

Proposed Project: Buckingham Creek Brook Trout Restoration Project **Organization:** City of Duluth

Presenters: Kate Kubiak, Natural Resources Coordinator, City of Duluth and John Lindgren, Principal Planner-Fisheries, MN DNR

City of Duluth-MNDNR - A History of Cooperative Natural Resource Restoration



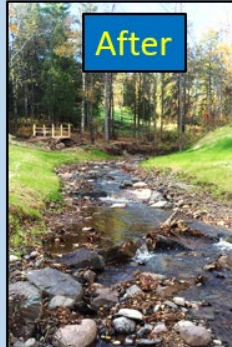
Before



Knowlton Creek

Failed culvert and extreme erosion
Ski hill runoff re-routed in conjunction with stream restoration

After



Before



Chambers Grove

Failing sheet pile wall replaced with rock weirs to reduce erosion potential, improve habitat and improve angling opportunity

After



Buckingham Creek Brook Trout Restoration:

- Restoration of natural stream channels through existing in-line ponds
- Restoration of stream channels across fairways and through other degraded areas
- Daylighting piped reaches and removal of culvert migration barriers
- Future, long-term preservation of land in headwaters
- Enhancement of recreational fishing opportunities within a City Park

Project History and Timeline

- **2003** – MNDNR documents the presence of naturally recruiting Brook Trout in Buckingham Creek within Enger Golf Course
- **2016** - MNDNR sets temperature loggers below , within and above the golf course and documents the presence of cold-water springs supporting the system
- **2017** – MNDNR communicating with the City of Duluth about mitigating the negative impacts of in-line ponds on the Brook Trout population
- **2021** – City of Duluth contacts MNDNR to propose a partnership to restore habitat within Enger Golf Course during their planned course renovation.
- **2021 and 2022** – MNDNR and Soil and Water Conservation District (SWCD) begin collection of land and stream survey data to support potential restoration design
- **2021** – MNDNR and City of Duluth begin exploring funding opportunities
- **2022** – MNDNR, SWCD and MPCA collect pre-project biological (Brook Trout) and limnological (temperature and water chemistry) data
- **2022 and 2023** – MNDNR and SWCD apply federal funding to complete design, environmental review, permitting and construction contracting
- **2023 and 2024 proposed** – City of Duluth, MNDNR, SWCD and MPCA apply their partnership to integrate the City's renovation project with the proposed Brook Trout restoration project

Project Funding

- **2021** – MNDNR and SWCD expend internal funds to collect land and stream survey data to support the design process
- **2022** – MNDNR applies for and secures \$170,000 in federal and internal state funding for project design
- **2022** – MNDNR is negotiating with USEPA to secure approximately \$1,000,000 in federal funding for restoration construction
- **2022** – City of Duluth has submitted a \$800,000 proposal to Minnesota Legacy Amendment – Outdoor Heritage Fund for restoration construction

