



# Environment and Natural Resources Trust Fund (ENRTF)

## M.L. 2018 ENRTF Work Plan (Main Document)

**Today's Date:** August 16, 2018

**Date of Next Status Update Report:** July 1, 2019

**Date of Work Plan Approval:**

**Project Completion Date:** June 30, 2022

**Does this submission include an amendment request?**

**PROJECT TITLE:** Elk River – Lake Orono

**Project Manager:** Brandon Wisner

**Organization:** City of Elk River

**College/Department/Division:** Public Works, City of Elk River

**Mailing Address:** 13065 Orono Pkwy

**City/State/Zip Code:** Elk River, MN 55330

**Telephone Number:** 763-635-1000

**Email Address:** bwisner@elkrivernm.gov

**Web Address:** <https://www.elkrivernm.gov/1569/Lake-Orono-Restoration-and-Enhancement>

**Location:** Upper Orono (Lake) (City of Elk River, MN)

Lake identification number: **71-0013-01**

Major Watershed:	<a href="#">Mississippi River - St. Cloud</a>
County:	Sherburne
Surface Area:	154.455644113 acres
Ecoregion:	North Central Hardwood Forests
<a href="#">Former ID:</a>	71-0013-00
Use Classification:	<a href="#">2B, 3C</a>

<https://cf.pca.state.mn.us/water/watershedweb/wdip/waterunit.cfm?wid=71-0013-01>

**Total Project Budget:** \$1,500,000

**Amount Spent:** \$0

**Balance:** \$1,500,000

**Legal Citation:** M.L. 2018, Art. 6, Chp. 214, Sec. 4, Subd. 5(2).

**Appropriation Language:** For a grant to the city of Elk River to Dredge Lake Orono.

**I. PROJECT STATEMENT:**

The goal of the Lake Orono Restoration and Enhancement Project is to remove a minimum of 125,000 cubic yards of accumulated sediment from the upper lake to improve navigation, recreation and enhance wildlife habitat. Lake Orono acts as a settling basin to keep sediment and sediment-bonded nutrients from flowing downstream into the Mississippi River. Downstream dredging of Mississippi River pools and lakes is common in order to restore navigability for shipping purposes. The lake was dredged in 1998 and was funded entirely by the City of Elk River. At that time, it was expected that the lake would need to be dredged again in 20 years. Due to work with local groups including Sherburne Coalition of Lakes and continually incorporation of extensive best management practices, it is expected that this investment will last closer to 30 years moving forward with identified intermediate smaller dredging.

Dredging Lake Orono would result in the removal of accumulated sediment, as well as accumulation of the reproductive seeds (turions) of the invasive aquatic plant curly-leaf pondweed (CLP) and thus its reduction. Curly-leaf pondweed currently occupies approximately a 33% area of the lake, a vast majority of which is in the upper lake and would be included within the proposed dredging area. Removing CLP will allow native plants to flourish and increase, establish and create wildlife habitat including but not limited to insects, amphibian and fish in the lake. Deeper water and more volume will benefit wildlife by allowing more area for fish to inhabit with increased oxygen levels in the water column. A portion of the project budget includes money specifically for fish, wildlife and habitat improvement. These enhancements will be achieved by incorporation woody debris additions (i.e. fish sticks), rock spawning beds and a deeper basin which would provide habitat for fish that prefer deep water. Based on correspondence with the Minnesota Department of Natural Resources (MnDNR), this was favorable to incorporate in order to ensure a well-round project for the overall benefit of the lake and wildlife long term.

There are several projects in Sherburne County and watershed based that are being undertaken to reduce nutrient and sediment loading to the Elk River including: recently approved Sherburne County Water Plan, Elk River Total Maximum Daily Load (TMDL), Mississippi River/St Cloud Watershed TMDL and a Watershed Restoration and Protection Strategies. Furthermore, city staff collaborates with the Sherburne Soil and Water Conservation District (SWCD) prior to applying for water quality grants in order to eliminate grant competition if the SWCD's potential project will improve downstream Lake Orono.

Removing the accumulated sediment will restore the average lake depth to 5' which will improve navigation, recreation opportunities and economic value of both the lake as a community asset and the general public who use the lake. In recent years, the average lake depth has lowered to approximately 2.5' or less in some areas, significantly reducing navigation on the upper portion of the lake. Currently the sediment is so deep that kayaks and canoes have difficulty navigating large portions of the lake with the combination of dense aquatic plant communities. The sediment that is removed from the lake will be land applied in an approved upland area to prevent the spread of aquatic invasive species. This project aims to restore the depths to historic levels and enhance the overall character of our city's significant asset. Improved navigation, recreation and wildlife enhancement are the priorities of this project.

