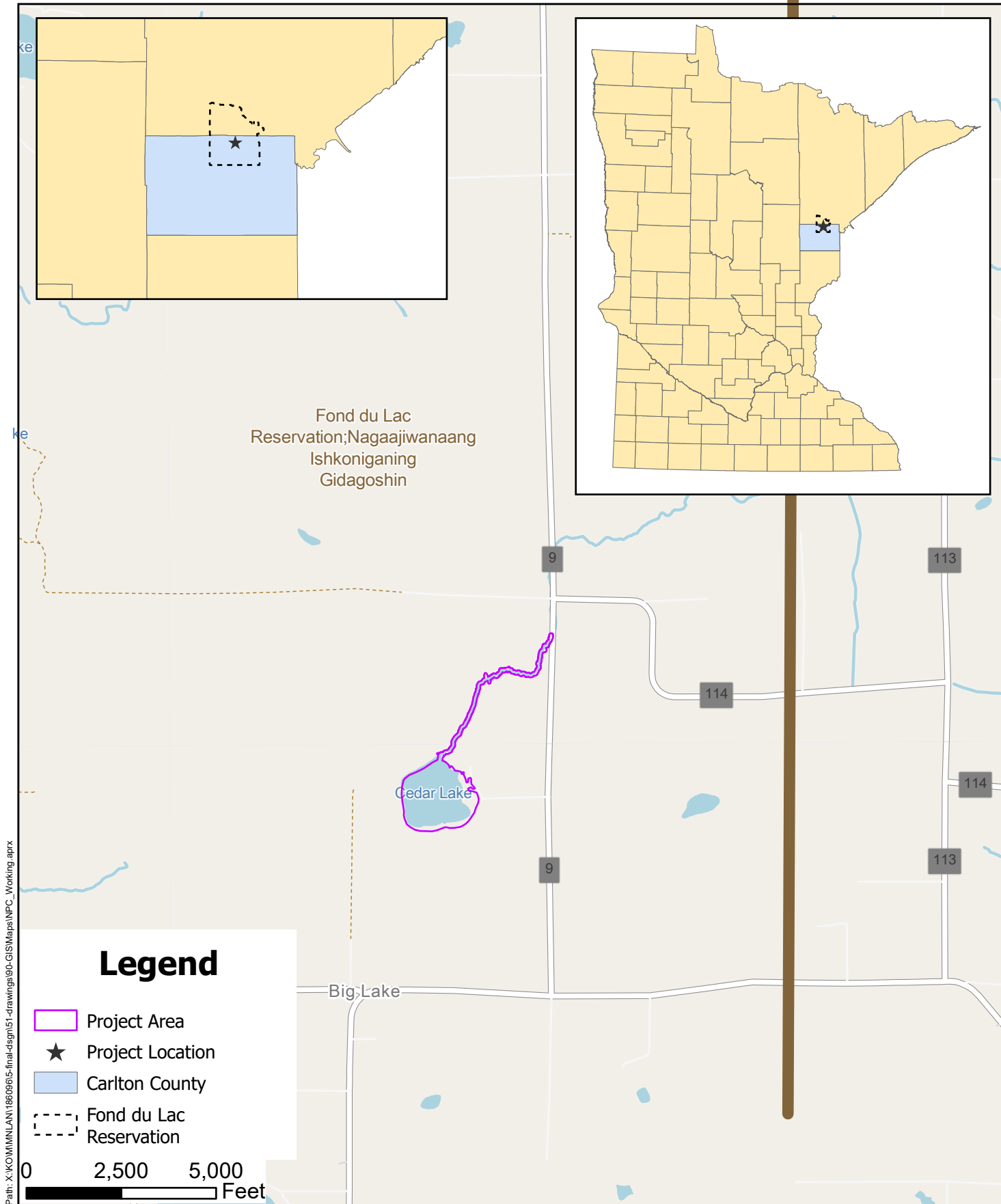




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Project: MNLN 186096
Print Date: 3/25/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO,
USGS, Open Street Map, MnDOT

