## Watershed Wise Property Owner Self-Assessment



The purpose of this assessment is to help you determine how watershed wise you are on your property and through your actions. When you are ready to begin the process of becoming a Watershed Wise Partner with LSPA then please mail or drop off this completed assessment to LSPA. Once received, we will contact you to schedule an onsite evaluation of your property in the following areas: **1**) driveway and parking, **2**) buildings and structures, **3**) recreational spaces and **4**) waterfront (if applicable). Upon completion, LSPA will either award you partnership in the program or provide a report that offers suggestions on ways to make your property watershed friendly. LSPA will offer all awardees a sign they can erect on their properties and recognize them in our newsletter and local publication(s). Thank you in advance for your participation!

CONTACT INFORMATION			
Please complete so we can contact you to schedule a property evaluation.			
Property Owner Name(s):			
Street Address:	Т	own:	
Phone Number:	_Email:		
Mailing Address (if different from above)			

Responses are required on all questions unless stated otherwise.

### **Self-Assessment Areas:**

- I. **Driveway & Parking:** These areas, whether paved or not, shed stormwater and surface pollutants that can lead to downstream erosion and water pollution.
  - 1. Are there any signs of erosion on or along the sides of your driveway and/or

parking area(s)?	🗆 YES	🗆 NO
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Signs of erosion include scouring and channeling of soils created by stormwater runoff. Eroded soils contain nutrients that when washed into a waterway, can stimulate algal growth.

2. Is there at least a 50-foot (75-foot on land with steep slopes) conservation buffer between any streams, wetlands, lakes or ponds and your driveway (if not applicable leave blank)? 
VES NO

A conservation buffer consisting of trees, shrubs, groundcovers and intact duff layer, slows down stormwater runoff and helps filter pollutants before they reach the water.

Sand and debris from road erosion and winter applications on your driveway can be washed into streams and wetlands degrading water quality and harming aquatic species.

4. Do you use chloride-based products for de-icing (e.g. road salt) and/or dust control (e.g. calcium chloride) on your driveway (this includes personal use or applications by a contractor)?

Snowmelt and stormwater can wash away de-icing and dust control products applied to driveway and walkway surfaces into nearby waterways. Chloride is harmful to aquatic species and degrades water quality. Safer alternatives and methods that can limit or eliminate the use of chloride is described in LSPA's pamphlet "Ice Management Choices for Homeowners" found on LSPA's online resource library at <a href="https://www.lakesunapee.org/library">https://www.lakesunapee.org/library</a>.

5. Do you sweep up excess sand and/or salt left on your driveway and walkways after storm events and/or at seasons end (leave blank if no de-icer products used)? □ YES □ NO

Salt and sand left on your driveway can be washed into the nearest waterbody during spring snowmelt and storm events. Leftover sand can be reused or disposed of.

6. If a contractor maintains your driveway/parking area(s) during the wintertime, is he/she Green SnowPro certified (leave blank if not applicable)? □ YES □ NO

Green SnowPro certified contractors are trained in snow management and salt reduction practices using the most up to date technologies to ensure a high level of service and safety to their customers. These practices help reduce the amount of harmful de-icer products that get into our lakes, ponds and streams. For more information please visit the UNH Technology Transfer Center at t2.unh.edu/green-snowpro-saltapplicator-certification-training.

II. Buildings & Structures: Structures displace natural vegetation and shed rainfall which needs to be infiltrated into the ground and not diverted downstream where it can cause erosion. Onsite septic systems servicing living quarters need to be maintained just like above ground property or they will fail, polluting groundwater, lakes, ponds & streams.

#### Septic Systems

- 7. Does your home have an onsite wastewater treatment system? If you are on public sewer, indicate "No" and skip to question 14. □ YES □ NO
- 8. Do you have the septic tank pumped every 3 years or as recommended by a septic service provider?

 $\Box$  YES  $\Box$  NO

*Regular maintenance of your septic system is critical to keep it functioning properly and increases the lifespan of your system. For a list of septic system providers visit <u>www.lakesunapee.org/septic-systems.</u>* 

9. Are you maintaining the surface of your leach field keeping it free of trees, shrubs and other woody vegetation? 
YES NO

The roots of trees and shrubs can interfere with the pipes of the septic system which shortens the lifespan of the system and can lead to a failure.

10. If your system is 20 years or older, have you had it fully inspected (this includes checking the tank, inlet & outlet baffles, distribution box (if applicable) and leach field? 
YES NO

For the modest cost of an inspection, and following the recommended maintenance by an inspector, you could gain years of service from your system avoiding sudden costly repairs. A properly maintained system does not contaminate groundwater and pollute downstream waterways. For a list of septic system evaluators, please visit <u>www.lakesunapee.org/septic-systems</u>.

