

Property Evaluation

Lake Wise Awards Program

The following evaluation and recommendations are based on commonly accepted lakeshore Best Management Practices that promote lake-friendly living. The intent of the Lake Wise Program is to improve or maintain the property for water quality and aquatic habitat by protecting and restoring natural shoreland conditions and by using effective practices that control erosion, treat stormwater runoff, and maintain a working septic system.

This program is not linked to any enforcement action. If you have any questions about the qualifying score, please contact the Department of Environmental Conservation, Watershed Management Division's Lake Wise Program at 802-828-1535 before awarding the Lake Wise sign. Sites awarded the Lake Wise sign represent model, lake-friendly properties.

Lake Name _____ Lake Association _____ Member Yes or No

Evaluator _____

Date _____

Property Owner(s) _____

Year Round Mailing Address _____

Lakeshore Property's Address – Road Name, # _____ Town _____

Telephone Numbers - Home _____ Cell _____

Email Addresses _____

Owned for # of Years _____ Live Year Round or Seasonal _____ Winterized? Yes or No

Permission to post name on web and/or newspaper? _____

Award Signs (select/explain one) Yes, send 1 sign _____ send 2 signs _____

No, gave them 1 _____ gave them 2 _____

Is an Informational Sign posted at a public access area or in town? _____

Lake Wise Award Status	Score	Recognition Status (Yes = pass; or No)
-------------------------------	--------------	---

Section 1 Driveway (10/15 pts to qualify)	_____	_____
---	-------	-------

Section 2 Structure (19/27 pts to qualify)	_____	_____
--	-------	-------

Section 3 Recreation Area (21/30 to qualify)	_____	_____
--	-------	-------

Section 4 Shore (24/34 to qualify)	_____	_____
------------------------------------	-------	-------

Sections 1-4 = LAKE WISE AWARD	<u>YES / NO</u>	
---------------------------------------	------------------------	--

Lake Wise Award for Undeveloped Shore	<u>YES / NO</u>	
--	------------------------	--

Section 5 Undeveloped Shoreland (11/15 to qualify)	_____	_____
--	-------	-------

Lake Wise Award Sign

- must qualify in each section
- minimum 74 pts (106 pts max)

Recognition Certificates

- sent to property owners who pass at least two sections

Please make a copy and send originals with evaluation recommendations to Amy Picotte at: Amy.Picotte@state.vt.us or by mail at: Watershed Management Division, 1 National Life Drive, Main 2, Montpelier, VT 05620-3522

Lake Wise Award Certification

Section 1. Driveway Area

Criteria	Ranking System	Points
The driveway and parking area are defined and minimized	0 = undefined and or excessive 1 = somewhat defined and or excessive 2 = mostly defined, slightly excessive 3 = well defined and minimal in size	
Driveway and parking surfaces are stable with no signs of erosion	0 = significant signs of erosion, rills/gullies (> 10%) 1 = moderate erosion (between 5% and 10% eroding) 2 = minimal erosion (between 1% and 4% eroding) 3 = no erosion	
Shoulders and ditches are stable with no signs or erosion	0 = significant signs of erosion (>10% eroding) 1 = moderate erosion (between 5% and 10% eroding) 2 = minimal erosion (between 1% and 4% eroding) 3 = no erosion	
Stormwater moves as sheet flow over driving surfaces (<i>except when channelized due to water bars or other BMPs designed to move water off road surface</i>)	0 = channelized (erosion channels) 1 = more channelized than sheet flow 2 = mostly sheet flow and/or BMP, some channelized 3 = entirely sheet flow and/or BMPs in place	
Stormwater sheet flow (or from BMP, e.g. waterbar) from road surface is directed to an effective vegetated buffer or other BMP	0 = none 1 = some 2 = most 3 = all	
Total Available Points = 15	(10 points to qualify) Total =	