**II. OVERALL PROJECT STATUS UPDATES:**

**First Update July 1, 2019**

**Second Update January 1, 2020**

**Third Update July 1, 2020**

**Fourth Update January 1, 2021**

**Fifth Update July 1, 2021**

**Sixth Update January 1, 2022**

**Final Report by August 15, 2022**

**III. PROJECT ACTIVITIES AND OUTCOMES:**

**ACTIVITY 1 Title: Secure Remaining Funding Sources**

**Description:** The \$1.5 million that is appropriated here is just under half of the estimated total project cost. The Elk River City Council recently approved a Local Option Sales Tax (LOST) referendum item for November 2019 that, if approved, would in part include \$1 million for the LORE. Also, a Lake Orono property group is working on a petition in order to establish a Lake Improvement District (LID). If this is approved, the understanding at this point is this special taxing district would contribute \$750,000 towards the LORE.

**ACTIVITY 1 ENRTF BUDGET:** \$ No cost for this activity outside of city staff time.

Outcome	Completion Date
1. Remaining funding secured via LOST or alternative source if not approved.	Tentatively Nov. 30, 2018
2. LID approval or alternative source if not approved.	Tentatively Nov. 30, 2018

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**ACTIVITY 2 Title: Regulatory Permitting Approvals.**

**Description:** It is anticipated that an Environmental Assessment Worksheet (EAW) will need to be completed, properly publically noticed and accepted. A concept dredging area map was submitted to the Minnesota Department of Natural Resources earlier this year. They will conduct a multi-department review of the proposed project with the anticipation of approval if the applicable requirements are met. It is not determined if the United States Army Corps of Engineers (USACE) will have jurisdiction over this proposed project. This will be determined over the next few months and applicable permits will be applied for. By working closely with all agencies, staff will ensure the LORE project meets required permits and regulations for the health of Lake Orono

and surrounding natural resources. Guidance from the DNR will be key to the success of our project. The final outcome will be a fully permitted dredging project.

**ACTIVITY 2 ENRTF BUDGET:** Approximately \$100,000

<b>Outcome</b>	<b>Completion Date</b>
1. EAW process and approval.	Tentatively February 2019
2. MnDNR and MPCA review and permitting.	Tentatively February 2019
3. USACE review and permitting.	Tentatively July 2019

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**ACTIVITY 3 Title: Final Engineering, Legal Review and Construction.**

**Description:** The LORE is anticipated to be completed entirely within the public water boundary. Final engineering with an updated estimated engineer’s estimate, contract documents, bid documents, and final plans would be completed. A legal review would be completed to better understand potential risk of the proposed project and outcomes, as well as a review of land ownership and authorities. The state required public agency bidding process will be followed and documentation completed as required. A final report of the project once completed would be produced.

At this point, it is anticipated that the construction portion of the project will entail: drawing down the lake to an appropriate level during the winter of 2019/2020 (with appropriate approvals), excavate to approved depths and areas, and haul material to an approved upland location off site. This will be detailed in a project schedule. A lake drawdown for this project makes the most economical sense since the city owns and operates the dam rather than pumping sediment out of the lake with no feasible land to deposit sediment laden water.

It is anticipated that the cost of a final report of the project will be included in the total cost of a hired consultant. The intent of the final report is to document each goal and related outcome, and that each objective is completed.

**ACTIVITY 3 ENRTF BUDGET:** Approximately \$1,400,000

<b>Outcome</b>	<b>Completion Date</b>
1. Engineering: estimate, contract, bid documents and final plans.	Tentatively August 2019
2. Legal review.	Tentatively August 2019
3. All final documents compiled following appropriate reviews. Construction commencing.	Tentatively September 2019- January 2020

4. Construction process of dredging the lake, sediment removal and land deposit.	Winter of 2019/2020
5. Improved navigation as indicated by increased water depths in areas previously 2.5' with vegetation overgrowth.	Spring of 2020
6. Improved fish and wildlife habitat as indicated by return of native vegetation, increased water depths and habitat improvements including structures.	Spring of 2020
7. Improved recreation as indicated by significant increase in water depth returning to historic depth of 5' throughout the upper basin.	Spring of 2020
8. Completed final report of construction/project for the LORE	Tentatively June 2020

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**Fourth Update January 1, 2021**

**Fifth Update July 1, 2021**

**Sixth Update January 1, 2022**

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#### **IV. DISSEMINATION:**

**Description:** As noted on page one of this document, a specific project tab has been created for the LORE on the City of Elk River website. Appropriate updates will be included on this webpage and will be updated as applicable. Members of the public can sign up for updates specifically for this page when they complete the NotifyMe subscription service that is available on our website. All information will be housed on this [page](#). Social media will be used to inform the public in real time of the project progress as it goes through various steps. The city has previously refocused efforts towards social media for disseminating information for residents and others from the public. The project will follow ENRTF acknowledgement guidelines for all publications, press releases, newsletters, signs and other mediums as outlined in the acknowledgement guidelines.