Project Location

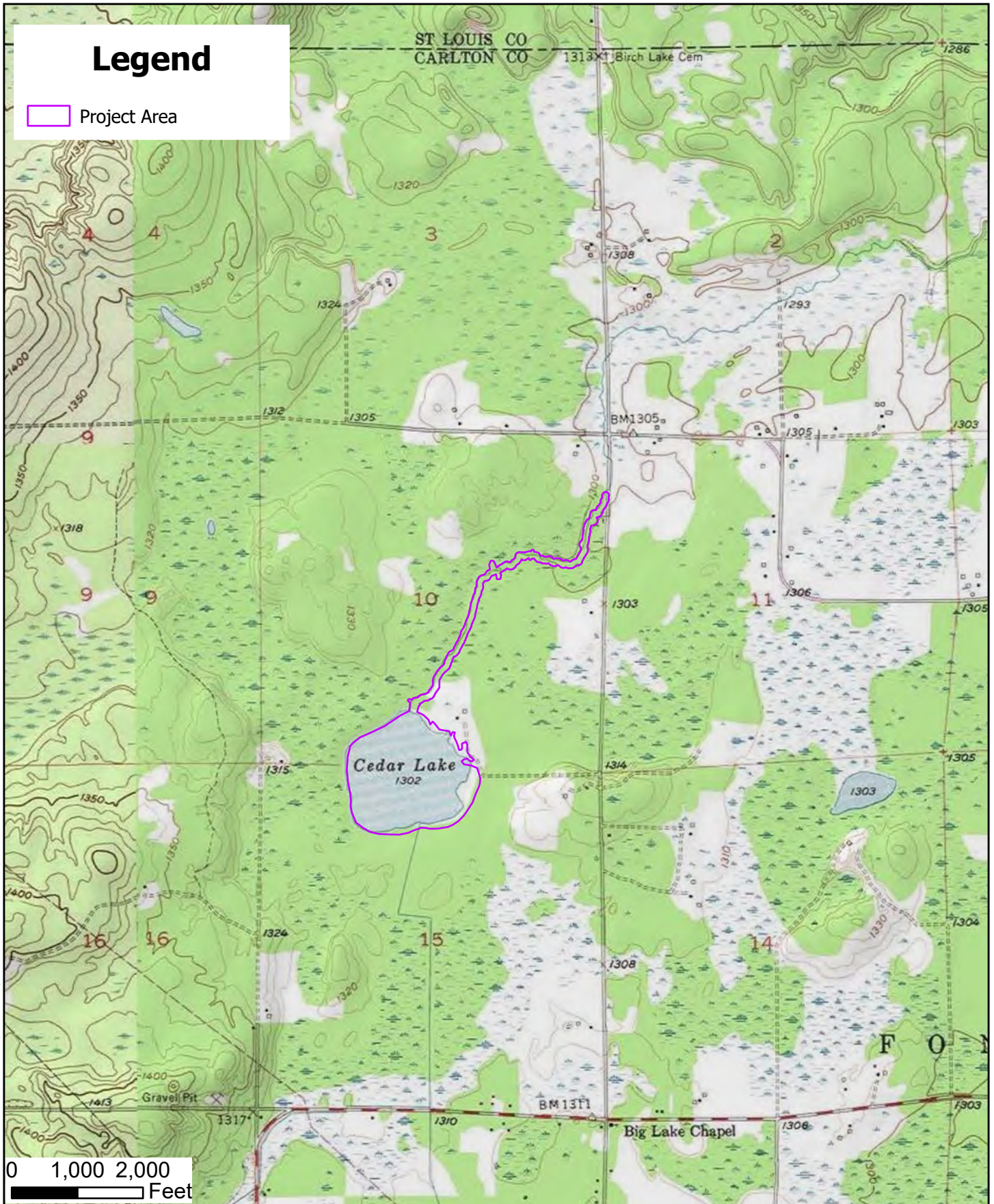
Cedar Lake Hydrology Restoration Carlton County, Minnesota

