Lessard-Sams Outdoor Heritage Council

ML 2022 Request for Funding

General Information

Date: 06/04/2021

Proposal Title: East Lake Habitat Improvement Plan

Funds Requested: $480,000

Manager Information

Manager's Name: McKenzie Cafferty
Title: Environmental Resource Manager
Organization: City of Lakeville
Address: 20195 Holyoke Avenue
City: Lakeville, MN 55044
Email: mcafferty@lakevillemn.gov
Office Number: 9529854520
Mobile Number:
Fax Number:
Website: https://lakevillemn.gov/

Location Information

County Location(s): Dakota.

Eco regions in which work will take place:

- Metro / Urban

Activity types:

- Restore

Priority resources addressed by activity:

- Habitat
- Forest

Narrative

Abstract

East Lake is a 44-acre, impaired shallow lake in Lakeville, Minnesota. The lake supports damaging populations of invasive fish (common carp, goldfish) that contribute to the downstream North Creek and Vermillion River

coldwater fisheries. The City of Lakeville, in partnership with Dakota County and the Vermillion River Watershed Joint Powers Organization, proposes a management plan that will reduce the invasive fish populations, improve aquatic vegetation, and restore adjacent shoreline and upland habitat to benefit fish, waterfowl, and other wildlife, and improve the public's recreational experience.

Design and Scope of Work

East Lake is shallow lake impaired for nutrients and infested with common carp and goldfish. The entire shoreline is owned by the City of Lakeville. East Lake Community Park surrounds the lake and provides 110 acres of public recreation space for canoeing, birdwatching, walking, and more. The park is also a trailhead for the North Creek Regional Greenway, a 14-mile trail corridor running from the Minnesota Zoo in Apple Valley to the Vermillion River in Farmington. East Lake flows south into North Creek, a portion of which is coldwater stream in Farmington. North Creek runs approximately four miles from East Lake alongside the North Creek Regional Greenway all the way to its confluence with the Vermillion River, a valued coldwater river in Dakota and Scott Counties that supports a naturally reproducing brown trout fishery.

Habitat for fish, birds, and other waterfowl has been degraded in and around the lake due to an overabundance of aquatic invasive species, including common carp and goldfish, that reduce lake clarity and decrease aquatic vegetation. Vegetation surveys completed in the last ten years found zero submerged aquatic vegetation within the lake. A previous carp study showed annual carp recruitment in East Lake and movement of carp from East Lake downstream to North Creek and the Vermillion River. East Lake Community Park includes forest, a portion of which has been actively managed over the last ten years by the City to establish an oak savanna. The forest and oak savanna continue to have pressure from terrestrial invasive species like buckthorn, requiring continued vegetation management to establish a successful community.

Proposed management activities to improve East Lake habitat include:

- Installation of a low-voltage electric fish barrier in the East Lake outlet channel, above the confluence with North Creek, to prevent fish migration both to and from the lake
- Forest and oak savanna improvements within East Lake Community Park
- Invasive species control and removals (carp, goldfish)
- Lake shoreline restoration
- Establishment of an aquatic plant community
- Fish stocking of desirable top predator species to establish a balanced and ecological sustainable fishery that also provides opportunities for recreation

This proposal will result in the restoration of 44 acres of shallow lake habitat within East Lake by controlling invasive fish species and improving aquatic vegetation communities, restoration of 1,600 feet of shoreline habitat, and improvement of 18 acres of surrounding upland forest and oak savanna habitat. Reducing the invasive fish population, completing restoration of the lake shoreline, establishing a currently absent aquatic plant community, and upland habitat improvements will result in higher quality lake habitat for fish, waterfowl, and other wildlife. The improved lake habitat will support fish such as northern pike, largemouth bass, and bluegill that rely on aquatic vegetation. Improved habitat will provide better opportunities for people to enjoy the lake, while also removing a source of invasive fish that are contributing to the impairment of the coldwater fish communities in North Creek and the Vermillion River.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species?

The rusty patched bumblebee, Minnesota's state bee, is a federally endangered species that can be spotted in woodlands, grasslands, and prairies in the Twin Cities metro area. East Lake Community Park is within an area of the United States Fish and Wildlife Service's first tier priority zone for habitat improvements for the rusty patched bumblebee. The continued improvement of forest, oak savanna, and shoreline vegetation areas within East Lake Community Park will provide prime pollinator habitat for the endangered species. Rusty patched bees typically forage within 0.6 miles of their nest. The habitat improvements in East Lake Community Park will provide protected nesting and foraging habitat for the bee as well as a connection to the natural habitat along the North Creek Regional Greenway corridor.