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**V. ADDITIONAL BUDGET INFORMATION:**

**A. Personnel and Capital Expenditures**

**Explanation of Capital Expenditures Greater Than \$5,000:** N/A

**Explanation of Use of Classified Staff:** N/A

**Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:** N/A

Enter Total Estimated Personnel Hours:	Divide by 2,080 = TOTAL FTE:
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**Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:** Consultant time for project to be determined (TBD).

Enter Total Estimated Personnel Hours: Approx. 400 hours	Divide by 2,080 = TOTAL FTE:
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**B. Other Funds:**

SOURCE OF AND USE OF OTHER FUNDS	Amount Proposed	Amount Spent	Status and Timeframe
<b>Other Non-State \$ To Be Applied To Project During Project Period:</b>			
	\$ 1 million	\$	Via LOST or other approved source
<b>Other State \$ To Be Applied To Project During Project Period:</b>			
	\$ 750,000	\$	Via LID or other approved source.
<b>In-kind Services To Be Applied To Project During Project Period:</b>			
	\$	\$	Secured (1 city FTE to devote partial time to the project)
<b>Past and Current ENRTF Appropriation:</b>			
	\$	\$	
<b>Other Funding History:</b>			
	\$	\$	

**VI. PROJECT PARTNERS:**

**A. Partners outside of project manager’s organization receiving ENRTF funding**

Consultant TBD.

**B. Partners outside of project manager’s organization NOT receiving ENRTF funding**

Sherburne Soil and Water Conservation District (Sherburne SWCD)

Lake Orono Improvement Association (LOIA)

Lake Orono Water Quality Committee (LOWQC)

## **VII. LONG-TERM- IMPLEMENTATION AND FUNDING:**

A plan was developed by city staff that showed the area and depth over which dredging would be undertaken. This plan generally reflects dredging selected areas of the lake to create a typical water depth of five feet (5'). On average this requires the removal of about two feet (2') of sediment across this area. The plan also included the creation of a deeper water area with depths up to 10 feet near the lake inlet. This would serve to trap and store future sediment that otherwise would be deposited further into the main body of the lake. This deeper area can then be easily dredged in the future, lessening the potential of a larger dredging project area. City staff, LOIA members and the Sherburne SWCD have regularly met 6-8 times over the last year in order to develop an updated Lake Orono Management Plan. The LID is being pursued as a long-term funding source for the lake, since none is currently in place. It is understood that this project will improve the health, navigation and economic vitality of the area.

## **VIII. REPORTING REQUIREMENTS:**

- The project is for three to four years, will begin on November 1, 2018, and end no later than June 30, 2022.
- Periodic project status update reports will be submitted January 1 and July 1 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2022 or sooner if the project is complete.

