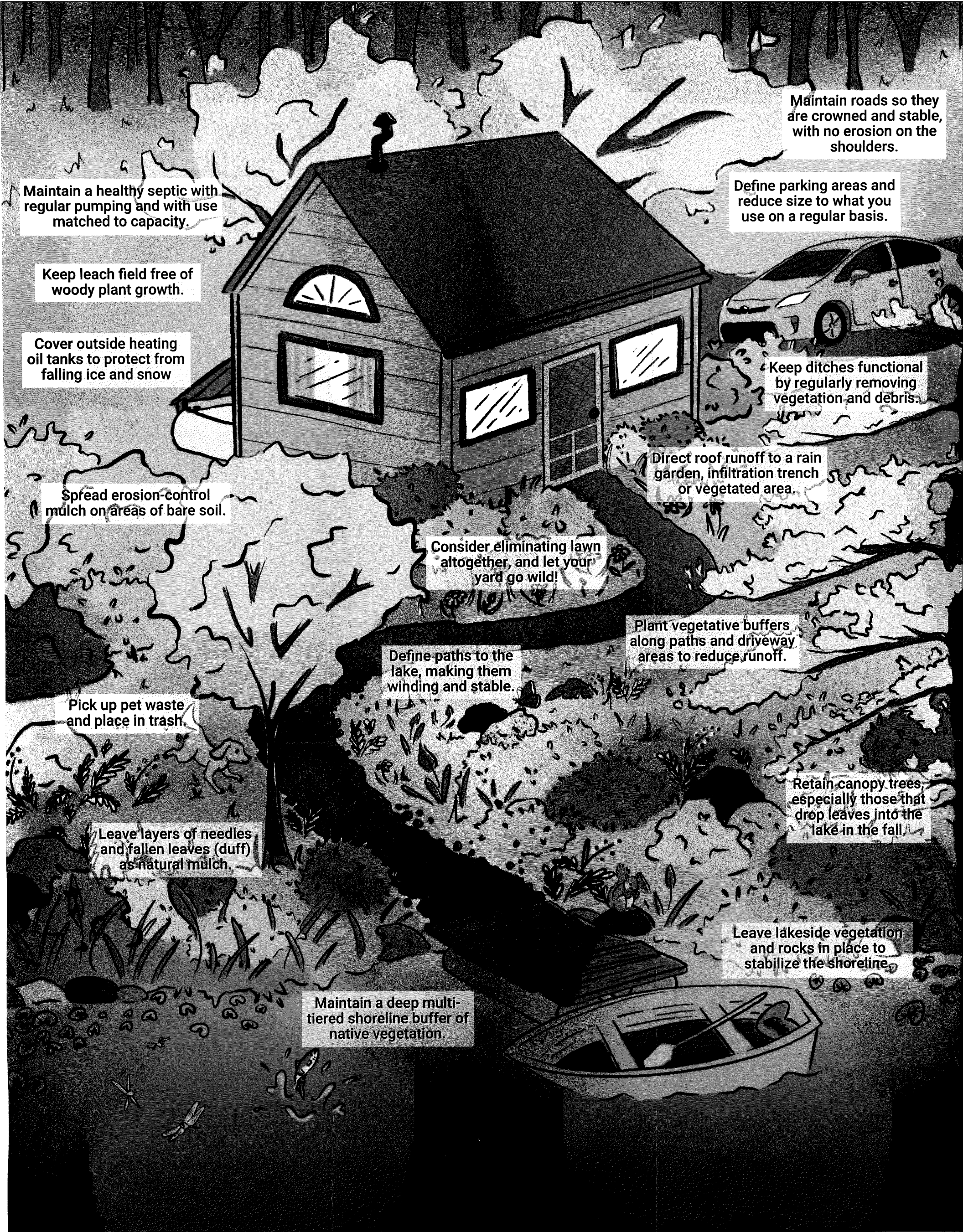
As development pressure continues to intensify in Maine’s lake communities, and as climate change creates better conditions for algae growth, the impact from septic “short-circuits” will only grow, contributing to a lake health problem that wreaks havoc on Maine’s lake economy (valued at over \$14.3 billion annually), affects local community budgets, harms the tourism and recreation industries, and places greater risks to public health from harmful algae blooms. Lake Associations around the state are grappling with this issue, fund raising and investing significant time and energy into the issue of septic “short-circuits” they have identified in their communities.