The Blanding's turtle is a state-threatened turtle species that prefers marsh and wetland habitats with abundant vegetation. The species requires both aquatic and upland habitat to complete its life cycle. East Lake, because of its location in a corridor of other small wetlands and creeks and proximity to protected upland habitat (East Lake Community Park), is critical habitat for the Blanding's turtle. Improving aquatic and upland habitat in and near the lake will provide better habitat for the threatened turtle.

What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible?

The City has been conducting assessment and management efforts within East Lake and East Lake Community Park for over ten years. A carp study completed in 2018 showed carp recruitment in East Lake and movement of carp from East Lake to North Creek and the Vermillion River. Following the study, the City completed a feasibility assessment in 2020 to explore action items to prevent the spread of invasive carp from East Lake. The assessment identified an electric fish barrier above the confluence of East Lake's tributary and North Creek as the best option. Immediate installation of the fish barrier is needed to protect North Creek and Vermillion River from long-term damage from invasive fish species.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

Over ten years of robust, scientific-based targeting has been completed by the City of Lakeville to understand East Lake and inform this habitat improvement plan. Aquatic vegetation and fish community surveys were completed by the City from 2012 to 2017. Results of the studies showed an absent aquatic vegetation community and a damaging fish community (common carp, goldfish). A targeted carp study was completed in 2018 to better understand carp recruitment and movement in and out of the lake. In 2021, the City completed an upland habitat assessment and identified needs to continue restoring a portion of East Lake Community park to forest and oak savanna habitat.

East Lake Park is a trailhead along the North Creek Regional Greenway. A component of Dakota County's Greenway initiative is to provide "hubs" of critical habitat within the county and connect them via corridors of trails and protected areas. As part of an existing Greenway habitat hub, East Lake is directly connected via corridors to downstream habitat along North Creek and the Vermillion River. Improvements to East Lake leverage this already existing corridor and will have direct, positive impacts on habitat and wildlife within the hub and its connections. Additionally, the Minnesota County Biological Survey identified a 64-acre area of moderate biodiversity significance just 1.2 miles downstream of East Lake. The area encompasses part of North Creek and the North Creek Regional Greenway. Installation of a fish barrier above North Creek will protect this 64-acre area of biodiversity significance from long-term damage from carp and goldfish.

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

- H4 Restore and protect shallow lakes
- H6 Protect and restore critical in-water habitat of lakes and streams

Which two other plans are addressed in this proposal?

- Long Range Plan for Fisheries Management
- Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife

Describe how your program will advance the indicators identified in the plans selected:

Long Range Plan for Fisheries Management: This project will increase both game fish abundance and angler satisfaction, both indicators listed in the Long Range Plan. Through removal and installation of the carp barrier, common carp and goldfish populations in East Lake will be drastically reduced. Removing carp and goldfish will restore water clarity and aquatic vegetation, increasing habitat for desirable gamefish species. Following the removals, fish stocking of desirable game fish such as bass, bluegill, and pike will support increased game fish abundance and likelihood of angler satisfaction.

Managing Minnesota's Lakes for Waterfowl and Wildlife: This project increases waterflow and wildlife habitat in East Lake. Management of invasive carp and goldfish will eliminate their negative impact on wildlife habitat. East Lake is situated in a corridor along the North Creek Greenway. Restoration of East Lake and the adjacent upland habitat will improve food sources, habitat, and connectivity for waterfowl.

Which LSOHC section priorities are addressed in this proposal?

Metro / Urban

- Protect, enhance, and restore riparian and littoral habitats on lakes to benefit game and nongame fish species

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

The project will demonstrate a significant and permanent improvement to the riparian and shallow lake habitat of East Lake and adjacent forest oak and savanna upland area within East Lake Community Park. A previous carp study on East Lake showed a carp community with significant annual recruitment within the lake, and a fish biomass well above levels at which lake habitat is degraded. The installation of the fish barrier and the targeted fish removals will eliminate a source of annual recruitment for these species and provide long-term protection from invasive species within the Vermillion River watershed. Without the benthic feeding habits of common carp disturbing lake sediments and aquatic vegetation, in-lake habitat within East Lake will significantly improve. An improvement in riparian and aquatic vegetation will support the survival of game and non-game fish and waterfowl. The Minnesota DNR has expressed support for the project and for designating East Lake as a Fishing in the Neighborhood (FiN) lake. With the long-term support of the DNR, the City of Lakeville will maintain a lake managed for a healthy and desirable fish community containing game and non-game fish. The adjacent forest and oak savanna habitat in the park has been managed by the City for the last 10+ years and will continue to be a priority. The improvement of the forest and oak savanna community will directly benefit critical priority species such as the rusty patched bumblebee and Blanding's turtle and establish a key habitat area along the Regional Greenway.