- 11. Do you use a garbage disposal or dump coffee grounds down the sink? □ YES □ NO
   Too much food or organic waste overwhelms & clogs the septic system which can shorten its life.
- 12. Do you use a water softener? (if no skip to question 14)  $\Box$  YES  $\Box$  NO
- 13. Do you use a salt free water softener (such as Birm or Greensand based)?  $\Box$  YES  $\Box$  NO

Salt based water softeners produce brine as a waste product that is flushed into a septic system or dry well. The brine contaminates area wells and groundwater and can impact nearby waterways by increasing chloride and sodium levels.

14. Are your household cleaning products phosphate-free (dishwashing liquid, surface cleaners, laundry detergent, etc.)? 
YES NO

Make sure to check the labels carefully when shopping for cleaning products. Additional phosphorus that enters waterbodies can result in increased algal blooms and more plant growth.

15. Do you pour cooking oils or grease down the drain?  $\Box$  YES  $\Box$  NO

*Oils and grease can clog pipes and also harm the microbes that help private and public wastewater treatment systems operate properly. Oil and grease should be collected in jars and thrown away.* 

16. Do you pour unused or expired medicines down the drain or toilet?  $\Box$  YES  $\Box$  NO

Wastewater systems are not designed to treat medications which can contaminate ground and surface waters. Most towns in NH have "Drug Take Back Days" where you can safely dispose of over-the-counter and prescribed medications (liquid, pill or capsule form).

17. Do you use toilet deodorizers or flush any unused chemicals down the drain?  $\Box$  YES  $\Box$  NO

Chemicals poured down the drain or toilet can kill beneficial bacteria that a wastewater system needs to function properly. The chemically derived perfumes and dyes used in deodorizers and in personal care products can contaminate ground and surface waters.

18. Do you wash paint brushes and rollers in the sink? 
YES NO

Most modern water-based paints contain harmful chemicals that should not go down the drain. Brushes and rollers should be cleaned in a container. Paint wastewater should be left to evaporate and the residue thrown away.

#### **Roof Drainage or Roof Runoff**

19. Are there any signs of erosion or scouring from roof runoff or at the end of a downspout(s) around the perimeter of building(s) on your property? □ YES □ NO

Roof runoff can erode soils creating channels that carry material and pollutants downslope to your neighbor's property or nearby waterway.

20. Are you using "soak-up-the-rain" practices to capture and infiltrate roof runoff such as rain gardens, drywells, dripline infiltration trenches, or rain barrels? □ YES □ NO

A rain garden is designed to retain and infiltrate rainfall and stormwater runoff along with providing habitat for birds and pollinating insects. All rainwater infiltration practices such as rain gardens, drywells and trenches require routine maintenance to function correctly.

- III. Recreational Spaces: This zone includes lawns, footpaths and other areas cleared of natural vegetation and used for recreational purposes. These spaces can contribute to water pollution, depending on how these spaces are used and maintained. In addition, lawn areas near waterways serve as safe grazing areas for some waterfowl such as geese that leave nutrient laden feces behind.
  - 21. Do you maintain a lawn on your property? (If no, skip to question 26). 

    YES NO

Large lawn areas displace natural wildlife habitat (forest & meadows) and require more maintenance. Heavily used lawn areas can lead to compacted soils which does not allow stormwater to soak into the ground. This may lead to downstream flooding and erosion.

22. Is the mower deck set to cut only the top 1/3 of the grass blade height (usually around 3")? 
YES NO

*Keeping your grass longer helps to retain more soil moisture, is less stressful for the plant and promotes deeper root growth making it more resilient in drought conditions.* 

23. Do you leave grass clippings on your lawn or compost and reuse them?  $\Box$  YES  $\Box$  NO

Grass clippings make lawns healthier and save you time since you don't have to remove and dispose of the clippings. Organisms in the soil feed on the clippings turning them into free fertilizer.