Recommended Action(s): _____

Section 2. Structures and Septic Systems

Criteria	Ranking System	Points
Roof runoff enters the lake clean by infiltration, runoff through rock lined canal, directed to rain garden, cistern, or stable outlet, and/or enters lake via small gutter	0 1 2 3 none some most all roof runoff enters lake clean	
<i>(Do you have a pet?)</i> Pet waste is not a threat to water quality	0 = much waste evidence 1 = some waste evidence 2 = no waste evidence 3 = no pets	
Septic system is located away from surface water	0 = system within 15 feet; 1 = system between 15-25 feet 2 = system between 25-45 feet 3 = 50 feet or more	
<i>(What is the age of your septic system?)</i> Septic system is in good condition	0 = Significant evidence of failing septic system 1 = system installed pre 2007, but no signs of failure 2 = no evidence of malfunction, has permit 3 = no evidence of malfunction, has permit, design, and has system regularly maintained	
Septic tank is regularly pumped	0 = never or more than 10 years 1 = every 6-10 years 2 = every 4-5 years 3 = every 2-3 years or checked annually	
Septic system's leachfield is free of woody vegetation so system is not threatened by large or too many roots	0 = a lot of vegetation within 10' of leachfield 1 = some vegetation within 10' of leachfield 2 = little vegetation within 10' of leachfield 3 = free of woody vegetation (unless dripline)	
Septic system age	0 = >30 years old 1 = 20-30 years old 2 = 10-20 years old 3 = <10 years old	
Home heating oil tank or exterior toxic chemical storage (like gas, pesticide, etc.) does not pose a threat to the lake	0 = exterior tank or toxic chemical container is leaking or rusty or not covered and where snow/ice cascading off roof would hit it 1 = exterior tank not covered, but not located where it could be hit by cascading ice 2 = exterior tank has valve cover 3 = exterior tank is completely covered or there is no exterior tank or toxic chemicals	
Decks, stairs, patios, house, and other impervious structures are less than 20% of the entire property	0 = >30% 1 = 25- 30% 2 = 20- 25% 3 = <20%	
Total Available Points = 27	(19 points to qualify) Total =	

Recommended Action(s): _____

Section 3. Recreation Area (managed areas around the home)

Criteria	Ranking System	Points
Soil erosion is not occurring on site	0 = significant (> 10% eroding) 1 = moderate (between 5% and 10% eroding) 2 = minimal (between 1% and 4% eroding) 3 = no erosion problems	
Stormwater flow goes to an effective vegetated buffer or other BMP	0 = none 1 = some 2 = most 3 = all	
<i>Please tell me how you control pests?</i> Use of pesticides and herbicides are omitted or minimized. (Pests are spot treated as needed).	0 = never 1 = sometimes 2 = mostly 3 = always	
Lawn area is minimized	0 = excessive 1 = moderate 2 = minimized 3 = no lawn	
<i>Do you use fertilizer on your yard?</i> Use of fertilizer is only used regularly if based on soil testing and minimal slope.	0 = areas fertilized annually 1 = areas fertilized very seldomly 2 = areas fertilized based on soil test and minimal slope, and/or to re-establish native vegetation 3 = fertilizer is never used	
Duff layer is maintained wherever possible (duff layer is thick and deep; mulch is a secondary solution).	0 = none 1 = some duff and or mulch 2 = most areas with duff and or mulch 3 = all areas with duff (except over leach field)	
Natural uneven topography is maintained, restored or enhanced	0 = none 1 = some 2 = most 3 = all	
Gardens or cultivated areas are mulched and planted with noninvasive annuals or perennials with so signs of runoff.	0 = none 1 = some 2 = most 3 = all mulched or no cultivated areas	
Recreation areas (pathways, lawns, hammock areas) are defined and limited	0 = none 1 = somewhat 2 = mostly 3 = all	
Paths are limited, defined, curved and do not convey runoff directly into lake (full points if no paths).	0 = none 1 = somewhat 2 = mostly 3 = all	
Total Available Points = <u>30</u>	(21 points to qualify) Total =	

Recommended Action(s): _____

Lake Wise Award Certification For Model Shoreland Practices and Outstanding Lake Stewardship

Section 4. Shorefront and Lake Access (covering a minimum of 15 foot width of shore)

