



Project 1-2 Buckingham Creek Channel Restoration

Background: The Enger Golf Course water appropriation pond on Buckingham Creek is a fish barrier, and operation of the pond dewateres a portion of Buckingham Creek during the spring, summer and fall.

Problem Statement: While there are several in channel ponds on Buckingham Creek through the golf course, the water appropriation pond has the most severe impact to the stream. The outlet of this pond was constructed in a way which created a fish barrier. Water is appropriated throughout the night, which draws the pond well below the elevation of the outlet, completely shutting off flow to this portion of the stream channel. Flow does not resume in the stream until a small tributary flows into the main channel further downstream. It typically takes most of the rest of the day for the appropriation pond to refill with stream flow and/or well/city water, resulting in little or no flow to the stream for most of the open water season.

Goals:

1. Create an off channel pond to utilize for water appropriation and restore stream channel through this area.
2. Eliminate the fish barrier by restoring a natural passable stream channel through this reach.
3. Restore natural stream flow to dewatered stream reach.
4. Restoration of streamflow should also help to improve water quality for trout in the designated trout lake (Upper Twin Pond) which is downstream.

Priority: High

Task Duration: 3 years

Potential Mechanism: City of Duluth, LSOHC, CPL, GLRI

Potential Partnering Organization(s): City of Duluth, DNR, TU, AFF

Estimated Cost: \$100,000-\$200,000

Comments: Water appropriations do not allow for dewatering of a natural stream channel.

Special Considerations:

Accomplishments: Existing pond has been surveyed to determine volume.

Measure(s) of Success: Restored stream channel and natural flow regime to this reach of Buckingham Creek.

Primary Contact: Deserae Hendrickson, DNR Fisheries, (218)525-0853

Vision Statement: Maintain, protect, and restore healthy cold water ecosystems with relatively stable flows and a diversity of habitat for fish and wildlife to enhance our quality of life.

For project information: www.lrcd.org/links/lsc_projects.htm