What other fund may contribute to this proposal?

- Environmental and Natural Resource Trust Fund

Does this proposal include leveraged funding?

Yes

Explain the leverage:

Management of East Lake is a priority for the City, as it is a key recreation area along Dakota County's Regional Greenway trail system and connects to a prized resource, the Vermillion River. The City has been contributing funds from their annual budget for the past 10 years for management of areas within East Lake Community Park and to conduct assessments of the fish and vegetation community within the lake. Upland management of forest and prairie in East Lake Community Park is being funded by the City. The City will continue funding upland management for the next ten years through 2032, reducing the total funds needed from LSOHF. Long-term management of carp and habitat in East Lake will require coordination among the City of Lakeville and their partners (Vermillion River Watershed Joint Powers Organization, Dakota County, and the Minnesota Dept. of Natural Resources). The City and partners will work together to:

- Operate and maintain the low-voltage, electric barrier ($5,000 per year for annual operation, $15,000 one-time every five years for replacement of parts)
- Continue to conduct surveys of East Lake vegetation and fish communities ($5,000 - $10,000 per year for surveys)
- Continue to improve the upland forest and oak savanna habitat, as well as the restored shoreline area ($12,500 per year)
- Continue to perform fish removals, aquatic plant management, fish stocking as needed in the future to maintain the established in-lake conditions

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

There have been no legacy funds used by the City for the management of East Lake and East Lake Community Park. The requested funds will be used to complete critical improvement activities that have been identified by the City and VRWJPO.

Non-OHF Appropriations

Year	Source	Amount
2016	City of Lakeville Environmental Resources Fee	$9,825
2017	City of Lakeville Environmental Resources Fee	$12,100
2018	City of Lakeville Environmental Resources Fee	$29,723
2019	City of Lakeville Environmental Resources Fee	$23,504
2020	City of Lakeville Environmental Resources Fee	$19,860

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

The City of Lakeville dedicates a portion of their annual budget for the improvement and maintenance of City lakes and natural areas. As described above, the City will also continue annual management of the restored shoreline and upland habitats. If installed, the City will cover the cost for the continued operation and ongoing maintenance of the installed fish barrier. If supplemental management activities such as fish removals, additional fish stockings, or

aquatic vegetation management is needed, the City will fund these activities.

The City will work closely with the Vermillion River Watershed Joint Powers Organization (VRWJPO), Dakota County, and the Minnesota DNR to maintain the ongoing project. The DNR has expressed support for East Lake habitat improvements and will assist with fish stocking and fish management in the future through their FiN program. VRWJPO and Dakota County have also expressed their support for the project.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2022 and beyond	City of Lakeville Environmental Resources Fee	Maintain electric fish barrier	Monitor fish and aquatic vegetation communities	Perform additional fish removals, aquatic plant management, and fish stocking as needed
2022 and beyond	City of Lakeville Environmental Resources Fee	Continue to improve upland and shoreline habitat	-	-

Identify indicator species and associated quantities this habitat will typically support:

Common carp: The fish barrier and rough fish removals will result in declines in the carp population, with a target of less than 100 kilograms of carp per hectare, the threshold at which carp become damaging to lake ecosystems.
Aquatic vegetation: The shallow lake habitat of East Lake would typically support native submerged and emergent aquatic plants. Native plants found previously but not consistently in the lake include stringy pondweed, sago pondweed, smartweed, and coontail. Management of East Lake will support anywhere from 25-50% cover by aquatic vegetation, providing key habitat to waterfowl, fish, and other notable species like the Blanding's turtle.
Fish: Following invasive fish management, populations and communities of desirable game fish will be improved through target stocking efforts. Indicator species will include northern pike, bluegill, black crappie, and largemouth bass. Fish stocking amounts and frequency will be directed by the DNR.
Trees: Management of the upland oak savanna includes red oak, bur oak, and white oak . The target oak density for oak savanna habitat is 12 trees or less per acre for trees greater than 6 inches in diameter.