Figure
1

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Legend

 Project Area



Path: X:\KOWMIN\LANI\186096\5-final-dsgn\51-drawings\90-GISMaps\NPC_Working.aprx



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO,
USGS

USGS Topographic
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
2

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Legend

- Simian Creek
- Beaver Dam



Path: X:\KOWIMNLANI\186096\5-final-dsgn\51-drawings\90-GISMaps\NPC_Working.aprx

0 500 1,000 Feet



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO, USGS

Pre-Construction: Simian Creek
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
3a

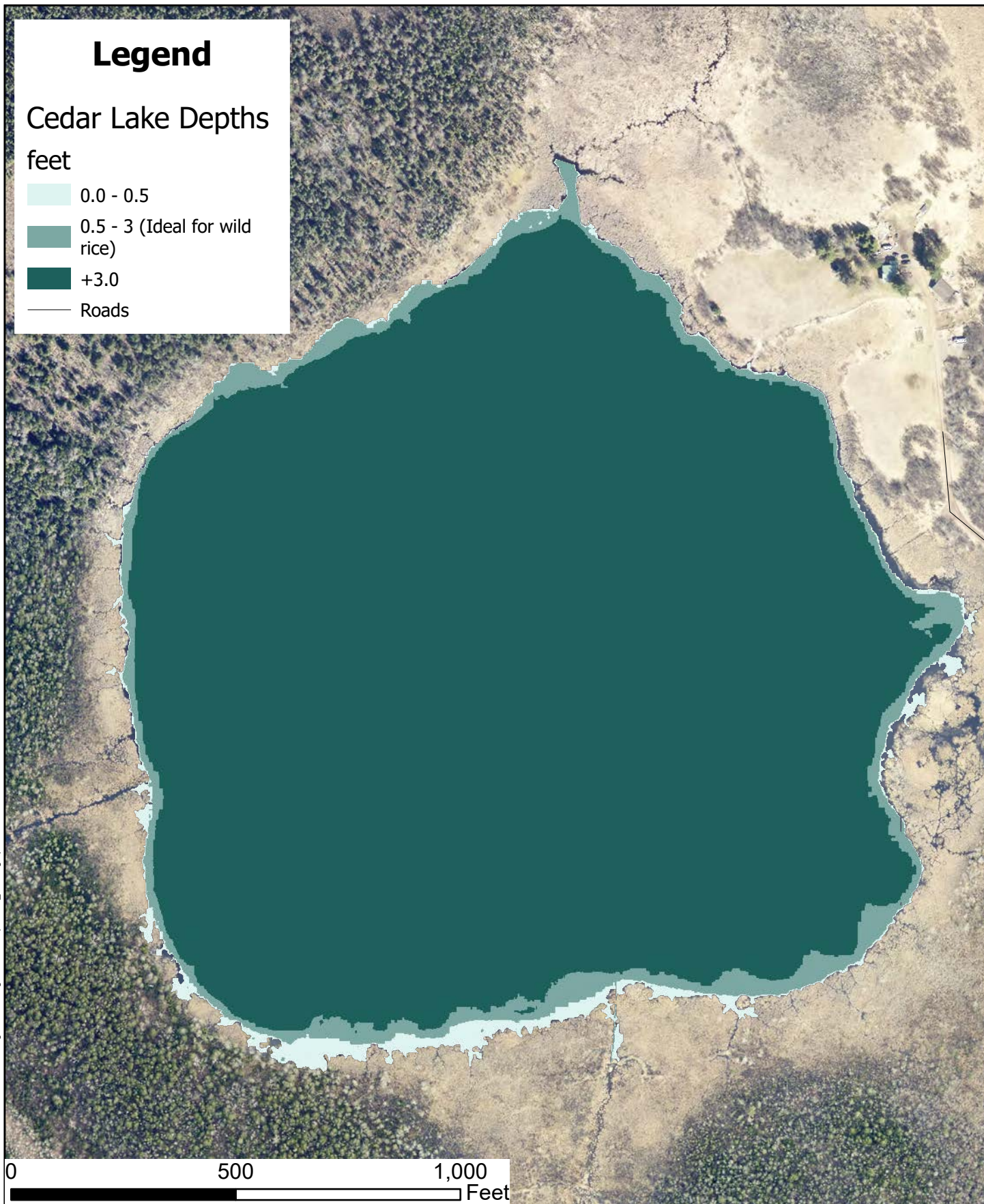
This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Legend

