Lessard-Sams Outdoor Heritage Council

Talcot Lake

ML 2026 Request for Funding

General Information

Date: 06/26/2025

Proposal Title: Talcot Lake

Funds Requested: $7,590,000

Confirmed Leverage Funds: -

Is this proposal Scalable?: Yes

Manager Information

Manager's Name: Ricky LIen
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Location Information

County Location(s): Cottonwood.

Eco regions in which work will take place:

Prairie

Activity types:

Enhance

Priority resources addressed by activity:

Wetlands

Narrative

Abstract

The Talcot Lake dam was built in 1936 by the Works Progress Administration creating the 996-acre lake. The structure is nonfunctional and needs to be replaced. This renovation project will include partial channel restoration, dam modification to include a rock riffle fish passage, and a variable crest water control component to retain water level management capabilities. Restoring water level management capabilities is important because Talcot Lake is completely within Talcot Lake Wildlife Management Area (WMA) and managed for fish and wildlife habitat. A consulting engineering firm will be obtained to survey, design, and provide construction oversight.

Design and Scope of Work

Talcot Lake is located within the Talcot WMA in Cottonwood County and covers 996 acres. It is managed for fish and wildlife habitat. Talcot Lake was first established as a National Wildlife Refuge. The original Talcot Lake dam was built in 1936. This dam consisted of a 250-long clay-cored dike and 175-foot concrete weir with a 16-foot radial arm gate for water level management. In 2007, the radial arm gate failed and was replaced with stop logs. The 24 steel stop logs ended up being welded together in sets of 4, filled with concrete, and reinforced with steel braces because of high water flow at the outlet. These modifications made the stop logs largely unusable for water level management. Multiple sandbagging efforts to reinforce the dam have occurred during high water years since 1990. There has been a fish barrier component of the dam for most of its 90 years. This fish barrier significantly restricted upstream movement of fish and other wildlife, but has not been functional since 2011.

The project will include renovations and/ enhancements to manmade structures that will restore connectivity and hydrology to Talcot Lake, as well as several minor watersheds within the headwaters of the Des Moines River. An improved water control structure will restore the ability to manage water levels for fish and wildlife habitat in Talcot Lake. Resources Managers wish retain water management capabilities in Talcot Lake. This could include replacing the existing stop-log bay component in the outlet weir or building a secondary water control structure in a strategic location that would only be used for implementing water level drawdowns. Determination of the preferred water control structure option would be based on engineering consultation. The improved water control structure also will allow resource managers to implement temporary water level drawdowns to improve fish and wildlife habitat, as well as maintain the appropriate pool elevation in Talcot Lake. Water level drawdowns are used to decrease the abundance of rough fish species (e.g., common carp and fathead minnows). Fewer rough fish in a basin often results in better water clarity and increased aquatic vegetation growth, which provides aquatic organisms with higher quality habitat.

A rock riffle component will help restore fish passage to part of the Des Moines River and could be used to replace all or part of the existing fixed crest weir. The existing dam has created a barrier to desirable native fish species and other aquatic organisms by preventing them from making necessary life stage migrations in and out of Talcot Lake. This project should increase the abundance of these native species by providing them with more access to the basin and other parts of the watershed through the rock riffle component.

Additionally, the improvements to the outlet of Talcot Lake will help protect and restore the stream bank, which will mitigate scouring and the impacts of flooding to the area.

A JPA will be developed with the Cottonwood County SWCD to allow them to implement portions of this project.

Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation

Talcot Lake is located at the bottom of a large watershed (331,408 acres). The existing infrastructure has been in place for almost 90 years and there has been a fish barrier component of the dam for most of that time. This fish barrier has significantly restricted upstream movement of fish and other aquatic wildlife. Enhancing the current infrastructure at the outlet of Talcot Lake will help improve connectivity in 42 minor watersheds, including several branches of the Beaver Creek Watershed (50,683 acres), three branches of the Lime Creek Watershed (39,018 acres), the Lake Shetek Watershed (21,416 acres), and the Talcot Lake Watershed (7,297 acres). The impacts of this project will be on a very large scale and result in reconnecting areas not otherwise accessible to aquatic fish and wildlife. Renovating the dam to include a rock riffle component will help restore the connection to other parts of the watershed for these species. It is important to note that several of these aquatic organisms are considered threatened or species of special concern in Minnesota - black sandshell mussels (special concern status), Blanding's turtles (threatened status), mucket mussels (threatened status), round pig toe mussels (special concern status), and spike mussels (threatened status). There also are numerous native fish and aquatic wildlife species throughout the watershed that will benefit from restoring this connection. In addition to the benefits provided by the rock riffle component of this project, water level management opportunities provided by a functional control structure will allow resource managers to implement temporary drawdowns to improve fish and wildlife habitat and maintain the appropriate pool elevation in Talcot Lake. Water level drawdowns are used to decrease the abundance of rough fish species (e.g., common carp and fathead minnows). Fewer rough fish in a basin often results in better water clarity and increased aquatic vegetation growth, which provides aquatic organisms with higher quality habitat. Migratory waterfowl and shallow lake dependent species will benefit from these habitat improvements.

What are the elements of this proposal that are critical from a timing perspective?

The existing infrastructure at Talcot Lake was built in 1936 and is nonfunctional in terms of water level management, which is needed to provide quality waterfowl and wetland wildlife habitat. As an indicator of its dilapidated state, multiple sandbagging efforts to reinforce the dam have occurred during high water years since 1990.

Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:

The project will include renovation and/or enhancements to manmade structures to help restore some connectivity and hydrology to Talcot Lake, as well as several minor watersheds within the headwaters of the Des Moines River.The Headwaters of the Des Moines River Watershed (a.k.a. the West Fork of the Des Moines River) is around 798,627 acres. The portion of the watershed that will be impacted by this project is about 331,408 acres. Enhancing the current infrastructure at the outlet of Talcot Lake will help improve connectivity in 42 minor watersheds, including several branches of the Beaver Creek Watershed (50,683 acres), three branches of the Lime Creek Watershed (39,018 acres), the Lake Shetek Watershed (21,416 acres), and the Talcot Lake Watershed (7,297 acres). The impacts of this project will be on a very large scale and result in reconnecting areas not otherwise accessible to aquatic fish and wildlife.

Which top 2 Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

Long Range Duck Recovery Plan

Managing Minnesota's Shallow Lakes for Waterfowl and Wildlife

Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.

Highlighting just how important wetlands are to address climate action, the Global Center on Climate Adaptation noted, "Wetlands capture CO_2 from the atmosphere, making them nature's own solution to the climate emergency. In fact, they store more carbon than any other ecosystem on Earth, and peatlands alone store twice as much as all the world's forests. According to Ramsar's Scientific and Technical Review Panel, wetlands cover only nine percent of the planet's surface, but store up to 35 percent of terrestrial carbon." Additionally, wetlands and shallow lakes provide the ability to hold precipitation and run-off that occur from major storm events that occur more frequently due to climate change.

Which LSOHC section priorities are addressed in this proposal?

Prairie

Protect, restore, and enhance shallow lakes

Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:

First, the proposed project is a well-known Minnesota waterfowl lake, Talcot Lake, and almost 1,000 acres of shallow lake wetland habitat will be enhanced. The area affected by the work will be multiplied because fish passage will be facilitated by a planned rock riffle, which will allow native fish to regain access to a large network of tributaries.

Second, this infrastructure will be worked on by qualified engineers who will design and oversee construction and renovation to achieve long-lasting results. A typical goal is to have constructed water control structures with a life expectancy of last a minimum of 30-40 years. This project will be on public water within State-owned land.

Third, the type of work being done through this proposal, shallow lake enhancement, is key to components of significant conservation plans for Minnesota. Ninety percent of prairie wetlands have been lost and those that remain are often degraded. Key state conservation plans such as Minnesota's Prairie Conservation Plan, Long Range Duck Recovery Plan, Minnesota Duck Action Plan, and Managing Minnesota Shallow Lakes for Waterfowl and Wildlife Plan call for the active management of shallow lakes and the restoration/management of wetlands to Minnesota landscapes.