How will the program directly involve, engage, and benefit BIPOC (Black, Indigenous, People of Color) and diverse communities:

The majority of Lakeville residents are white and non-Latinx (83.4%) and the remaining 16.6% of residents are BIPOC. The City is dedicated to maintaining a family-oriented community with a small-town atmosphere and considers diversity a key component to achieving goals. Providing enjoyable recreational activities such as parks and fishing access are essential opportunities to involve residents in their community and are open for public access to all members of the community.

East Lake is part of the Citizen-Assisted Monitoring Program (CAMP). The program is a partnership provided by Metropolitan Council to collect and analyze scientifically valid water quality data from lakes in the seven-county Twin Cities area. Organizations and residents use the data to make better decisions about lake management. In the past, East Lake has been part of the Wetland Health Evaluation Program (WHEP). WHEP engages citizens to take part in wetland monitoring in their community. East Lake was a WHEP site and is currently a CAMP site. The Vermillion Stewards program, conducted by the VRWJPO and Friends of the Mississippi River, works with citizens to participate in stewardship activities within the Vermillion River Watershed. An annual work plan of stewardship activities may provide opportunities for citizens to perform stewardship activities at East Lake.

Activity Details

Requirements

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056?
Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?
Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15?
Yes

Where does the activity take place?

- County/Municipal
- Public Waters

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?
No

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC?
No

Timeline

Activity Name	Estimated Completion Date
Install low-voltage electric fish barrier in North Creek	December 2022
Rough fish removals on East Lake using standard netting methods	December 2025
Stocking of desirable game and non-game fish species in East Lake	September 2026
Management of upland forest and oak savanna in East Lake Park	September 2026
Aquatic plant establishment in East Lake	September 2025
Shoreline restoration along northern portion of East Lake	November 2026
Evaluation and effectiveness monitoring	Ongoing - City of Lakeville

Budget

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	$50,000	-	$50,000
Contracts	$250,000	$75,000	City of Lakeville Environmental Resources Fee	$325,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	$75,000	$25,000	City of Lakeville Environmental Resources Fee	$100,000
Direct Support Services	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	$155,000	-	-	$155,000
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	**$480,000**	**$150,000**	**-**	**$630,000**

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Environmental Resources Specialist	0.05	5.0	0	$50,000	City of Lakeville Environmental Resources Fee	$50,000

Capital Equipment

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Low-voltage electric fish barrier	$155,000	-	-	$155,000

Amount of Request: $480,000
Amount of Leverage: $150,000
Leverage as a percent of the Request: 31.25%
DSS + Personnel: -
As a % of the total request: 0.0%
Easement Stewardship: -
As a % of the Easement Acquisition: -

Describe and explain leverage source and confirmation of funds:
Leverage funds come from the City of Lakeville Environmental Resource Fee budget. The City has used a portion of the Environmental Resource Fee budget in the past to fund work on East Lake and will continue to do so over the term of the project and beyond.

Does this proposal have the ability to be scalable?
No

Please explain why this project can NOT be scaled:
This project is not scalable and the full requested $480,000 is needed to achieve the goal of improved lake, shoreline, and upland habitat improvements.

Contracts

What is included in the contracts line?
Contract budget accounts for:

- Invasive fish removals
- Supplemental fish stocking
- Lake shoreline improvements
- Forest management (invasive removals and management)
- Oak savanna management (seeding and burning)
- Aquatic vegetation establishment

Federal Funds

Do you anticipate federal funds as a match for this program?
No

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	18	46	64
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	0	0	0
Total	**0**	**0**	**18**	**46**	**64**

How many of these Prairie acres are Native Prairie? (Table 1b)

Type	Native Prairie (acres)
Restore	18
Protect in Fee with State PILT Liability	0
Protect in Fee w/o State PILT Liability	0
Protect in Easement	0
Enhance	0
Total	**18**

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	$140,000	$340,000	$480,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-
Total	**-**	**-**	**$140,000**	**$340,000**	**$480,000**

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	64	0	0	0	0	64
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	0	0	0	0	0	0
Total	**64**	**0**	**0**	**0**	**0**	**64**

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	$480,000	-	-	-	-	$480,000
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	-	-	-
Total	**$480,000**	**-**	**-**	**-**	**-**	**$480,000**

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	$7,777	$7,391

Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	$7,500	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	-	-

Target Lake/Stream/River Feet or Miles

Outcomes

Programs in metropolitan urbanizing region:

- Improved aquatic habitat indicators ~ *Carp population surveys and fish surveys using appropriate methods will be used to collect data on the fish community. The DNR's fish management goals will be used to evaluate the health of the fish community. Submerged aquatic vegetation (SAV) surveys using standard DNR methods will be used to assess the vegetation community. SAV metrics such as floristic quality index and species richness will be used to evaluate improvements. Fish and SAV survey data will be compared to historic East Lake data to assess changes to the communities. Oak tree density will be used to assess the oak savanna.*

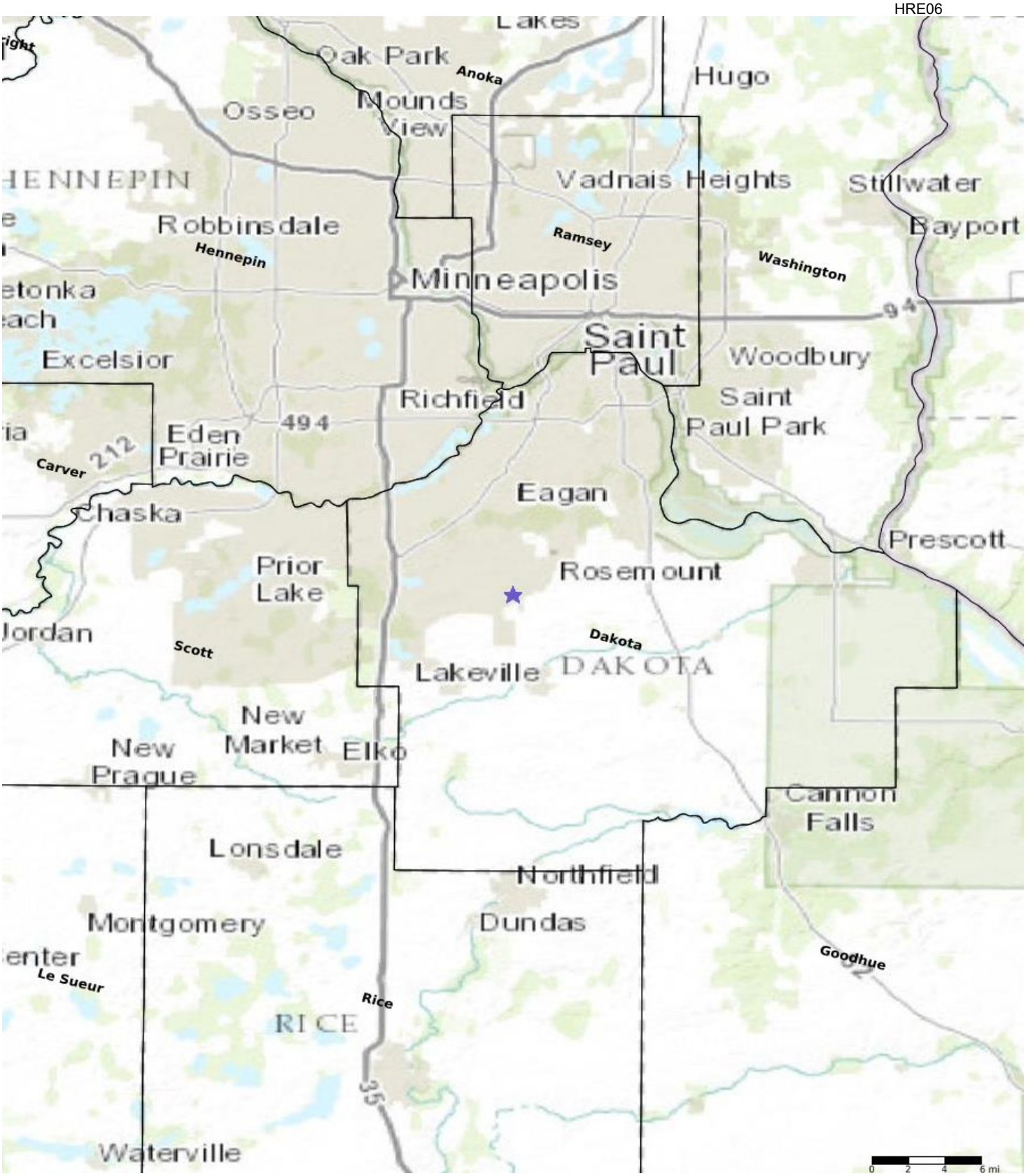
Parcels

Sign-up Criteria?
No

Explain the process used to identify, prioritize, and select the parcels on your list:
Parcels listed below are already City-owned property and encompass the project area (East Lake, East Lake Park, identified fish barrier location).