**There are many aspects of lake health that are out of our hands, but managing septic systems is entirely within reach.**

**LD 1550 will direct DHHS to amend septic design standards so that systems installed in sandy soils in the shoreland zone will not be a source of additional pathogens or nutrient pollution into our water systems.**

**I urge you to support LD 1550 and am happy to answer any questions you might have.**





Maintain roads so they are crowned and stable, with no erosion on the shoulders.

Maintain a healthy septic with regular pumping and with use matched to capacity.

Define parking areas and reduce size to what you use on a regular basis.

Keep leach field free of woody plant growth.

Cover outside heating oil tanks to protect from falling ice and snow

Keep ditches functional by regularly removing vegetation and debris.

Spread erosion-control mulch on areas of bare soil.

Direct roof runoff to a rain garden, infiltration trench or vegetated area.

Consider eliminating lawn altogether, and let your yard go wild!

Plant vegetative buffers along paths and driveway areas to reduce runoff.

Define paths to the lake, making them winding and stable.

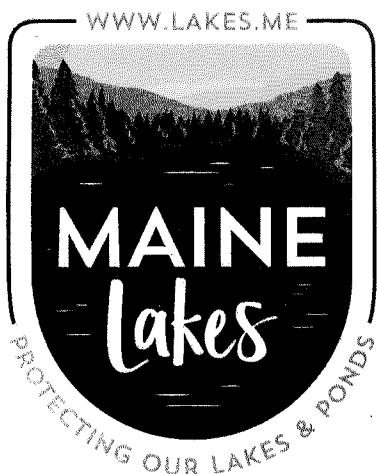
Pick up pet waste and place in trash.

Retain canopy trees, especially those that drop leaves into the lake in the fall.

Leave layers of needles and fallen leaves (duff) as natural mulch.

Leave lakeside vegetation and rocks in place to stabilize the shoreline.

Maintain a deep multi-tiered shoreline buffer of native vegetation.



## YOU CAN CREATE A LakeSmart PROPERTY!

This typical older camp, sited closer to the lake than current regulations allow, protects the lake when all the standards listed above are met.

Need more information? Visit [www.lakesmart.org](http://www.lakesmart.org) to learn more about the standards described above, and how you can be part of the LakeSmart solution.



WHY IS YOUR LAKE AT RISK?

Phosphorus is a naturally occurring element that feeds lake algae, a healthy part of any lake ecosystem. But too much phosphorus can put a lake out of balance, feeding massive algae blooms that smell terrible, turn water green, degrade wildlife habitat, and potentially harm human and pet health.

You can find phosphorus in lots of places, including pet waste, fertilizers, household cleaners and motor oil, none of which should ever find their way into a lake. But the biggest source of phosphorus is sand and soil that is washed into a lake after a rain event.

Signs of erosion on your property show you that phosphorus has a direct path to your lake. Look around for channels left by rain after a storm, especially near buildings and parking areas.



Small sources of pollution - a little stormwater runoff, a little pet waste on the lawn, a minor application of fertilizer – added together are a big problem. A little pollution from you, your neighbor and others around the lake, year after year, put your lake at big risk!

MORE BUFFER, LESS LAWN

An expansive lawn does not offer the same benefit for infiltrating stormwater as other types of native, deep-rooted vegetation.

Reduce your lawn to the parts you use for recreation, and let the rest go wild. You can supplement the no-mow areas with beautiful native shrubs and flowering plants that are visually appealing, attract pollinators and enhance property value. You can also leave twigs, leaves and pine needles (collectively called “duff”) on the ground to enhance the capacity of your buffer to “slow the flow.”



BIGGER BUFFERS ARE BETTER

Deeper and wider buffers, with more layers of native vegetation, are always better. LakeSmart standards require a minimum of 10’ of buffer depth across a property. Properties with steeper slopes require a deeper buffer to get the same protective benefit, since water flows faster on a slope compared to flatter ground. It takes a deeper buffer to make sure that water has time to slow down and absorb into the ground.