Criteria	Ranking System	Points								
Vegetated area is properly sited along shoreline including drainage ditches, streams, and wetlands (there can be up to an eight foot clearing for access to the lake, for every 100 feet of shore)	0 none 1 some 2 most 3 all									
Shoreland vegetation contains five tiers: canopy, shrub, understory, ground cover, and duff that are effective in filtering runoff (*see back side) sections <table border="1" data-bbox="126 506 646 573"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table>									0 = no tiers effective 1 = 1 tier effective 2 = 2 tiers effective 3 = 3 tiers effective 4 = 4 tiers effective 5 = 5 tiers effective or all possible tiers as occur naturally	
Shoreland vegetation is composed of native or native friendly species	0 = mostly invasive plants 1 = partially invasives 2= mostly native friendly and native 3= all native plants									
Shorelands are receiving sheet flow (over surface), not channelized, concentrated flows	0 = all flow concentrated 1 = most flow concentrated 2= most flow is sheet 3= all flow is sheet									
Shoreland vegetation is significantly wide to filter stormwater effectively and protect aquatic habitat. (The steeper the slope and the larger the area draining to the vegetation, then the wider the vegetation needs to be. The widths given assume a relatively flat area.) sections <table border="1" data-bbox="126 1031 646 1098"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table>									0 = < 15 feet in width 1 = 15 - 20 feet 2 = 21- 30 feet 3 = 31-40 feet 4 = 41- 50 feet 5 = > 50 feet in width <i>(if a shoreland bill passes, then developed lots after 2014 must meet a minimum of a 100 foot vegetated shoreland standard to earn 5 pts)</i>	
Duff layer is maintained wherever possible (duff layer is thick and deep; mulch is a secondary solution); and there's no mowing in woodlands. sections <table border="1" data-bbox="126 1257 646 1325"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table>									0 = none 1 = some duff and/or mulch 2 = most areas with duff and/or mulch 3 = all area with duff	
Shoreline is stable (rip rap and concrete walls may be considered depending on their condition, slope and height) sections <table border="1" data-bbox="126 1484 646 1551"> <tr> <td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td> </tr> </table>									0 = mostly unstable 1 = moderately unstable 2= mostly stable 3= totally stable	
Shoreline is natural and shallow water area is not "cleaned up." (If riprap or concrete is used, and it is vegetated and limited in size or appropriate to location as a BMP, then it may be counted)	0 = < 25% "unmanaged" (natural condition) 1 = 26-50% "unmanaged" 2 = 51%-89% "unmanaged" 3 = > 90% "unmanaged"									
Pathway and dock are designed to compliment vegetated area (for example a meandering path slows water runoff compared to a straight path)	0 = effectiveness of vegetation is compromised 1 = some vegetation still functioning 2 = most vegetation still functioning 3 = pathway and dock design compliment vegetation									
Beach or lake access (including to dock) is stable and designed to prevent runoff	0 no 1 somewhat 2 mostly 3 yes									
Total Available Points = 34	(24 points to qualify) Total =									

Shorefront and Lake Access Worksheet

Dividing the Shore into Equal Sections

The shorefront assessment may cover up to 100 feet back from the shore, depending on the size of the lot, and may stretch through varying landscaping, such as natural vegetation, lawn down to lake, a seawall, a road along shore, or a garden, etc.,. **When the shorefront consists of several land uses, then divide the shore into equal sections and evaluate each section.** Average the sections to calculate the final assessment score. Use this grid to divide the shore into sections if need be.

sections						
<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> <td style="width: 20%;"></td> </tr> </table>						

For Example:

Question two of the assessment asks for a rating of shoreland vegetation - *shoreland vegetation contains 5 tiers: canopy, shrub, understory, ground cover, and duff that are effective in filtering runoff*

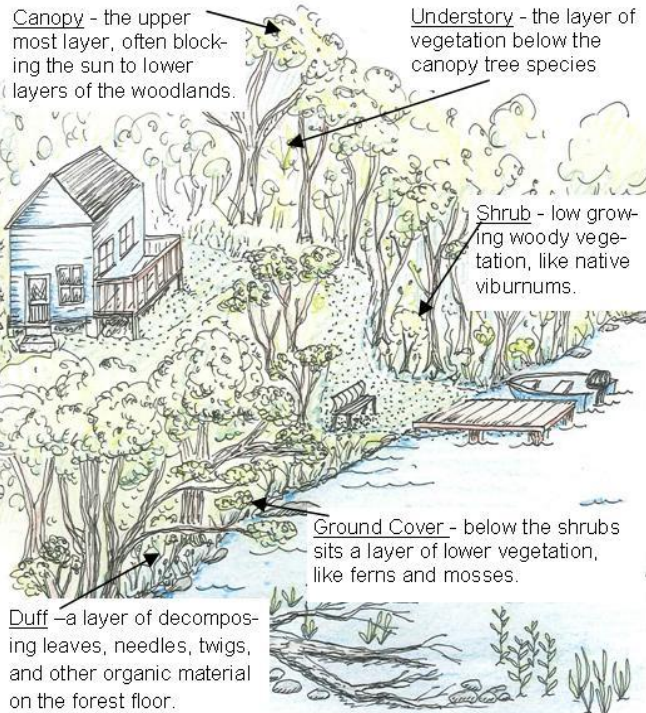
Below is a shoreland that has a large clearing, but also wooded areas. It was best divided into five sections. Three of the five consisted of lawn to lake and two of the sections were wooded. The scoring is shown below.