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
224705000010	Dakota	11420201	13	-	Yes
227130000024	Dakota	11420201	9	-	Yes
227130000119	Dakota	11420201	8	-	Yes
227130000121	Dakota	11420201	9	-	Yes
227130000122	Dakota	11420201	4	-	Yes
227130000123	Dakota	11420201	2	-	Yes
227130000124	Dakota	11420201	1	-	Yes
227130100080	Dakota	11420201	1	-	Yes
227130100090	Dakota	11420201	8	-	Yes
227130100130	Dakota	11420201	3	-	Yes
227131100020	Dakota	11420201	1	-	Yes
227132100080	Dakota	11420201	5	-	Yes
227134000030	Dakota	11420201	6	-	Yes
220010051010	Dakota	11420201	39	-	Yes



Protect in Easement
Protect in Fee with PILT
Protect in Fee W/O PILT
Restore
Enhance
Other

Parcel Map
East Lake Habitat Improvement Plan
(Data Generated From Parcel List)

East Lake

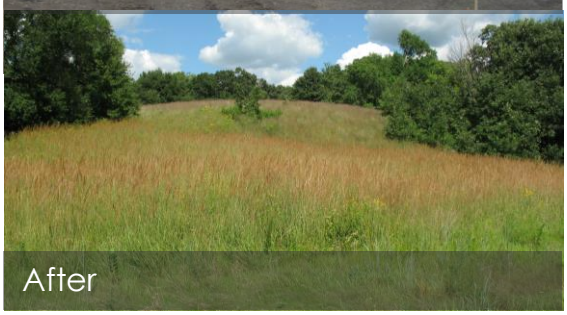
East Lake is a 44-acre shallow lake in Lakeville, MN. The lake is impaired for nutrients and infested with invasive species (common carp, goldfish), resulting in poor habitat for desirable fish, waterfowl, and other wildlife and few recreation opportunities. The lake is adjacent to a city park, East Lake Community Park, that contains natural habitat like prairie, woodland, and wetlands that are managed to provide increased habitat for local wildlife, such as the federally endangered rusty patched bumblebee and state-threatened Blanding's turtle.

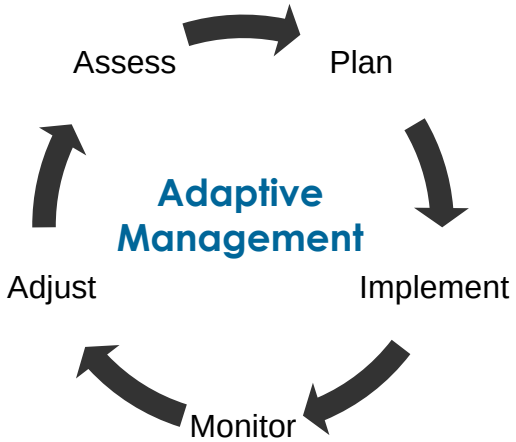
East Lake Habitat Improvement Plan

Previous Work

Work has already been done to identify problems and improve habitat in and around East Lake. A 2018 carp study showed a carp community with significant annual recruitment in East Lake and a damaging amount of carp biomass. The installation of a low-voltage electric fish barrier will prevent carp and goldfish recruitment in the lake and protect the downstream North Creek and Vermillion River from the invasive species. Fewer invasive fish mean improved water clarity, more aquatic vegetation, and improved habitat for fish and wildlife.

The City has spent 10+ years managing the adjacent park to improve forest and establish oak savanna habitat. Actions have included reducing invasive species, seeding native plants, planting trees, controlled burns, and goat management. Work will continue to maintain the oak savanna.

