

# SNEAK PEAK AT DAKIN CREEK

FULL STREAM AHEAD TO PROTECT BIG GREEN

**D**akin Creek is one of eight named streams in the 107-square mile Green Lake watershed (the surrounding area of land that drains towards the lake). It is a six-mile-long, designated class II trout stream that flows into Green Lake near the County Highway A bridge on the lake's east end. It is also the creek that the GLA focused its "stream restoration" efforts on this year.

Dakin Creek once supported a thriving brook trout population, but the native fish disappeared from the creek in the mid-1950s because of poor water quality and a loss of adequate habitat.

A series of two culverts also create issues for brook trout on the creek:

- A perched culvert at Skunk Hollow Road (above) creates a barrier to fish and aquatic organism migration. The energy from this waterfall effect has created a four-foot-

deep scour hole. Brook trout need to swim upstream to spawn, but they cannot make the 6-inch jump at Skunk Hollow Road.

- Just 140 feet downstream, an undersized culvert on Maug Road is eroding the roadbed and causes high stream velocities that brook trout cannot navigate.

Both of these culverts cause sediment disruption, which clouds the stream water, smothers fish eggs, and sends phosphorus pollution downstream to Big Green—fueling excess algae and weed growth.

To address these issues on Dakin Creek, the GLA is in the progress of:

- 1) Completing 3,600 feet of streambank repairs by creating gently-sloping banks, armoring the soil with native plants, and using reclaimed Christmas trees to secure areas of stream erosion.
- 2) Replacing two culverts—one perched culvert that blocks fish migration, and a second culvert that constricts stream flow and is contributing to erosion. The GLA is coordinating these culvert replacements in early 2020.
- 3) Restoring fish habitat and re-establishing brook trout in Dakin Creek. Brook trout are a native fish species that indicate clean water, so their ability to survive in Dakin Creek will show encouraging progress towards cleaner water in the stream, and cleaner water making its way to Big Green Lake.

The benefits of the Dakin Creek stream restoration project also flow downstream. The project will improve the water quality of Green Lake by reducing phosphorus pollution and preventing 20,000 pounds of weeds and algae from growing in the lake.



This culvert Maug Road, along with a second culvert at Skunk Hollow Road, will be replaced in early 2020 as part of a larger stream restoration project.





## BALSAMS FOR BROOKIES



Last January, the GLA collected Christmas trees to be used for the “Balsam for Brookies” project. This fall, those trees were taken to Dakin Creek where they found a new home.



Green Lake area students and community volunteers transported the repurposed evergreens to Dakin Creek where they were strategically placed to help reduce erosion on the streambanks and create habitat for fish.

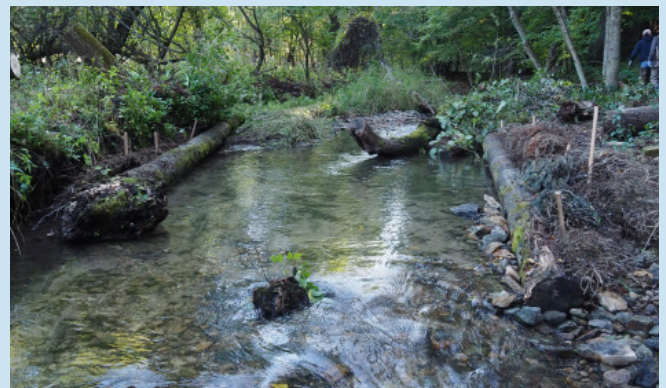


BEFORE



AFTER

Before and after photos, using the same root wad as reference, demonstrate in-stream improvements on Dakin Creek. Fallen trees and debris obstructed the flow of Dakin Creek, contributing to stream bank erosion. Volunteers and staff removed these obstacles and helped re-establish the stream's natural flow and path.



Repurposed Christmas trees were baled with eco-friendly twine and anchored in place with vertical wooden stakes (left and right banks) to provide streambank stability and aquatic habitat on Dakin Creek.