section 1	section 2	section 3	section 4	section 5
wooded, 5 tiers	lawn to lake	lawn to lake	lawn to lake	wooded, 5 tiers
5	0	0	0	5

Final Score = 2

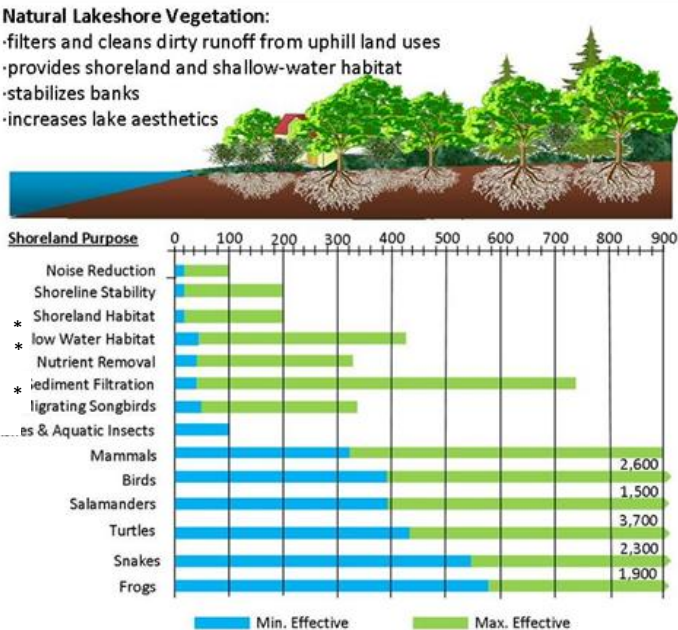
In this example, the score of the five sections adds to 10. The average ($10 \div 5 = 2$) of the five sections is 2, which is the final score.

Five Tiers of Vegetation



Note: lawn is not effective at filtering runoff and protecting water quality or wildlife habitat

Widths of Shoreland Vegetation For Lake and Shore Protection



Additional Factors that Impact Shoreland Effectiveness:

- Density and Composition of Shoreland Trees and Shrubs
- Slope
- Land Use above the Shoreland Area

** These values represent the minimum for retrofitting developed sites where 100 foot width is not possible.*

Section 5. Undeveloped Land

Criteria	Ranking System	Points
Low % impervious surface	0= > 10% 1= between 5% and 10% 2= between 1% and 4% 3 = <1%	
Low percent of lawn and cleared areas	0= > 30% 1= between 15% and 30% 2= between 15% and 7% 3 =<7%	
Paths or roads through undeveloped land	0 = eroding roads 1 = well maintained roads 2 = only paths, but with some erosion 3 = no roads or well stabilized paths	
Condition of undeveloped land is undisturbed	0 = Recently cleared or graded with little vegetation 1 = several recently cleared or graded plots 2= a few disturbed areas 3= mature native forest	
Forever conserved (Vermont Land Trust, etc.)	0 = no 3 = yes	
Total Available Points = 15	(11 points to qualify)	Total =

Recommended Action(s): _____

Lake Wise Evaluation Recommendations

Date _____

Evaluator _____

Property Owner(s) _____

Lake Wise Award Status (Yes = pass)	
Section 1 Driveway	Yes / No
Section 2 Structure	Yes / No
Section 3 Recreation Area	Yes / No
Section 4 Shore	Yes / No
Section 5 Undeveloped Shoreland	Yes / No

Lake Wise Award Sign
 •must qualify in each section; •minimum 70%
Recognition Certificates
 •pass at least two sections

Circled BMPs were recommended to the landowner for improving their shoreland management and becoming more lake-friendly on their property.

Additional Comments:

Lake Wise Program, Watershed Management Division, 1 National Life Drive, Main 2, Montpelier, VT 05620-3522, Tel. 802-828-1535

Thank you for participating in the Lake Wise Program!

