

Grindstone Dam Removal Project Scoping Environmental Assessment Worksheet:

Attachments

Attachment 1: Figures 1 – 6

Attachment 1: Natural Heritage Information System Review

Attachment 2: State Historic Preservation Office Letter

Attachment 1: Figures

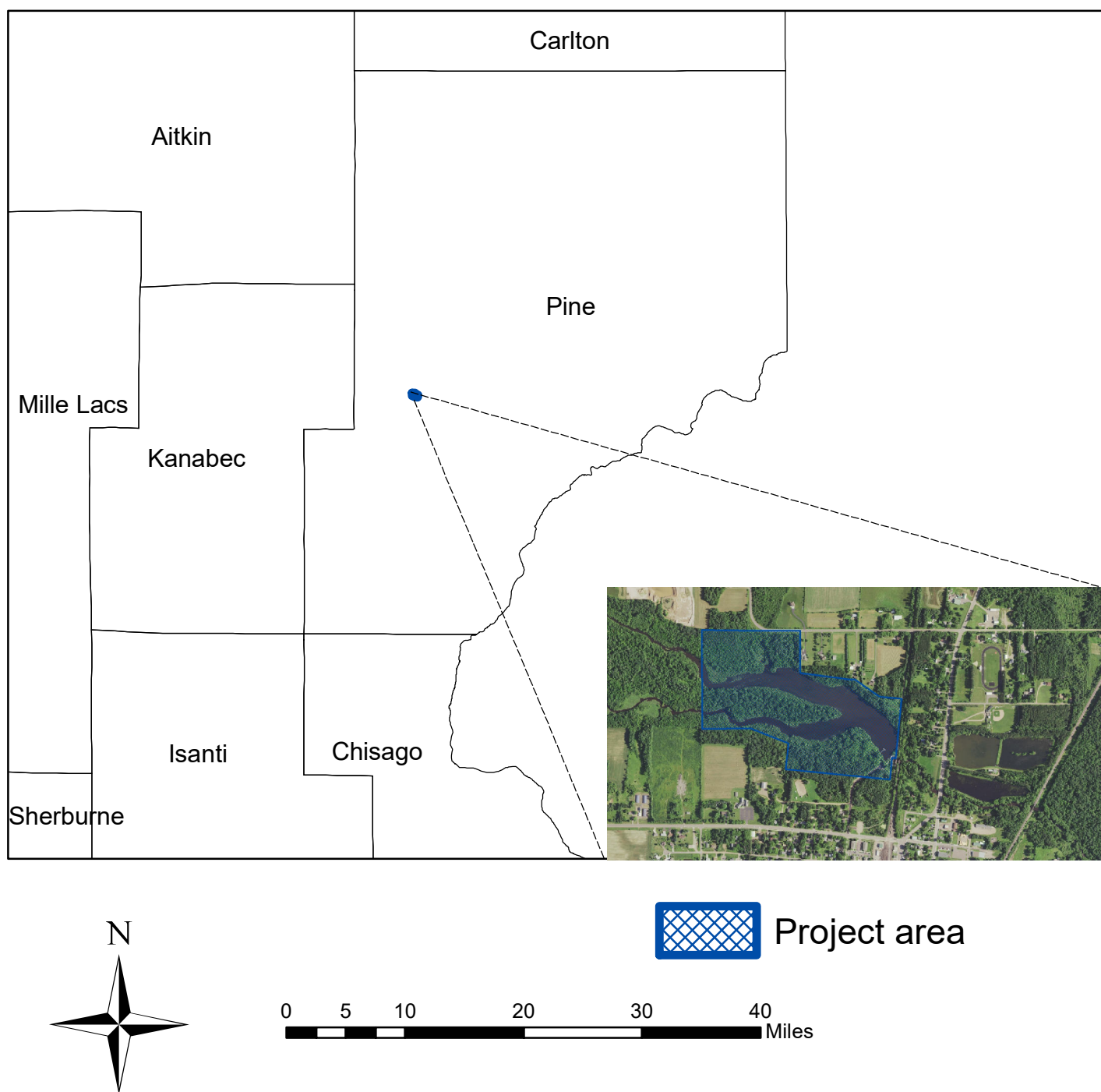
