



# Take Action

## Reduce Runoff and Pollutants

### Sign Up to Keep our *Lake Blue*!

This summer, we invite residents around Moose Lake to commit to taking at least one action to reduce runoff and pollutants on their properties. Working together, our cumulative actions can improve the water quality of Moose Lake.

Residents who sign up to Keep our Lake Blue will receive a lawn sign to display their commitment to clean water.

#### Effects of Runoff

Impermeable surfaces don't allow water to soak into the ground. Instead, this water runs off of the surface, carrying sediments, salts, chemicals, and excess nutrients like phosphorous into the lake.

- Sediments cloud water, which can harm aquatic animals by impeding vision, covering eggs, and affecting breathing
- Pesticides, paints, and motor oil can poison aquatic life
- Excess nutrients, like phosphorus, can increase the growth of algae and cyanobacteria in the lake

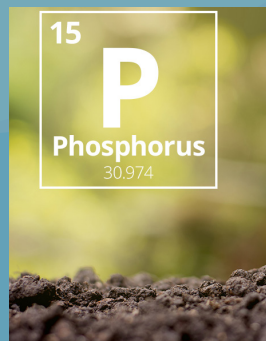


#### Phosphorus, Algae, and Cyanobacteria

Items like detergents, fertilizer, manure, human waste, and decaying plants are all sources of phosphorous. When excess nutrients, such as phosphorus, enter the lake, it results in increased growth of algae that is often quite odorous. When mats of algae die, they sink to the bottom of the lake and decay, creating low-oxygen conditions that are detrimental to fish and other aquatic organisms.

Excess nutrients, like phosphorus, can also result in the formation of cyanobacteria, also known as blue-green algae, which are a unique group of bacteria that photosynthesize. When cyanobacteria decompose, they produce nerve and liver toxins that can pose a serious health risk to humans and animals.

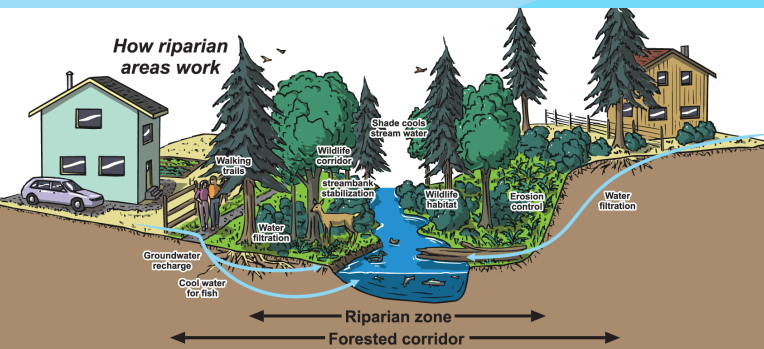
You can help prevent algae blooms by reducing runoff, phosphorus, and other pollutants on your property.



# Plants Reduce Runoff, Phosphorus, and other Pollutants

## Layered Landscapes

Lawns absorb less rainfall than natural areas that have multiple layers of vegetation like tall trees, understory of smaller trees and shrubs, and groundcover. Adding layers of vegetation helps reduce runoff, and the plants help filter pollutants out of the water.



The more natural you keep your property the healthier your lake will be.



## Rain Gardens

These gardens consist of native shrubs, perennials, and flowers that are planted in a depression of a slope. They are designed to catch the runoff from driveways or downspouts; they filter the water and reduce the amount of pollution reaching the lake.

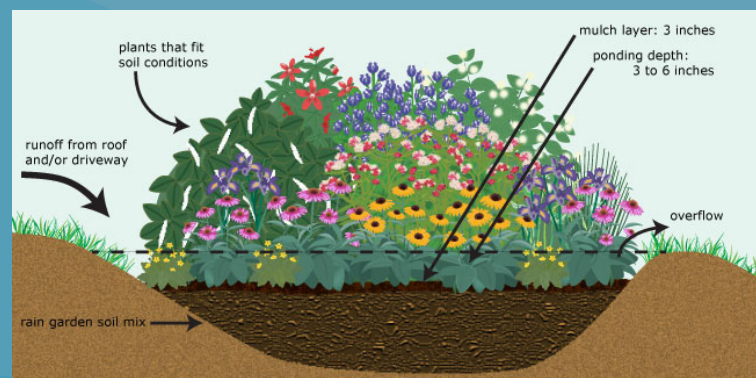
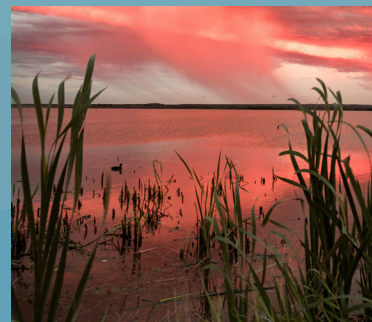
For more information, and to sign up for the  
Keep our *Lake Blue* campaign, contact:

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## Native Species

Riparian plants that thrive near water attract wildlife, protect the shoreline, and are the “glue” that bind the shoreline together. Sedges are grass-like plants with deep root systems that help stabilize banks. Willows stabilize the shoreline and provide wildlife habitat. Cattails help purify water by removing nutrients and trapping sediment. Rushes are leafless with round stems, providing critical nesting habitat for marsh birds.



### References:

Alberta Environment and Parks  
aep.alberta.ca  
Moose Lake Watershed Handbook  
laraonline.ca