

Buck Lake Wetland Restoration Project

Magic Lake Estates Information Sheet



Capital Regional District | May 2024

What is a Wetland?

Wetlands are defined as land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, vegetation and other biological activity adapted to a wet environment.

(National Wetlands Working Group)

Why are Wetlands Important?

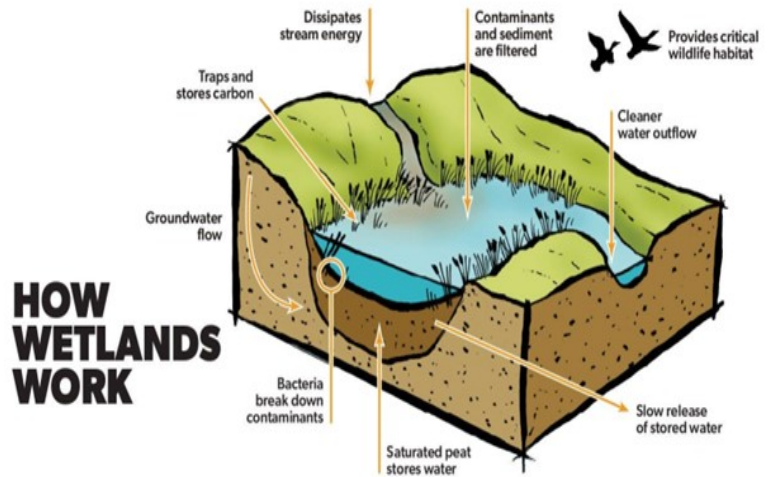
Wetlands protect us from flooding, drought and climate change. Wetlands also clean the water we enjoy at beaches, lakes and rivers. Wetlands protect wildlife by providing hundreds of species with safe places to eat, sleep and raise their young. Most importantly, wetlands are natural places to play, learn and explore.

Why are We Doing this Project?

The area beside Buck Lake was historically a cedar swamp ecosystem but has been degraded over time as the surrounding land was developed. Restoration allows us to support the capacity of protected lands to sustain biodiversity while providing ecosystem services that help mitigate the impacts of climate change.

What's the Plan?

Restoration will begin in August or September and is projected to be completed over a two-week period. In October, new native plant species will be planted and fenced off to foster growth. This restoration project is a unique opportunity to greatly improve the health of surrounding ecosystems while also providing benefits to Buck Lake and adjacent areas.



Who is Leading the Project?

The CRD has contracted Rewilding Water & Earth (RWE) to lead this project. RWE is a Victoria-based watershed restoration consulting company that works to restore healthy ecosystems to support biodiversity.



What Restoration Methods Will be Used?

Natural wetland ecosystems have diverse topography which form over centuries through an environmental lifecycle process. Our goal is to create a self-sufficient system that will sustain itself for years to come. In order to complete this work, heavy equipment will be needed to transport logs and soil. Please note, there will be large amounts of exposed soil and pit and mound topography after restoration work is complete.

Buck Lake Restoration Methods:

- Remove invasive plant species that are growing in the area
- Create temporary wetland depressions
- Rough and loosen the soil for new native plantings
- Place coarse woody debris (CWD) into strategic locations
- Augment the area with new native plant species

How Will Harvested Logs be Used?

Harvested logs from the wetland area adjacent to the Schooner Wastewater Treatment Plant will be incorporated into the restored wetlands as CWD. Healthy functioning wetlands that include CWD help to filter, clean and store water. Additionally, CWD creates wildlife and plant habitat, adds nutrients and organics to soil and slows the movement of water to improve water quality. In wetland ecosystems CWD that is saturated with water also acts as a carbon sink, storing excess carbon.

How Will the Restoration Project Improve Water Quality?

Restoration will restore healthy wetlands along the shoreline of Buck Lake, which will improve the quality of water entering the reservoir, as well as provide habitat for native plants and wildlife. Healthy wetland ecosystems slow water down and capture it in pools, which allows water to seep into the soil and enter the reservoir through sub-surface flow, instead of flowing on the surface directly into the reservoir. This new flow of water substantially improves the quality of water entering the reservoir, as the groundwater is naturally filtered before it enters the reservoir. The lake water is further filtered, treated and disinfected prior to delivering it to residents as clean drinking water.

Below is a sample of a fully restored wetland



Looking for more information about the project

Check out our webpage at: www.crd.bc.ca/magiclake-sewer

Capital Regional District

Integrated Water Services

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