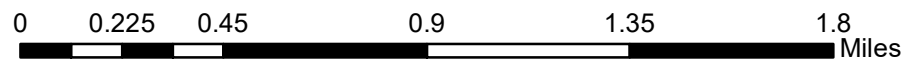
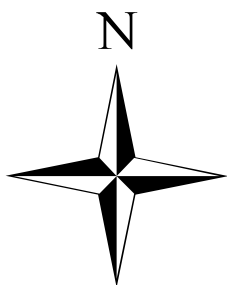
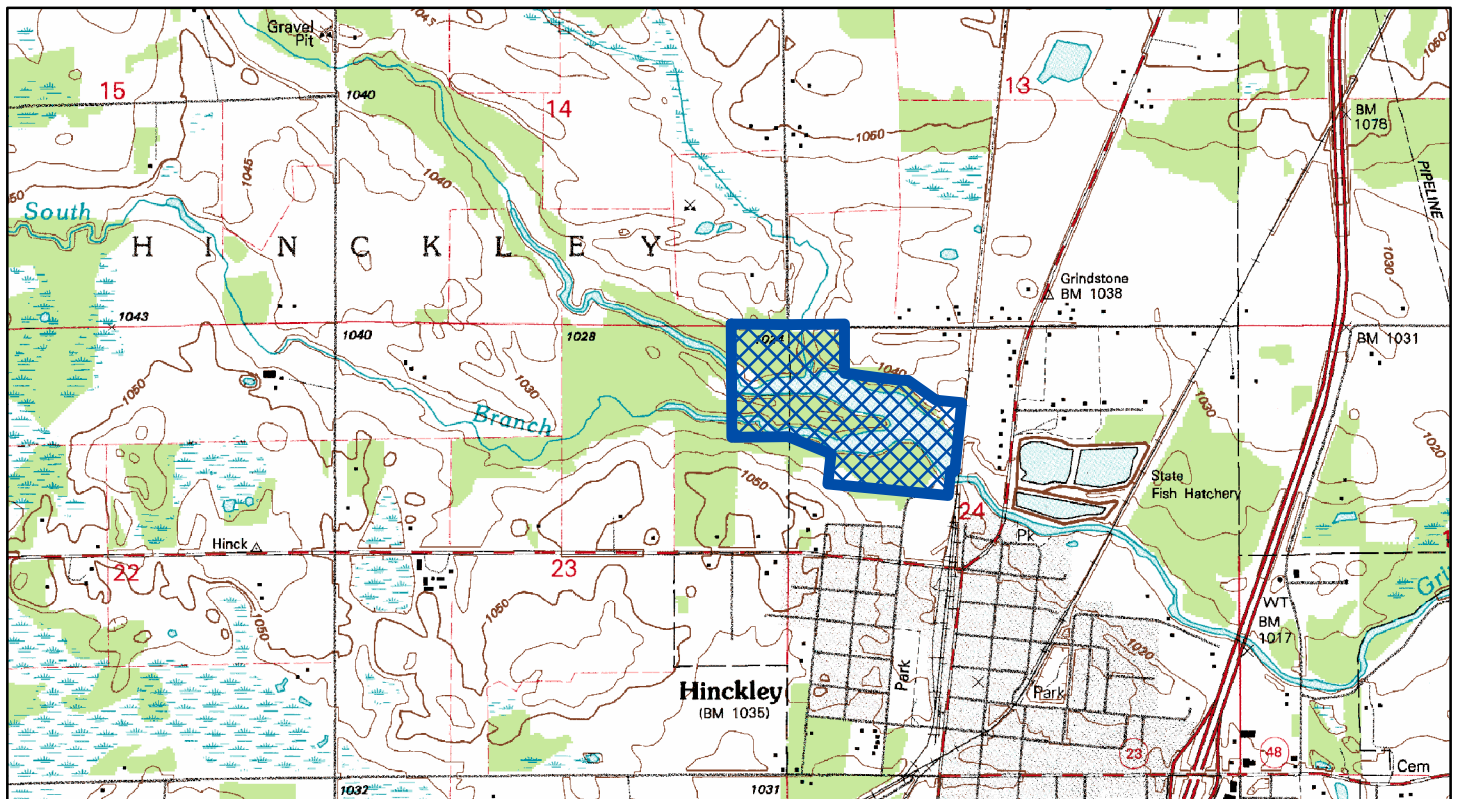
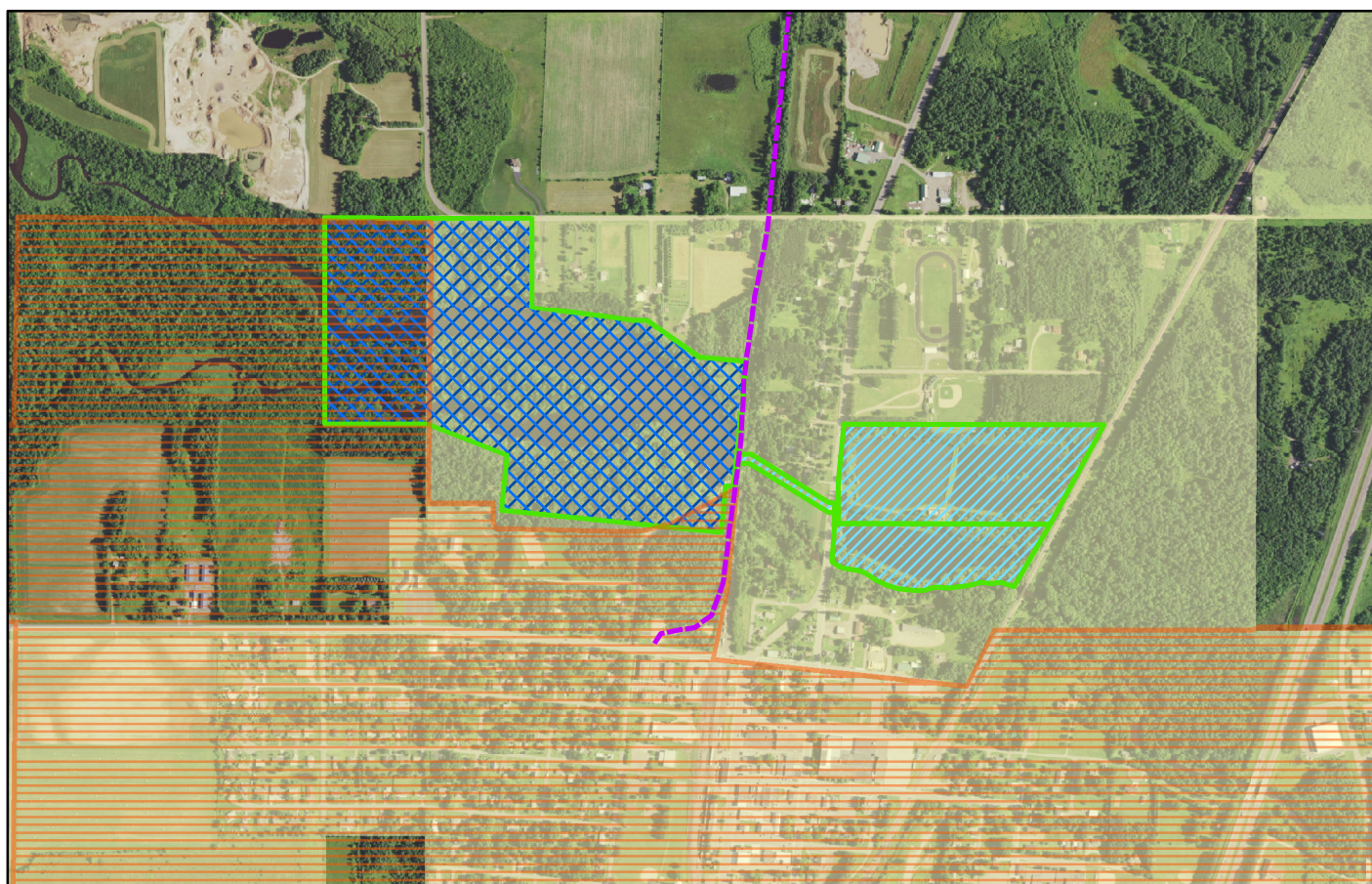