Cedar Lake Depths

feet

- 0.0 - 0.5
- 0.5 - 3 (Ideal for wild rice)
- +3.0
- Roads



Path: X:\KOW\MNLAN\186096\5-final-dsgn\51-drawings\90-GISMaps\NPC_Working.aprx



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO, USGS

Pre-Construction: Cedar Lake
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
3b

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Legend

-  Proposed Channel
-  Dam Breach
-  Beaver Dam

Path: X:\KOWIM\NLN\186096\5-final-dsgn\51-drawings\90-GIS\Mapa\NPC_Working.aprx

0 500 1,000 Feet



Project: MNLN 186096
Print Date: 3/20/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO, USGS

Post-Construction: Simian Creek

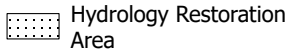
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
4a

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.

Legend

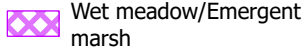
BWSR RIM Easement



Vegetation Restoration Areas



Wet Forest



Wet meadow/Emergent marsh

Boatramp



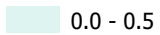
Dock



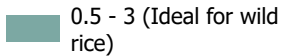
Road

Proposed Water Level

feet



0.0 - 0.5



0.5 - 3 (Ideal for wild rice)



+3.0



0 500 1,000
US Feet



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO, USGS

Post-Construction: Cedar Lake

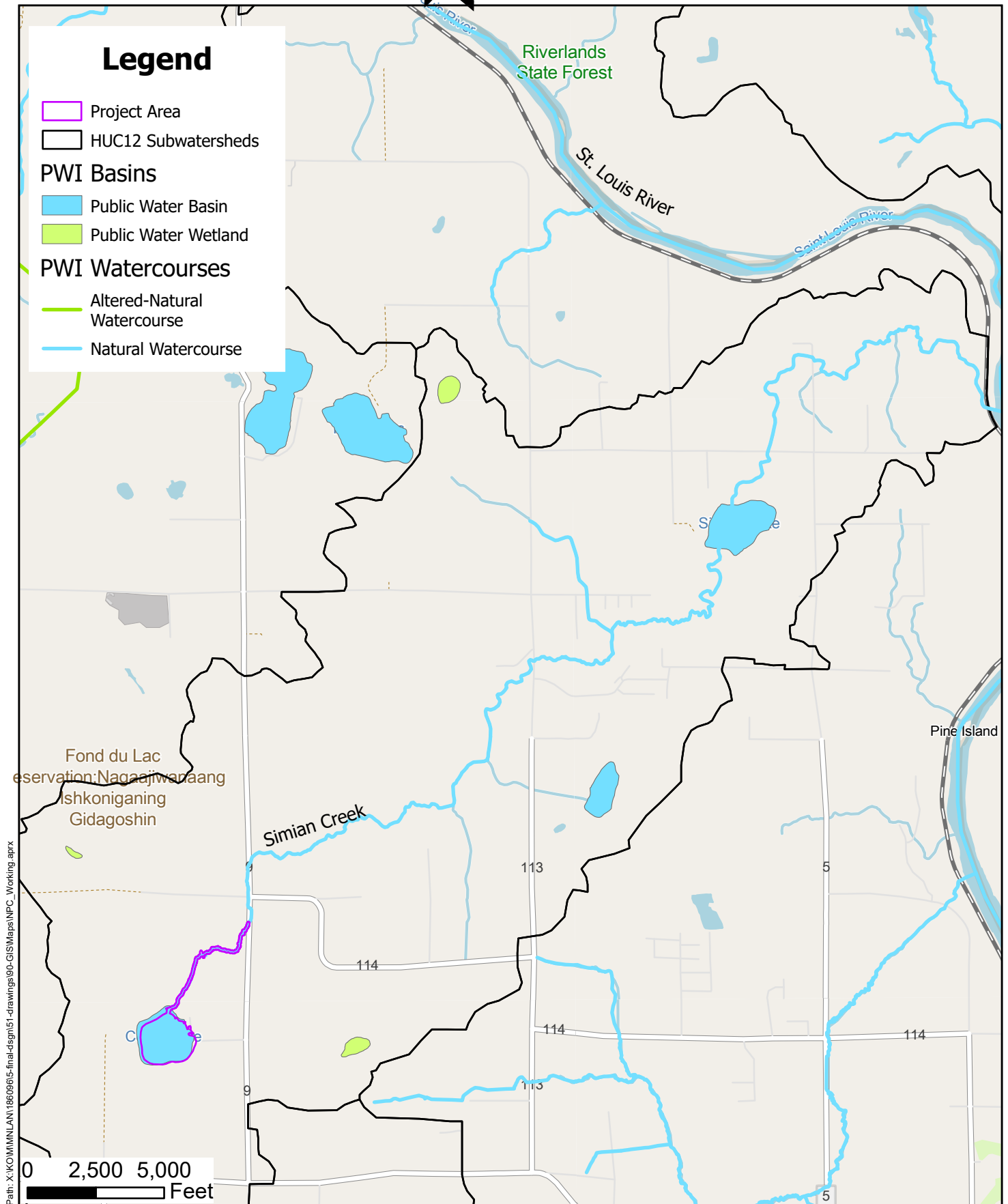
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
4b