DRIVEWAY

- | | |
|--|---|
| Standards | BMPs |
| <ul style="list-style-type: none"> Defined and minimized driveway Minimized soil compaction No erosion Runoff channeled away from the lake | <ul style="list-style-type: none"> Crowned drive-ways, rock-lined drainage ditches and good gravel Open-top culverts Infiltration trenches Pervious pavement Non-structural BMPs |

RECREATION AREA

Yards, Footpaths, Gardens, Patios

- | | |
|---|--|
| Standards | BMPs |
| <ul style="list-style-type: none"> Minimum of 15 ft of vegetation from shoreline Minimal lawn area Soil erosion is not occurring on site No pet waste accumulation No solid waste scattered No pesticide, fertilizer, or runoff to lake | <ul style="list-style-type: none"> Infiltration steps Rain gardens Waterbars Lake-friendly yard maintenance Planting and maintaining vegetation areas Planning pathways Establishing no-mow zones Vegetated swales |

STRUCTURES/SEPTIC

- | | |
|--|---|
| Standards | BMPs |
| <ul style="list-style-type: none"> Less than 20% of property contains impervious surfaces Properly functioning leach field No uncovered oil tanks No erosion caused from impervious surface runoff | <ul style="list-style-type: none"> Dripline trenches Drywells Rooftop downspout disconnection Infiltration trenches Rain gardens Septic system primer Ensuring septic system quality Vegetated swales |

SHOREFRONT

- | | |
|---|--|
| Standards | BMPs |
| <ul style="list-style-type: none"> Natural conditions Stable bank Minimum of 15 ft width of vegetation area for developed sites Minimum of 100 ft width for undeveloped sites No unfiltered runoff to the lake Shallow water areas natural and not "cleaned up" | <ul style="list-style-type: none"> Conserving lakeshores Rock toe, riprap, & rockwalls Live staking vegetation Planting and maintaining vegetation areas Planning pathways Waterbars Resloping Establishing no-mow zones |

Landowner's copy

Lake Wise Evaluation Recommendations

Date _____

Evaluator _____

Property Owner(s) _____

Lake Wise Award Status (Yes = pass)	
Section 1 Driveway	Yes / No
Section 2 Structure	Yes / No
Section 3 Recreation Area	Yes / No
Section 4 Shore	Yes / No
Section 5 Undeveloped Shoreland	Yes / No

Lake Wise Award Sign
 •must qualify in each section; •minimum 70%
Recognition Certificates
 •pass at least two sections

Circled BMPs were recommended to the landowner for improving their shoreland management and becoming more lake-friendly on their property.

Additional Comments:

Lake Wise Program, Watershed Management Division, 1 National Life Drive, Main 2, Montpelier, VT 05620-3522, Tel. 802-828-1535

Thank you for participating in the Lake Wise Program!

DRIVEWAY

- | | |
|--|---|
| Standards | BMPs |
| <ul style="list-style-type: none"> Defined and minimized driveway Minimized soil compaction No erosion Runoff channeled away from the lake | <ul style="list-style-type: none"> Crowned drive-ways, rock-lined drainage ditches and good gravel Open-top culverts Infiltration trenches Pervious pavement Non-structural BMPs |

RECREATION AREA

Yards, Footpaths, Gardens, Patios

- | | |
|---|--|
| Standards | BMPs |
| <ul style="list-style-type: none"> Minimum of 15 ft of vegetation from shoreline Minimal lawn area Soil erosion is not occurring on site No pet waste accumulation No solid waste scattered No pesticide, fertilizer, or runoff to lake | <ul style="list-style-type: none"> Infiltration steps Rain gardens Waterbars Lake-friendly yard maintenance Planting and maintaining vegetation areas Planning pathways Establishing no-mow zones Vegetated swales |

STRUCTURES/SEPTIC

- | | |
|--|---|
| Standards | BMPs |
| <ul style="list-style-type: none"> Less than 20% of property contains impervious surfaces Properly functioning leach field No uncovered oil tanks No erosion caused from impervious surface runoff | <ul style="list-style-type: none"> Dripline trenches Drywells Rooftop downspout disconnection Infiltration trenches Rain gardens Septic system primer Ensuring septic system quality Vegetated swales |

SHOREFRONT

- | | |
|---|--|
| Standards | BMPs |
| <ul style="list-style-type: none"> Natural conditions Stable bank Minimum of 15 ft width of vegetation area for developed sites Minimum of 100 ft width for undeveloped sites No unfiltered runoff to the lake Shallow water areas natural and not "cleaned up" | <ul style="list-style-type: none"> Conserving lakeshores Rock toe, riprap, & rockwalls Live staking vegetation Planting and maintaining vegetation areas Planning pathways Waterbars Resloping Establishing no-mow zones |