Outcomes

Programs in prairie region:

Enhanced shallow lake productivity ~ *The Minnesota DNR Shallow Lake Program performs standardized shallow lake assessments to identify those waters needing management and to evaluate the impact of management actions. Standardized assessments measure physical and biological components of a lake and are an accepted means to evaluate the health of shallow lake habitats. A 2023 shallow lake assessment of Talcot Lake confirmed the poor conditions that currently exist. Another shallow lake assessment will be performed post-construction to evaluate expected habitat improvements.*

What other dedicated funds may collaborate with or contribute to this proposal?

N/A

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.

This request is an acceleration of the Minnesota DNR's Section of Wildlife wetland habitat work to a level not attainable but for the appropriation.

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

Qualified engineers will design and oversee construction and renovation of infrastructure to achieve long-lasting results. A typical goal is to have water control structures, dikes and fish barriers last a minimum of 30-40 years. The management of completed infrastructure projects will fall on existing staff of the Department of Natural Resources. Periodic enhancements such as invasive species removal, supplemental vegetation planting, or water control structure installation, maintenance, or replacement, will be accomplished through a variety of annual funding requests. These funding sources include, but are not limited to, the Game and Fish Fund, bonding, gifts, the Environmental and Natural Resources Trust Fund, the Outdoor Heritage Fund, and federal sources such as North American Wetlands Conservation Act grants and Pittman-Robertson funds. Wetland enhancement projects such as cattail control, prescribed burns, invasive fish management and the like are implemented to achieve quality, long-lasting habitat benefits. However, the benefit lifespan may be variable due to conditions imposed by climate, physical factors, etc. Monitoring by area wildlife staff and shallow lakes specialists will ensure that follow-up management is employed as needed.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
After completion of engineered infrastructure	DNR	Qualified engineers conduct warranty inspection of project.	-	-
1-year post-completion of engineered infrastructure	DNR	Shallow Lakes Program and Area Wildlife/Fisheries staff evaluate management effectiveness.	-	-

Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:

DNR's OHF projects aim to serve all Minnesotans. At the same time, we are bringing more focus in all our work to BIPOC and diverse communities. The Minnesota DNR has adopted advancing diversity, equity and inclusion (DEI) as a key priority in its 2020-22 strategic plan. The plan focuses on increasing the cultural competence of our staff, creating a workforce that is reflective of Minnesota, continuing to strengthen tribal consultation and building partnerships with diverse communities.

OHF funds high quality habitat projects that provide ecosystem services like clean water and carbon sequestration that support environmental justice. OHF funding also supports public access and recreational opportunities on these lands. OHF projects and outcomes benefit BIPOC and diverse communities through recreational opportunities that are close-to-home, culturally responsive and accessible to Minnesotans with disabilities.

The DNR has diversity, equity and inclusion strategies that benefit all OHF projects:

- Multilingual and culturally specific hunting and fishing education programs take place on public lands.
- All hiring is equal opportunity, affirmative action, and veteran-friendly. Contracting seeks out Targeted Group, Economically Disadvantaged and Veteran-Owned businesses.
- Public engagement seeks out BIPOC voices and involves diverse communities. Outreach and marketing of projects has this focus as well.
- Partnerships are at the center of all projects. Tribes in particular are consulted in all pertinent areas of the DNR's work, under EO 19-24.

Activity Details

Requirements

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 or on lands to be acquired in this program?
Yes

Where does the activity take place?

WMA

Public Waters

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program, either by the proposer or the end owner of the property, outside of the initial restoration of the land?
No

Will insecticides or fungicides (including neonicotinoid and fungicide treated seed) be used within any activities of this proposal either in the process of restoration or use as food plots?
No

Other OHF Appropriation Awards

Have you received OHF dollars through LSOHC in the past?
Yes

Are any of these past appropriations still OPEN?
Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2024	$3,136,000	$93,100	$3,042,900	2.97%
2023	$3,695,000	$1,372,800	$2,322,200	37.15%
2022	$2,301,000	$1,069,600	$1,231,400	46.48%
2021	$2,589,000	$1,689,300	$899,700	65.25%
2020	$1,676,000	$1,086,300	$589,700	64.82%
2019	$845,000	$373,500	$471,500	44.2%
Totals	$14,242,000	$5,684,600	$8,557,400	39.91%