Path: X:\KOWIM\NLAN\186096\15-final-dsgn\151-drawings\90-GIS\Map\NPC_Working.aprx

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1000



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO,
MN DNR

Public Waters Inventory (PWI)

Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
5

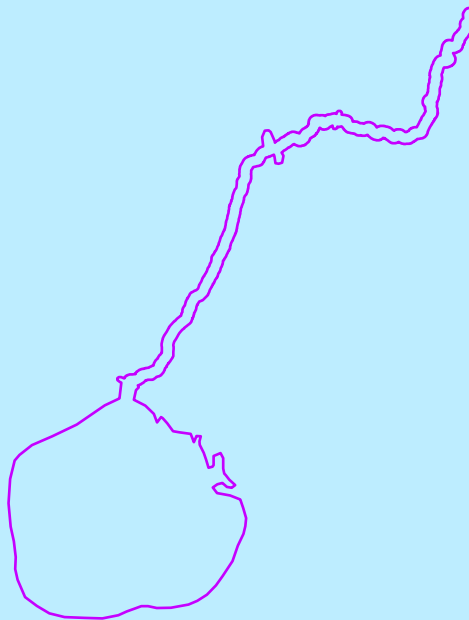
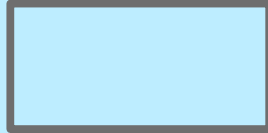
Legend

 Project Area

MCBS Sites of
Biodiversity Significance

Rating

Moderate



Path: X:\KOW\MNLAN\186096\5-final-dsgn\51-drawings\90-GISMaps\NPC_Working.aprx

0 1,000 2,000
Feet



Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO,
MN DNR, MN Biological Survey