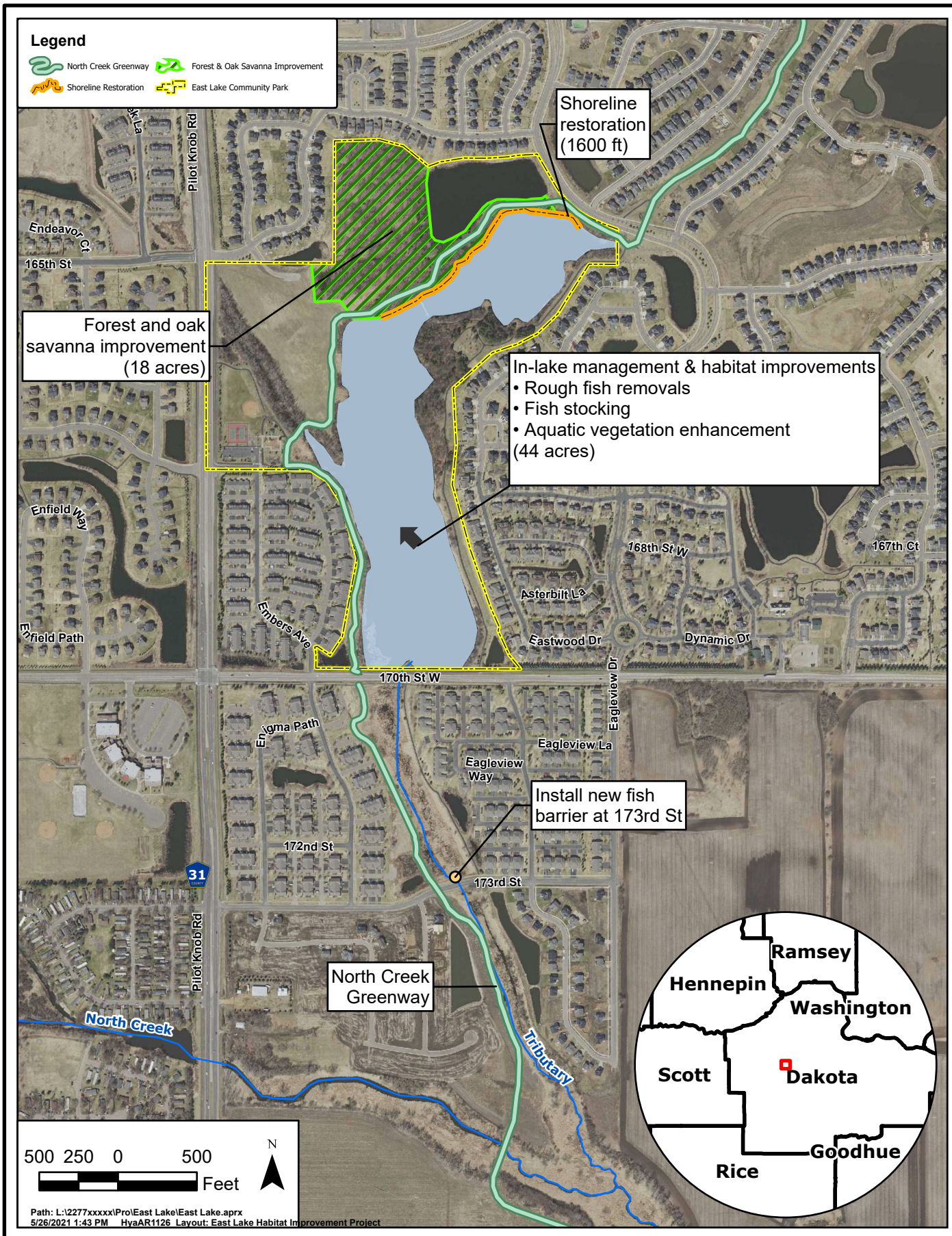




The Plan

From 2020-2027, the City of Lakeville will use an adaptive management strategy to improve 44 acres of lake habitat, 1,600 feet of shoreline, and 18 acres of upland park habitat. Actions include:

- ► Installation of a low-voltage fish barrier (2022)
- ► Improvement of the adjacent forest and establishment of an oak savanna (2022-2026)
- ► Invasive fish removals using modern netting techniques (2023-2025)
- ► Lake shoreline restoration along the northern portion of East Lake (2023-2024)
- ► Fish stocking with desirable fish species (2024-2026)
- ► Aquatic vegetation establishment (2024-2026)



CITY OF LAKEVILLE

East Lake Habitat Improvement Project

WENCK now part of Stantec

MAY 2021

Figure 1

May 18, 2021

Mark Johnson, Executive Director
Lessard-Sams Outdoor Heritage Council
100 Rev. Dr. Martin Luther King Jr. Blvd.
State Office Building, Room 95
St. Paul, MN 55155

Dear Mark:

The City of Lakeville is requesting a FY22 Outdoor Heritage grant related to improving the habitat and fishery in and around East Lake. The proposed improvements include:

- Low voltage fish barrier between North Creek and East Lake to prevent rough/invasive fish (primarily carp and goldfish) from entering the lake
- Removal of rough/invasive fish from East Lake
- Restoration of upland vegetation in areas adjacent to the lake
- Seeding and installing native, submergent species "plugs" in and around the lake

The City and partners are also considering fish cribs for additional, in-lake habitat, fish stocking, lake aeration, and alum treatment(s) in a comprehensive approach to improving aquatic habitat.