Timeline

Activity Name	Estimated Completion Date
Engineering survey and design	June 2027
Water control structure, rock rifrfle, outlet work completed	August 2029

Budget

Totals

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	-	-	-	-
Contracts	$6,500,000	-	-	$6,500,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	$1,000,000	-	-	$1,000,000
Direct Support Services	$90,000	-	-	$90,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	**$7,590,000**	**-**	**-**	**$7,590,000**

Amount of Request: $7,590,000
Amount of Leverage: -
Leverage as a percent of the Request: 0.0%
DSS + Personnel: $90,000
As a % of the total request: 1.19%
Easement Stewardship: -
As a % of the Easement Acquisition: -

Does this proposal have the ability to be scalable?
Yes

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?
Scalability could be achieved if enough funding ($1 million) is awarded to move ahead with engineering. A subsequent request would be made to move ahead with construction. Obviously, it would be easier to do all this in one appropriation.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?
No personnel funding is requested. DSS would be determined for the awarded amount based on the DNR formula that takes into account the amount of funding received and what it is being used for.

If the project received 30% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?
30% of funding would allow engineering to move ahead. Construction could not move forward as it would not be adequate for all anticipated construction, as all construction would need to occur at the same time.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?
No personnel funding is requested. DSS would be determined for the awarded amount based on the DNR formula that takes into account the amount of funding received and what it is being used for.

Contracts

What is included in the contracts line?
Contract expenses would include work related to hiring a contractor to build a water control structure, place a rock riffle, and channel modification.

Professional Services

What is included in the Professional Services line?

Design/Engineering

Other : Construction management

Surveys

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?
Direct Support Services is determined by a standard DNR process taking into account the amount of funding and the number of allocations made with that funding.

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	0	0	0
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	996	0	0	0	996
Total	**996**	**0**	**0**	**0**	**996**

Restoration/Enhancement Acres Breakdown of Existing Protected Lands (Table 1a.2)

	RESTORE		ENHANCE	
	Lands acquired with OHF	Lands NOT acquired with OHF	Lands acquired with OHF	Lands NOT acquired with OHF
DNR Lands (WMA, State Forests, etc)	-	-	0	996
Non-DNR Lands (city, state, federal, etc.)	-	-	-	-
Easements	-	-	-	-
Total	**-**	**-**	**0**	**996**

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	$7,590,000	-	-	-	$7,590,000
Total	**$7,590,000**	**-**	**-**	**-**	**$7,590,000**

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	0	0	0
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	996	0	996
Total	**0**	**0**	**0**	**996**	**0**	**996**

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	-	-	-	$7,590,000	-	$7,590,000
Total	**-**	**-**	**-**	**$7,590,000**	**-**	**$7,590,000**

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	$7,620	-	-	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	-	$7,620	-

Target Lake/Stream/River Feet or Miles

Parcels

Sign-up Criteria?
No

Explain the process used to identify, prioritize, and select the parcels on your list:
Minnesota DNR Shallow Lakes staff and Area Wildlife and Fisheries staff, Cottonwood County officials, and Cottonwood County Soil and Water Conservation District have long known of issues at Talcot Lake that are the result of an extremely old and non-functioning water control structure. A 2023 shallow lake assessment confirmed the poor biological and physical conditions that resulted in the current sub-optimal habitat. The poor habitat conditions, along with the threat of the structure's failure during high water events that have necessitated sandbagging, have made this a priority project.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection	Description
Talcot Lake	Cottonwood	10538217	996	$7,590,000	Yes	Engineer and construction rock riffle, water control structure, and outlet modification

Parcel Map


Lyon
Redwood
Brown
Murray
Cottonwood
Nobles
Jackson
0
2
4
6 mi
Protect in Easement
Protect in Fee with PILT
Protect in Fee W/O PILT
Restore
Enhance
Other