Minnesota County Biological Survey

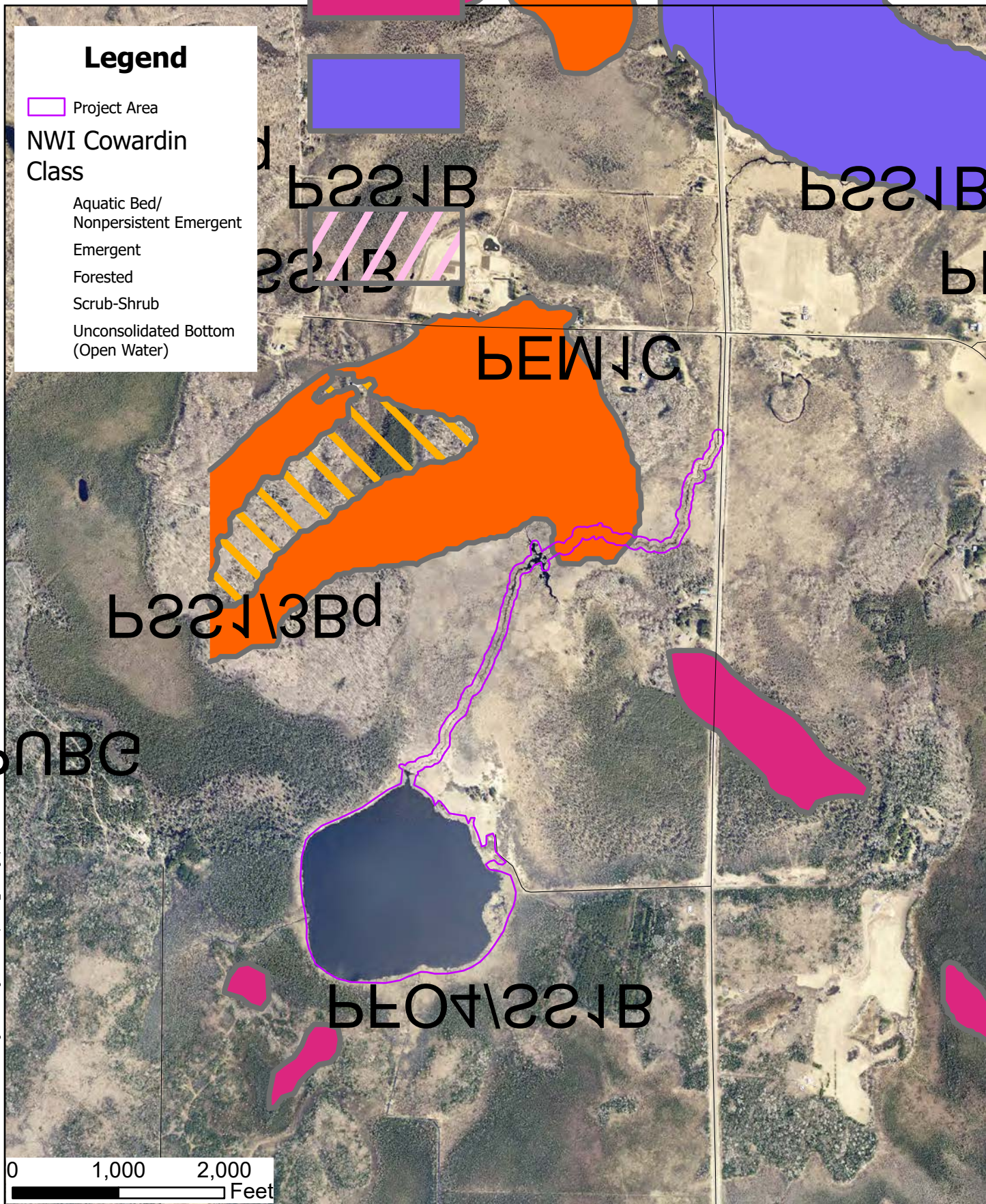
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure
6

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Legend

- Project Area
- NWI Cowardin Class
 - Aquatic Bed/Nonpersistent Emergent
 - Emergent
 - Forested
 - Scrub-Shrub
 - Unconsolidated Bottom (Open Water)



