

MEADOWBROOK CREEK STREAMBANK STABILIZATION AND FISH SPAWNING HABITAT IMPROVEMENT PROJECT – PHASE III (2023-2024)

The Meadowbrook Creek project workdays again kicked off in the spring of 2023 on Earth Day with the combined forces of Ruekert-Mielke’s environmental group, Walleyes for Tomorrow volunteers, and Lake Pewaukee Sanitary District employees.

During 2023, the primary focus was to continue choir log installation along the northern outside bend of the river and to continue cutting away buckthorn and making the river accessible as we moved downstream on the south bank of the river as seen in *Figure 1*. Several boats were needed to get the choir logs and people to the north side of the river.

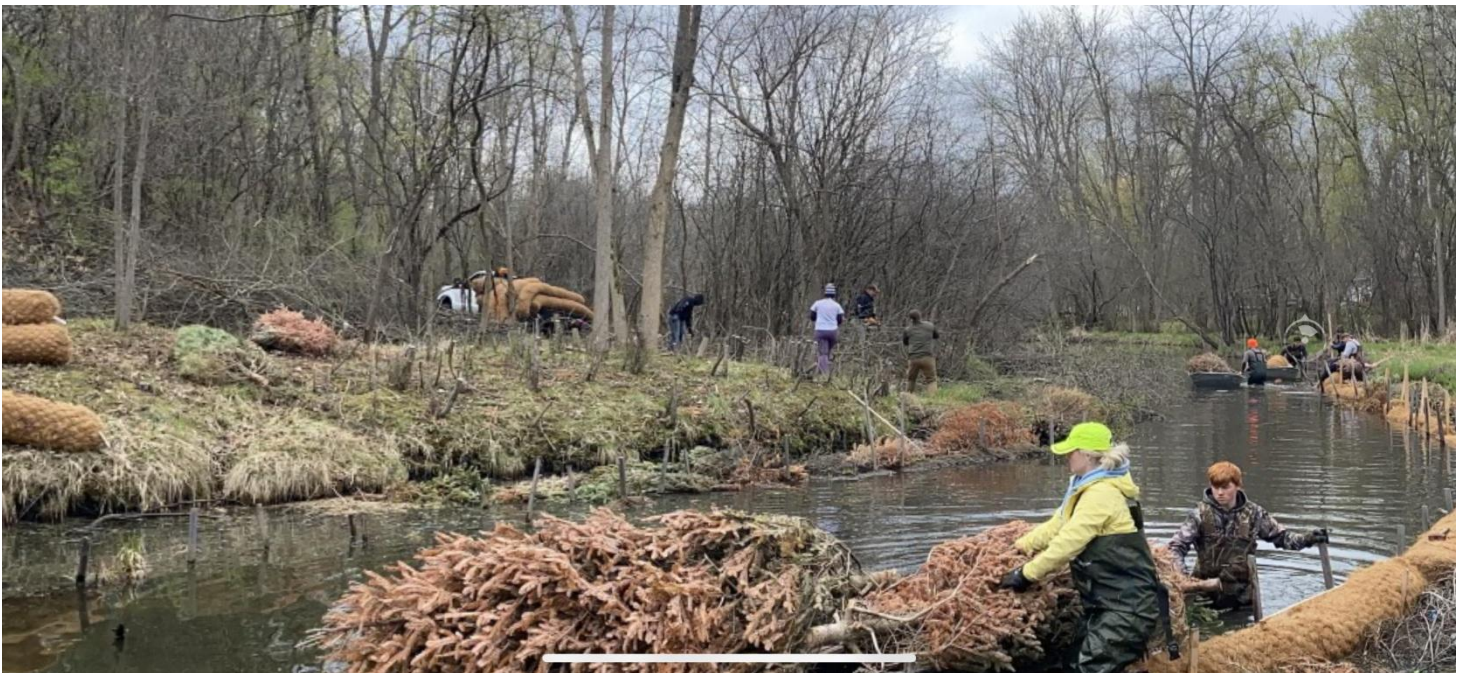


Figure 1: Looking southwest from the north side of the river. Volunteers installing recycled Christmas trees in the foreground and cutting buckthorn in the background.

Donated trucks, skid-steers, boats, trailers, and UTV’s were crucial in getting the materials to and around the project site. Volunteers that cut buckthorn and brush hand hauled them to the nearest location accessible by the skid steer where it was then pushed into large piles. Choir logs were hauled up the project site with LPSD’s donated flatbed truck where they could be loaded into boats and brought across the river.

The north side of the creek in this section is a large outside bend that has undergone years of erosion due to buckthorn shading out native grasses and sedges. This led to years of exposed soil and created a wide, silt-filled and shallow area. This outside bend can be seen in *Figure 2* below as volunteers install choir logs and trees. This photo and the installation occurred a few years after buckthorn was removed and some grasses were already making a comeback.



Figure 2: Volunteers using boats to haul choir logs and wooden stakes up and down the river.

The Boehm-Madisen donated stakes that were used are all from the same batch received in 2021-2022. These hardwood stakes have been extremely effective at holding the choir logs in place. New choir logs were purchased from GSI in 2023 and 2024. Recycled Christmas trees were again used to help fill and capture sediments in the spaces behind the choir logs. An example of how they are installed can be seen in *Figure 3* below.



Figure 3: Greg and Levi Koepp hauling recycled Christmas trees to be used behind the choir logs. An example of a completed section of choir logs back filled with trees is seen on the left side of the image.



Figure 4: A wide view of the 2023-2024 project area looking southeast from the north side of the river.

In 2023 and 2024, LPSD employees picked up and delivered the choir logs used on the project day from GSI, a local landscape supply company in Pewaukee. An LPSD donated F-550 and Trailer combo was used. The dump truck was also used to haul stumps and brush on the project days.



Figure 5: LPSD F-550 and Trailer hauling choir logs



Figure 6: Ford F-350 and Dodge 2500 used to haul boats, choir logs, and plants to river.

During the workdays in 2024, many of the volunteers spent most of their time cutting and removing trees from the main channel of the river. This section of the river was wider, deeper, and loaded with fallen trees. This posed a real challenge and full day of work for many people. To get as much done as possible, the volunteers broke into two main groups. One group cut up and removed trees, while the other group followed behind installing the choir logs, Christmas trees, and native plants. Below are before and after pictures of the tree-ridden section of river. This section is almost complete; however, a little more clean-up and native plantings are yet to be done.



Figure 7: Before and after picture of a difficult to access, tree filled section of river. Looking upstream to the northeast.

In addition to the choir log and native plant installation, buckthorn removal, brush burning, and tree cutting was a main priority to clean up the project site and make new areas of the river accessible. Approximately 600ft of streambank was again completed during this phase of the project. A project extension for the grant has been filed and approved, allowing us to continue efforts into 2025.



Figure 8: Volunteers from R&M, WFT, and LPSD enjoying lunch and cold beverages after a long day of work.

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