DEPARTMENT OF NATURAL RESOURCES

Talcot Lake Dam Replacement

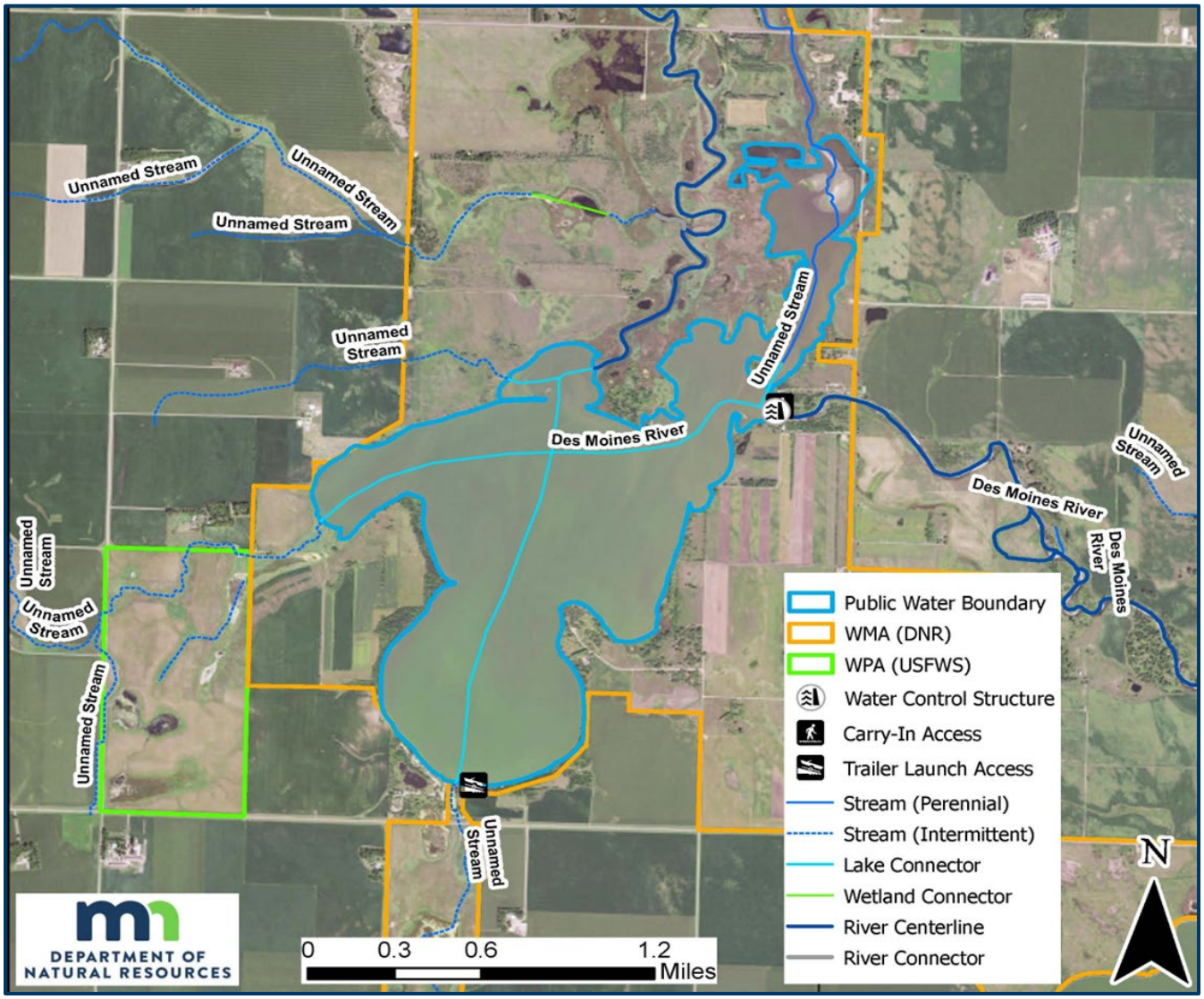

Figure 1. Talcot Lake within Talcot WMA in Cottonwood County. The current dam on the east side of the lake was built in 1936 and is undersized for current conditions and floods frequently. This dam also does not allow consistent fish passage. DNR and the Cottonwood County SWCD are proposing to replace this dam with a rock- arch rapids with an estimated cost of $7.59 million.

Picture 2. The current dam at Talcot Lake, constructed in 1936.

Picture 3. Flooding at the current dam.

Picture 4. DNR and Cottonwood Co. SWCD propose replacing the current dam with a rock arch-rapids and variable crest water control structure to improve fish passage and habitat in Talcot Lake.