24. Do you use fertilizer on your lawn? (If no, skip to question 26)  $\Box$  YES A fraction of fertilizers (particularly fast-release chemical fertilizers), even when properly applied to lawns, washes away after a storm event and often ends up in the nearest waterway. Excess nutrients from fertilizer can lead to harmful algal blooms and more plant growth. 25. Did you test your soil before applying fertilizer?  $\Box$  YES Many soils have adequate nutrients already so applying fertilizer or the wrong ratio is a waste of your time and money. 26. Do you use herbicides or pesticides on your lawn and/or gardens?  $\Box$  YES The chemicals in these products are harmful to people, pets and wildlife. Look for safe alternatives or use integrated pest management practices which can minimize the environmental harm and risk. For more information visit <u>www.ipminstitute.org</u>. 27. Are insecticides applied on your property for mosquito and tick control?  $\Box$  YES Again, the chemicals in these products are very harmful to birds, frogs and pollinators critical in our food production. To reduce your environmental impact, wear pants, long sleeves, nets and/or apply repellents to your clothing instead of spraying. 28. Are rodenticides (mice, rat, moles, etc.) used in or around buildings? 
YES 🗆 NO Rodenticides can maim or kill non-targeted wildlife and pets that eat poisoned bait or ingest poisoned rodents such as hawks and foxes. Rodenticides can contaminate ground and surface waters when harmful chemicals get released from animals that die and decompose outside. Consider other non-toxic pest control methods safe for wildlife and water. For more information visit saferodentcontrol.org. 29. Do you remove or rake leaves, pine needles and branch debris from areas other than your lawn, paths or driveways? 🗆 YES 🛛 NO

Unmanicured, untouched natural areas with a healthy duff layer of decomposing leaves, pine needles and other organic debris, help absorb and slow down runoff thereby reducing downstream flooding and erosion. A duff layer provides habitat for wildlife and the decomposing materials enrich soils which serve as a carbon sink.

30. Are there perpetual areas of exposed soil or bare ground on your property due to high traffic or other reasons? □ YES □ NO

Exposed soils can erode and be carried downstream uncovering roots and causing unwanted channels to form. Carefully placed stones or pavers, along with native groundcover, can stop further erosion and is more aesthetically pleasing.

31. Do you regularly clean up pet waste outside your home (leave blank if not applicable)?

 $\Box$  YES  $\Box$  NO

Pet waste contains harmful pathogens and high amounts of nutrients which can be washed into a stream, lake or pond if not disposed of properly. Again, this can lead to harmful algal blooms and plant growth and the pathogens can pose a health risk to those swimming in the water.

#### **IV.** Waterfront (complete this section only if your property borders or contains a lake, pond or stream):

Preserving at least 50 feet (75 feet on land with steep slopes) or greater healthy buffer of native trees, shrubs, undergrowth and duff layer (undisturbed forest floor) is critical in preventing pollutants from reaching streams, lakes, ponds and wetlands. The waterfront buffer is the last defense in stopping migrating pollutants. Disturbing this area greatly increases the impact we have to our waterways.

- 32. Do you have any footpaths leading down to a stream, lake, or pond on your property? If no, skip to question 35. 
  YES NO
- 33. Does stormwater periodically rush down the path carrying soil and debris into a stream or waterbody? □ YES □ NO

A path that meanders and uses water bars, crushed rock or stepping stones helps infiltrate and redirect stormwater away from the stream, lake or pond.

34. Is your path wider than 4 feet?  $\Box$  YES  $\Box$  NO

Wide paths displace critical waterfront vegetated buffer areas that prevent pollutants from getting into a waterway and provide important habitat for wildlife.

35. Is there a dense vegetated buffer consisting of trees, shrubs, groundcovers and intact duff layer along most of the shoreline of streams, lakes or ponds that is at least 50 feet wide (75 feet for steep sloped lands)?

□ YES □ NO

An adequate buffer helps soak up stormwater runoff and catches yard debris before it reaches the stream, lake or pond and protects the soil from erosion (due to wave action & runoff). A wide buffer provides habitat for some wildlife while also dissuading geese from coming onto your property. The wider the buffer the greater the benefit for water quality, especially on a steep slope.

36. Are you experiencing persistent erosion along the shore or streambank due to activities on your landscape or from wave action? (Examples of shoreline erosion are bank slumping, beach erosion, channeling, undercutting of bank material, exposed roots and trees leaning towards the water.)

□ YES □ NO

Long-term erosion can be a result of recreational use, an inadequate vegetated buffer or consistent wave action from excessive boating activity on a lake.

37. If there is a beach on your shoreline, do you periodically replenish the sand via a NHDES

6-year permit (leave blank if not applicable)? YES NO

Sand materials, brought in from an outside source, may contain nutrients leading to unwanted plant & algae growth. Eroding sand from beach areas smothers and covers up habitat for many aquatic animal species.

38. Do you remove aquatic plant species along your shoreline?  $\Box$  YES  $\Box$  NO

*Removal of aquatic vegetation, either by hand-pulling, mechanical or chemical means, is a violation of state law without a permit and can disturb vital wildlife habitat.* 

39. Do you feed ducks or other waterfowl?  $\Box$  YES  $\Box$  NO

It is not a good idea to feed ducks on your property because they will habituate to people and might become nuisance animals. Additionally, their feces contain a lot of phosphorus which is washed into the lake and can lead to more plant growth and harmful algal blooms.