MORE BMPs

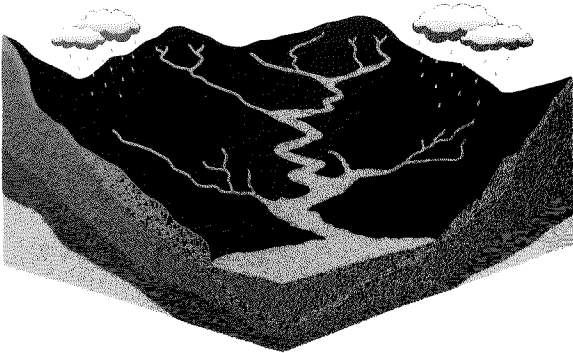
Although vegetative buffers are a requirement for the LakeSmart program, there are many other Best Management Practices (BMPs) landowners can implement on their property to “slow the flow” during a rain event, including:

- ✓ **Rain Gardens:** Designed to collect and hold water so that it soaks into the ground.
- ✓ **Erosion-control Mulch:** Special mulch to cover bare soil that stays in place during a rain event.
- ✓ **Infiltration Trenches:** Built along house driplines to absorb water off the roof.
- ✓ **Infiltration Steps:** Steps built with gravel fill so that water soaks into the ground.
- ✓ **Rubber Razors:** Strips of rubber that go across paths or roads to divert rain into rain gardens or other vegetated areas.

FMI on BMPs, visit [lakesmart.org/BMPs](http://lakesmart.org/BMPs)

BEYOND SHOREFRONTS

Actions far beyond shoreline properties affect lake water quality. Lakes drain the watersheds around them, and the health of a lake is directly tied to its watershed. Forest and farm management practices that reduce phosphorus and erosion, and development that minimizes impervious surfaces and maximizes vegetation, will have far-reaching benefits for lakes at the bottom of the watershed.



Water flows downhill so land-use practices throughout the watershed will affect water quality in a lake.

Being Lakesmart preserves water quality and property values while protecting wildlife habitat and the recreational values of Maine lakes.

Look inside for tips and the Lakesmart poster.



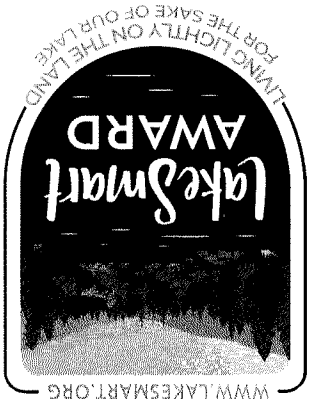
If you will, then Lakesmart is for you!

Do you appreciate Maine's clear, clean lakes? What does the beautiful panorama of your lake, the song of a loon calling in the evening, or a boundless summer day spent swimming, fishing, or boating mean to you? Will you help protect your lake so your children and grandchildren will experience the clean, clear water you enjoy today?

Be Lakesmart  
FOR THE SAKE OF YOUR LAKE

FMI:  
Contact Maine Lakes today!  
207-495-2301 or [info@lakes.me](mailto:info@lakes.me)  
Learn more at [www.lakesmart.org](http://www.lakesmart.org)

Whether or not your property merits a Lakesmart award yet, you'll get written recommendations about what Best Management Practices (BMPs) you may consider to increase your property's ability to protect lake water quality. Lakesmart evaluations are free, voluntary, non-regulatory and confidential. You are under no obligation to undertake Lakesmart suggestions. However, we hope you'll decide to find ways to capture the rain, "slow the flow", and reduce lake pollutants. You'll protect water quality, property value and wildlife habitat for many generations to come.



BECOME  
LAKESMART

Check out Lakesmart [Start at lakesmart.org](http://lakesmart.org) to get started on your own, or contact your local lake association to schedule a Lakesmart visit by a volunteer evaluator. If your property is protecting water quality, it might merit Lakesmart award signs for display, helping spread the word to neighbors and friends that you are committed to keeping your lake healthy.

BEEFY BUFFERS

Lakesmart is about taking simple actions to protect your lake. There are many Best Management Practices (BMPs) you can put in place that will "slow the flow" and give rainwater a chance to soak into the ground (infiltrate) before reaching the lake. Some BMPs can be done in an afternoon, some might take years, but all are investments in long-term lake health.

While there are many BMPs that will help reduce your property's contributions of phosphorus into the lake, planting deep swaths of native vegetation along the shoreline, beside paths and on the downhill side of driveways and parking areas is one of the easiest ways to infiltrate runoff and "slow the flow."

Buffers with many tiers of vegetation (duff (needles and leaves), ground cover, shrubs, mid-story trees and canopy trees) provide the most protection, and a buffer can beautifully frame your lake view. The multiple tiers of vegetation intercept more rain, and the deep roots of native plants help absorb rainwater and extract phosphorus.

