

Easy DO's and DON'T's for Lakeshore Owners

1. Site disturbance yardwork, clearing, landscaping

Use	Reason
Do keep site disturbance to a minimum especially removal of natural vegetation and exposure of bare soil.	Site disturbance dramatically increases surface runoff and erosion that contributes phosphorus to lakes.
Do seed and mulch bare soil within two weeks of clearing and install hay bales downslope of cleared areas.	Hay bales trap sediments and the phosphorus they carry.
Do leave naturally vegetated areas (buffer strips) along lakeshores, streambeds, road ditches & intermittent streams. Leave at least 25 feet of undisturbed buffer, with more on poor soils or steep slopes.	Buffer strips intercept runoff and filter sediment and phosphorus from water before they reach the lake or stream.
Do plant deep-rooted, woody vegetation along lake shores, streambeds, road ditches.	Plant roots stabilize shoreline, prevent erosion, and take up nutrients carried by water before they reach the lake.
Do preserve natural topography and natural drainage systems.	Natural drainage systems evolve over years and effectively control sediment and phosphorus
Do use fertilizer sparingly and in multiple applications. Hay mulch is preferable.	Solid, inorganic fertilizers are readily dissolved by water and transported in runoff.
Don't use herbicides and pesticides in excess on your garden and lawn.	Avoid their use if possible. Many of these products are toxic and can get into the water.
Don't put leaves, branches or any kind of organic matter into the lake.	Plant debris adds phosphorus and other nutrients directly to the lake.

2. Shore frontage

Do leave existing rocks in place along shore. Add rip rap if erosion control is necessary (MNDNR permit necessary).	Large rocks are the most effective buffer against erosion because they diffuse wave action.
Do minimize shoreline alteration such as removal of vegetation, construction of piers, breakwaters, etc.	Shorelines are generally stable due to years of wind, wave, and ice action. Alteration of the natural shoreline destabilizes the shoreline increases erosion, and impairs fish and wildlife habitat.

3. Tree cutting

Do leave trees along the shoreline forestry or stream front. Consult shore land zoning laws before cutting/harvesting limitations may apply.	Trees and natural cover best protect against shoreline erosion and sedimentation of lakes. Trees take years to grow and only minutes to cut down
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4. Septic systems

Do check sludge level in septic tank every year. Pump when sludge fills half of the tank (average is every 2-3 years for year- round residents, 5-6 years for seasonal residents).	Septic systems must be maintained if they are to function properly. If settled solids are not removed from the tank, they will wash into and clog the leach field.
Do organize neighborhood septic tank pumping.	Pumpers usually reduce the price for large volume jobs.
Do conserve water and give the septic system time to "rest" after heavy use.	The less water you use, the better your septic system will work. Don't flush strong cleaning agents (drain cleaner, bleach) into your septic system. Septic tanks are living systems. Strong cleaners kill the micro-organisms that break down the waste.
Don't flush cigarette butts, paper towels, etc., down the toilet.	These items fill up the septic tank quickly and cannot be broken down by microorganisms.
Don't install or use an in-sink garbage disposal.	Ground up garbage overburdens your septic tank and slows its functions.

Don't use commercial products that claim to clean your septic tank without pumping.	These products can cause clogging of your leach field and may contain chemicals that can contaminate groundwater.
Don't put paint or chemicals into the septic system.	These hazardous products kill microorganisms in the septic tank and contaminate drinking and lake water.

5. Detergents

Do use non-phosphate detergents.	Phosphate detergents add more phosphorus to the lake and, thus, contribute to algal growth.
Don't wash cars near lakes streams, or drainage ditches.	Runoff containing phosphorus will put it directly into the water. Runoff should be diverted to vegetated surfaces and allowed to seep into the ground, where phosphorus can be removed.

6. Surface runoff

Do prevent water from running directly into lakes and streams from developed areas, ie driveways	Detain in depressions or divert flow. Flowing water contains sediment and phosphorus Detaining or dispersing water allows it to filter into the soil, roofs, lawns to flat, wooded areas where sediment and phosphorus are filtered out.
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7. Roads

Do plant vegetative buffer strips along roads and stabilize road ditches by seeding or rip rapping	Plants slow runoff from roads and help to remove sediment and phosphorus before they reach lakes or streams.
Don't allow water to run directly off roads into lakes or streams.	Water running off roads contains sediment, phosphorus, and pollutants from cars.

8. Structures

Don't belong close to the water. All (houses, decks, sheds) structures must meet the required setback from the water	State shore land zoning statute requires setback from shore because shoreline disturbance dramatically increases sedimentation of the lake.
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9. Sand beaches

Don't build new beaches.	Sand contains phosphorus. Sand which is not stabilized by vegetation washes into the lake where it accelerates filling of the lake and provides poor bottom habitat for fish and wildlife.
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10. Fill/dredge

Don't fill or dredge unless necessary.	Fill and dredge stir up sediment and impair natural habitat.
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11. Storage of hazardous materials

Do store hazardous materials in a contained area.	Containment prevents contamination of water supplies and lake waters by undetected leaks.
Don't dispose of paint thinners or chemical products on the ground.	These products cannot be removed by soil and can contaminate groundwater and lake water.