40. Are geese able to access your lawn and graze on the grass?  $\Box$  YES  $\Box$  NO

Feces from geese contain a lot of nutrients that get washed into the lake during the next storm which stimulates plant and algae growth. Wide (50+ feet), dense vegetated shorefront buffers with few breaks discourage geese from accessing your property.

41. Do you or your property manager dump yard waste (leaves, pine needles, twigs, etc...) into the lake (yes, this does occur and is a problem)? □ YES □ NO

Decomposing yard waste dumped into the lake reduces the amount of oxygen available for aquatic organisms and releases nutrients into the water. This can lead to increased plant and algae growth.

42. Are there any drainage pipes from your property dumping directly into a stream, lake or pond? □ YES □ NO

Sump pumps, foundation drains, culverts and stormwater pipes should be directed away from waterways and into low-lying natural vegetated areas to replenish groundwater supplies, prevent streambank erosion and trap debris and pollutants before reaching waterways.

43. Do you clean your boat and/or dock structure(s) with soap or chemical cleaners in or near a lake, pond or stream?

 $\Box$  YES  $\Box$  NO

Cleaning products degrade water quality and are harmful to wildlife. Ideally, boats should only be washed in the off season away from any waterways. Visit LSPA's online resource library at <u>https://www.lakesunapee.org/library</u> to view the **Lake Friendly Dock Choices** pamphlet that includes cleaning and maintenance tips.

44. Do you flush out bilge water from your boat in or near the water?  $\Box$  YES  $\Box$  NO

Fuel and oil in the bilge water is toxic to aquatic species.

45. Do you paint, stain or treat the wood of your dock in or near the water?  $\Box$  YES  $\Box$  NO

There is no safe way to treat or paint a dock structure while it's in the water. Drips and spills from treating dock structures is toxic to wildlife and pollutes waterbodies. Visit LSPA's online resource library at <a href="https://www.lakesunapee.org/library">https://www.lakesunapee.org/library</a> to view the Lake Friendly Dock Choices pamphlet that includes cleaning and maintenance tips.

46. Do you launch fireworks over the water?  $\Box$  YES  $\Box$  NO

*Fireworks contain metals and other chemicals that can pollute waterbodies. Spent debris either sinks to the bottom or is washed onto shorelines polluting the environment.* 

- **V. Undeveloped Land:** This section is for properties many acres in size and is referring to undeveloped parcels and land adjacent to any structures, driveways, or parking areas that has not been developed.
  - 47. Has the undeveloped land on your property been left largely undisturbed (that is no more than sustainably harvested see <a href="https://forestsociety.org/cutting-trees-conservation-storymap">https://forestsociety.org/cutting-trees-conservation-storymap</a> for more information on this practice)? □ YES □ NO

Heavily or poorly operated logging/timber harvesting operations, mineral extraction and other land disturbance activities can and does lead to the erosion of soils into waterways degrading the water quality of streams, lakes and ponds. It can also damage vital wildlife habitat.

48. Have you considered or put your property into a conservation easement?  $\Box$  YES  $\Box$  NO

A conservation easement is a good way to protect your property by not allowing it to be developed in the future if ownership changes. Conserved land protects wildlife habitat and can reduce potential future impacts to water resources. For more information about conservation easements visit the regional land trust <u>www.ausbonsargent.org</u>, the statewide land trust <u>https://forestsociety.org/area/land-conservation</u>, or <u>www.landtrustalliance.org</u>.

- VI. **Stormwater Runoff:** This section is to identify stormwater that has been intentionally directed onto your property via pipe or channel.
  - 49. Is stormwater runoff being directed through a pipe or channel onto your property from a neighboring property or public road? □ YES □ NO
  - 50. Is the runoff scouring and eroding soils (leave blank if not applicable)?  $\Box$  YES  $\Box$  NO
  - 51. Is there a drainage easement on your property between you and the Town or State (leave blank if not applicable)?

□ YES □ NO

A drainage easement allows the Town or State to maintain any stormwater infrastructure on your property including the removal of built-up sediment.

# Thank you for participating and helping us protect the water quality of our lakes, ponds and streams within the Lake Sunapee Watershed!

Please drop off or mail back your completed survey to:

LSPA - Watershed Wise Program PO Box 683 63 Main Street, Sunapee, NH 03782

LSPA staff will be in touch soon to schedule an on-site evaluation. If you have any questions, please contact LSPA at (603) 763-2210.