**PROJECT TITLE: Elm Creek Habitat Restoration**

**I. PROJECT STATEMENT**

Elm Creek Stream Restoration project is a high priority project multiple phase project in cooperation with the City of Champlin, Elm Creek Watershed Management Commission and Hennepin County to restore water resources that within the City of Champlin and the Elm Creek Watershed. The City of Champlin Management Plan developed in 2008 has identified goals for accelerating programs and projects for improved habitat, water quality and flood control through a variety of conservation measures in areas surrounding Champlin Minnesota.

Prioritization and implementation of appropriate protection, enhancement and restoration measures on area lands, streams, ditches, rivers, lakes and wetlands within the City of Champlin and Elm Creek Watershed have been accelerated through use of conservation decision making tools which aid in determining high priority projects that are beneficial to the City of Champlin, Elm Creek Watershed and the Upper Mississippi River Watershed. The Elm Creek Habitat Restoration Project is divided into six phases.

Phase 1 included replacement of the existing Mill Pond dam in May of 2016. Phase 2 is the Mill Pond aquatic habitat restoration through installation of habitat structures and restoration of deep water habitat refuge lake depths by removal of excess nutrient laden sediments in the three bays of the Mill Pond which is a full funded project proposed for construction completion in March of 2018. Phase 3 included 3,700 linear feet of stream bank restoration of Elm Creek, fully funded with construction completion in May of 2019.

Phases IV is a continuation of the Elm Creek habitat restoration project. This project includes 3,670 linear feet of stream bank restoration of Elm Creek which is located upgradient of the Mill ponds. Preliminary design plans have been completed in cooperation with the MNDNR, Elm Creek Management Commission and Hennepin County. Elm Creek is impaired water with low dissolved oxygen, restoring the stream banks and providing habitat structure will reduce downstream sedimentation and provide native habitat improvements including root wads, boulder vanes, toewood, boulder clusters, rock weirs and riffles with varied substrate to enhance aquatic species habitat including sensitive species such as Blandings Turtle. The riparian areas of the creek will be restored with native planting buffer using native seeding that will filter sediments and nutrients from direct runoff. Our current water plan specifically identifies goals for accelerating projects for improved habitat, water quality and flood control. The project allows the City of Champlin to meet these goals and open opportunities for the public that includes recreation, fishing and educational experiences.

In preparing the Habitat Restoration Plan, the City of Champlin utilized all available data which includes hydrologic assessments and completed field surveys of Elm Creek Phase IV project based on standards in the Minnesota Department of Natural Resources (MNDNR) Fisheries Stream Survey Manual, Rosgen Channel Characterization. Our experience in completing previous phases of habitat restoration projects we have effectively reduced costs on the project, achieved overall project goals and allows effectively efficient project completion schedule.

**II. PROJECT ACTIVITIES AND OUTCOMES**

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| **Activity 1:** *Final Design, Engineering, Permitting and Construction Supervision***Description:** *This activity includes engineering, design, permitting, supervision of construction, permit compliance inspections, and survey (post construction),* **ENRTF BUDGET: $104,700.00** |  |

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| **Outcome** | **Completion Date** |
| *1. Engineering/Construction Plans and Bid Specifications* | *October 2020* |
| *2. Permit Requirements: MPCA, MNDNR, USCOE, SWCD, City and County* | *October 2020* |
| *3. Construction Supervision: Permit Compliance Inspection and Construction Supervision* | *March 2021* |
| *4. Post Construction Stream Survey and Project Summary Report* | *May 2021* |

**Activity 2:** *Phase IV Elm Creek Habitat Restoration and Construction.*

**Description:** *This activity includes construction materials and construction services for Elm Creek habitat restoration and native buffers.*

**ENRTF BUDGET: $545,500.00**

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| **Outcome** | **Completion Date** |
| *5. Streambank Restoration construction, development of instream habitat features, seeding and native buffers.* | *March 2021* |
| *6. Construction materials, native seed and erosion control*  | *March 2021* |

**III. PROJECT PARTNERS AND COLLABORATORS:**

The City of Champlin will be the fiscal agent receiving funds for the project. The following local agencies will assist by providing technical input: Hennepin Co. Environmental Services, Elm Creek Watershed Commission, SWCD, Minnesota [Natural Resources Conservation Service](http://www.nrcs.usda.gov/), Bureau of Soil and Water Resources, and the US Army Corps of Engineers. Outside services required to complete the project include environmental, GIS, engineering and construction.

**IV. LONG-TERM IMPLEMENTATION AND FUNDING:**

The habitat restoration project is designed for long-term ecological and hydraulic stability. Once the project is completed and vegetation well established, no significant maintenance is will be required to sustain the designed habitat outcomes. The increase in wildlife, amphibian and fish populations are gains which are sustainable long-term through natural reproduction. The goal for timeline requirements of overall project is approximately 1 year. Phase IV which we are requesting funding timeline requirements is approximately 1.0 years.

We anticipate that long-term monitoring of the integrity of the improvements will be done in conjunction with routine inspections and biological monitoring conducted by local MNDNR staff, volunteers from local and the City of Champlin as appropriate. This monitoring and maintenance will not require separate funding. In the event that there are other maintenance costs, volunteer labor and other funds sources will be obtained to complete the required maintenance.

Long term goals of the project are to restore aquatic habitat and restore structural elements. Placement of aquatic structures including rock vanes and riffle pools will optimize oxygen levels in the stream and gravel beds and woody structure will improve the habitat and stream biota. The improvements described above will be incorporated in Phase IV and will require future funding request for Phase V. The City will construct aquatic habitat improvements in Hayden Lake as part of Phase VI. A long-term monitoring/maintenance plan will be implemented to assure all constructed habitat restoration measures are adequately functioning as designed for the project.

**V. SEE ADDITIONAL PROPOSAL COMPONENTS:**

**A. Proposal Budget Spreadsheet**

**B. Visual Component or Map**

**C. Parcel List Spreadsheet**

**D. Acquisition, Easements, and Restoration Requirements**

**E. Research Addendum (Not required at proposal submission stage. Required later in process, if proposal is recommended. Staff will provide further information at that time)**

**F. Project Manager Qualifications and Organization Description**

**G. Letter or Resolution**

**H. Financial Capacity**