This project compliments past and continued County habitat investments in this area of the City, and aligns with numerous adopted Dakota County Strategic Plans, including the Land Conservation (2020), Natural Resource Management Systems (2017) and Aquatic Invasive Species (2020) plans.

In 2005, the County provided $690,000 to the City of Lakeville to protect 12 acres of forest and shoreland with a natural area conservation easement as part of a future community park adjacent to East Lake. The County developed a Natural Resource Management Plan (NRMP) for these twelve acres, which would later become a 75-acre community park. The project area is located within the approved North Creek Regional Greenway. A Request For Proposal was recently issued by the County Parks Department for completing a NRMP for this 14-mile greenway segment, including East Lake. Finally, Dakota County provides staff resources to the Vermillion River Watershed Joint Powers Organization (VRWJPO). These staff have worked closely with the City of Lakeville to identify the most cost-effective, integrated approach to achieving both habitat and water quality improvements in East Lake.

Environmental Resources

P 952-891-7000 F 952-891-7588 W www.dakotacounty.us
A Dakota County Western Service Center • 14955 Galaxie Ave. • Apple Valley • MN 55124

Due to the many potential benefits of this project, and its' close alignment to many current Dakota County initiatives, Dakota County staff encourage you to favorably consider funding this proposal.

Sincerely,

Georg T. Fischer,
Environmental Resources Director

CC. City of Lakeville

Environmental Resources

P 952-891-7000 F 952-891-7588 W www.dakotacounty.us
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May 15, 2021

Mac Cafferty
Environmental Resources Manager
City of Lakeville
20195 Holyoke Avenue
Lakeville, MN 55044

RE: Letter of Support for East Lake Habitat LSOHC Grant Application

Dear Mr. Cafferty,

The Vermillion River Watershed Joint Powers Organization (VRWJPO) has been partnering with the City for a number of years on improvements in and around East Lake. The VRWJPO appreciates a comprehensive approach to habitat improvements of East Lake and the directly adjacent North Creek Greenway.

The VRWJPO supports the proposed Lessard-Sams Outdoor Heritage Council (LSOHC) grant application for the following reasons:

- East Lake's fishery is currently dominated by carp and goldish and we'd like to see those species reduced or eliminated by installing a fish barrier between East Lake and North Creek
- Removal of rough fish and invasive fish species will result in increases in long-term increases in the quantity of aquatic vegetation and habitats
- Since all land around East Lake is publicly owned and accessible, habitat improvements around East Lake will result in better wildlife habitat and an improved experience for recreational users.

Thank you for pursuing the LSOHC application for East Lake habitat improvements and the opportunity to provide support.

Regards,

VRWJPO Senior Watershed Specialist

DEPARTMENT OF NATURAL RESOURCES

1200 Warner Road
St. Paul, MN 55106
651-259-5770

May 19, 2021

Mac Cafferty
Environmental Resources Manager
20195 Holyoke Avenue
Lakeville, MN 55044

East Lake aquatic habitat improvement project

Dear Mr. Cafferty-

The Minnesota Department of Natural Resources (MNDNR) – Fisheries Division would like to express support for the City of Lakeville's LSOHC grant submittal to improve upland and aquatic habitat in and around East Lake. These improvements include:

- Low voltage fish barrier between East Lake and North Creek
- Rough fish/invasive fish (primarily carp and goldfish) removals from East Lake
- Upland vegetation management of areas directly surrounding the lake
- Submersed and emergent vegetation seeding/plugs around and in the lake

The improvements will improve clarity and improve fish habitat on a lake within a city park. With these improvements, the DNR hopes to support the city through our Fishing in the Neighborhood (FiN) program that will assist with fishing access, stocking, and overall fish management. The FiN program is aimed at increasing angling opportunities, public awareness and environmental stewardship within the seven-county metro region. As areas become more urbanized, there is a growing need for easily accessible fishing opportunities close to where people live. East Lake would provide an opportunity in an urban setting.

The City of Lakeville's grant submittal demonstrates their commitment to clean water and enhancing public fishing opportunities in an urban setting.

Sincerely,

TJ DeBates
East Metro Area Fisheries Supervisor