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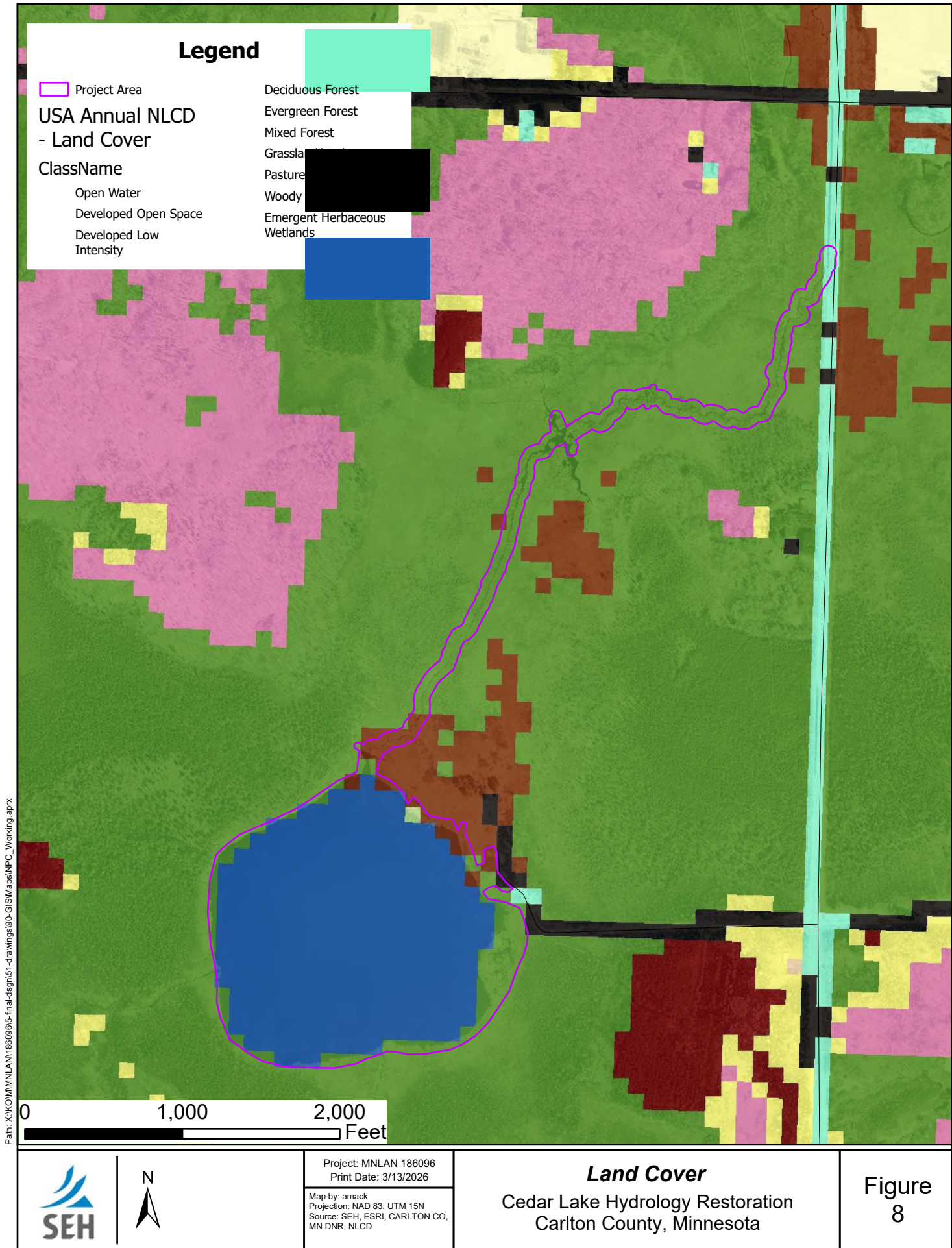
Project: MNLAN 186096
Print Date: 3/13/2026

Map by: amack
Projection: NAD 83, UTM 15N
Source: SEH, ESRI, CARLTON CO, MN DNR

National Wetlands Inventory (NWI)
Cedar Lake Hydrology Restoration
Carlton County, Minnesota

Figure 7

This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.





Name	Estimated Clean-out Length [LF]	Estimated Clean-out Area [SF]
Area 1	682	6820
Area 2	186	1860
Area 3	37	370
Area 4	26	260
Area 5	31	310
Area 6	843	8430
Area 7	396	3960
Area 8	339	3390
Total	2540	25400

Legend

- Channel Clean Out
- ProposedChannel
- Potential Beaver Dams
- Beaver Dam

0

50

100

Feet

CEDAR LAKE
MANOOMIN HABITAT RESTORATION

FIGURE 9
Potential Barriers and Clearing

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