## **IX. SEE ADDITIONAL WORK PLAN COMPONENTS:**

**A. Budget Spreadsheet**

**B. Visual Component or Map**

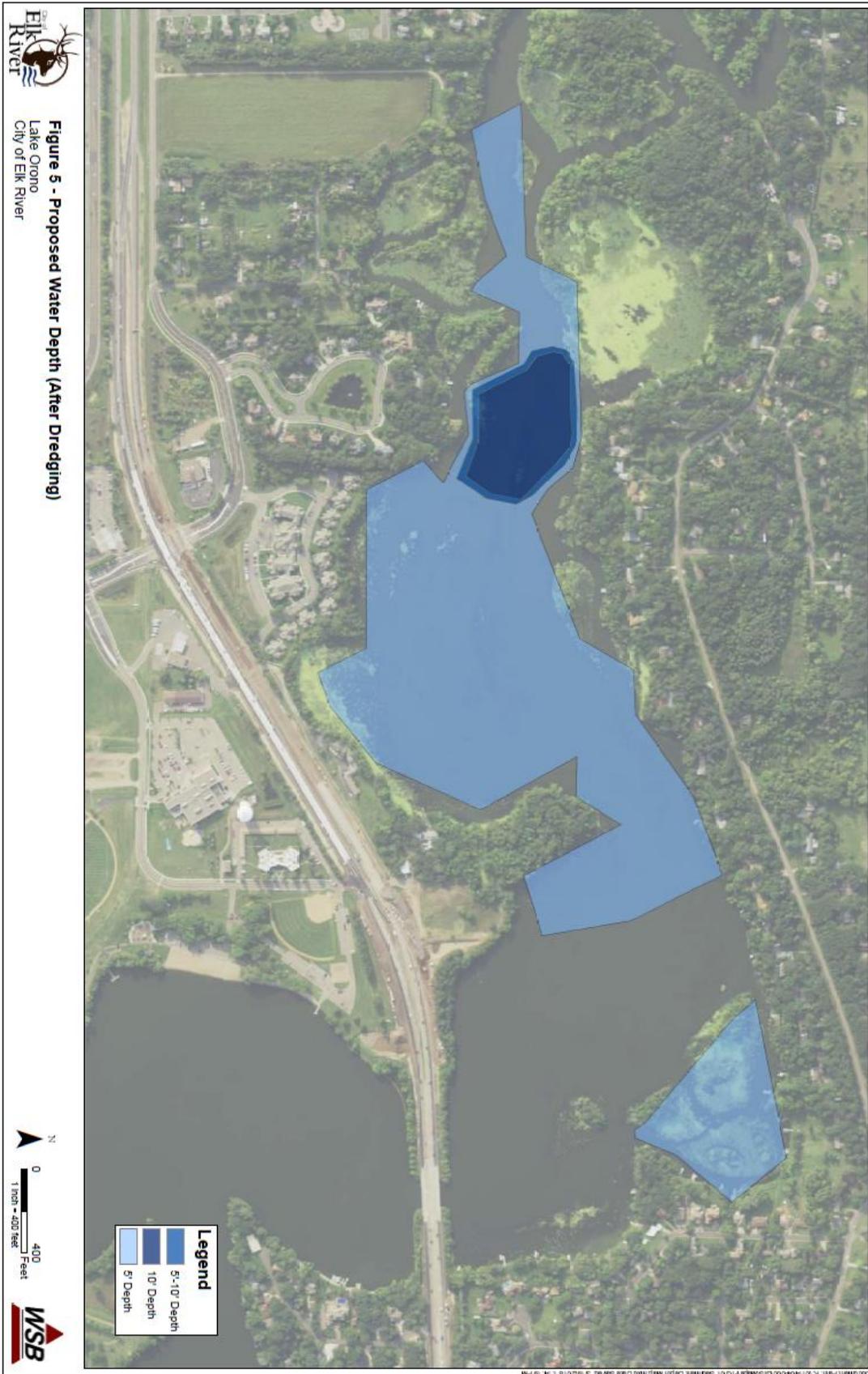
**C. Parcel List Spreadsheet - N/A**

**D. Acquisition, Easements, and Restoration Requirements – N/A**

**E. Research Addendum - N/A**



B. Visual Component or Map (2 of 2)



**Attachment A:  
Environment and Natural Resources Trust Fund  
M.L. 2018 Budget Spreadsheet**



**Legal Citation:** M.L. 2018, Art. 6, Chp. 214, Sec. 4, Subd. 5(2).

**Project Manager:** Brandon Wisner

**Project Title:** Stormwater Coordinator

**Organization:** City of Elk River

**Project Budget:** \$1,500,000

**Project Length and Completion Date:** 2 years, June 2020

**Today's Date:** August 16, 2018

<b>ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET</b>	<b>Budget</b>	<b>Amount Spent</b>	<b>Balance</b>
<b>BUDGET ITEM</b>			
<b>Professional/Technical/Service Contracts</b>			
Review, compile and submit applicable regulatory permitting documents including but not limited to: Environmental Assessment Worksheet, Minnesota Dept. of Natural Resources public waters permit(s), United States Army Corps of Engineers and Minnesota Pollution Control Agency permits.	\$100,000	\$0	\$100,000
		\$0	\$0
<b>Equipment/Tools/Supplies</b>			
		\$0	\$0
		\$0	\$0
<b>Capital Expenditures Over \$5,000</b>			
Final engineering with updated engineer's estimate, updated contract documents, bid documents, legal review and final plans. Construction: lake draw down, excavating to approved depths, hauling and depositing material, wildlife enhancement and final reports as necessary. The state required public agency bidding process will be followed and documentation completed as required (Activity 3).	\$1,400,000	\$0	\$1,400,000
<b>COLUMN TOTAL</b>	<b>\$1,500,000</b>	<b>\$0</b>	<b>\$1,500,000</b>