Figure 1. Map showing the location of the project within Pine County, MN. .








Project area

Figure 2. USGS 24K quad map with the project location outlined in blue.



0 0.125 0.25 0.5 0.75 1 Miles

-  City of Hinckley
-  Drinking Water Supply Management Area
-  AMA-Public use area
-  AMA-Fish ponds (non-public use)
-  Willard Munger Trail

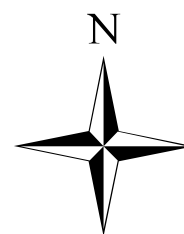
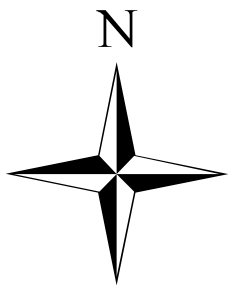
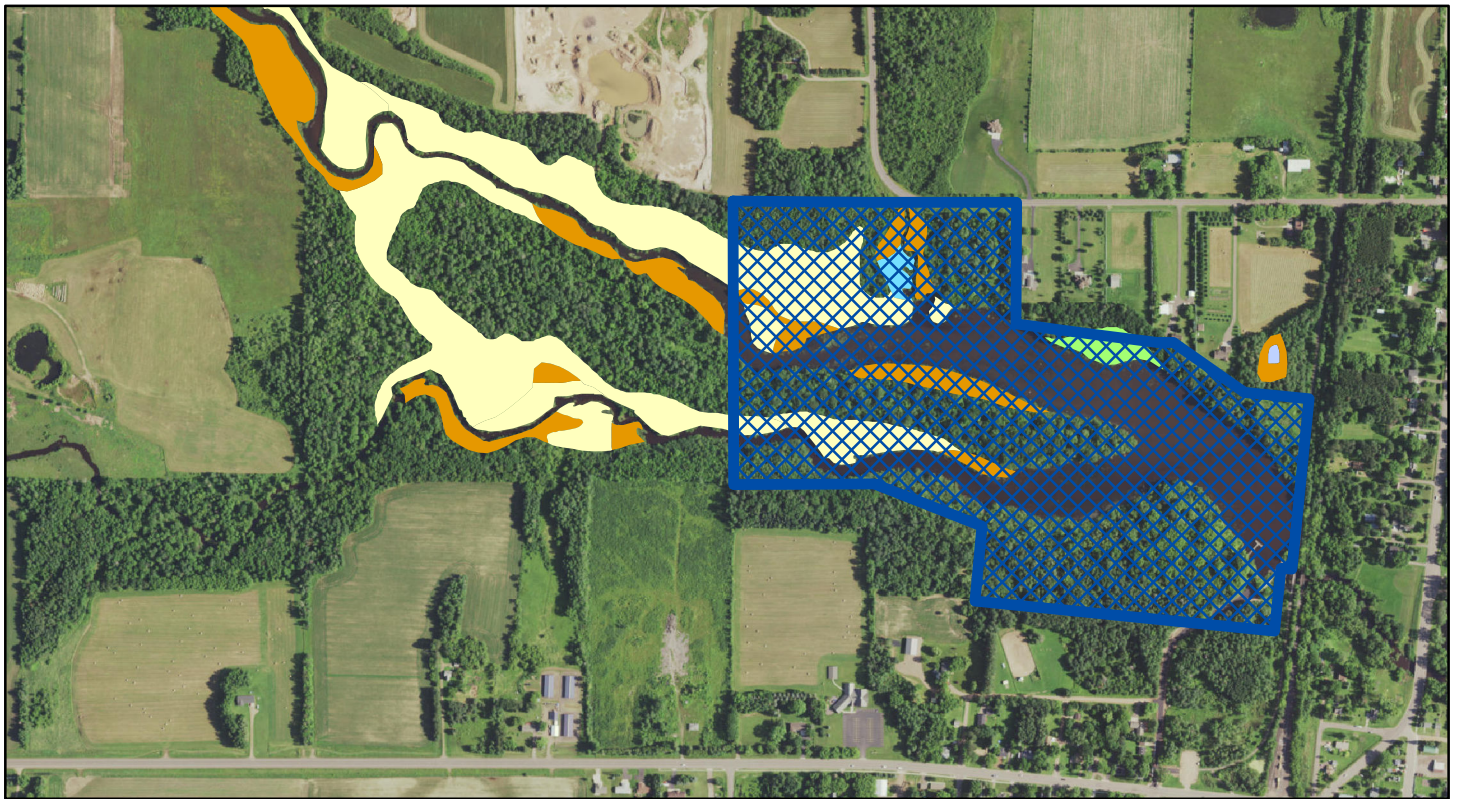


Figure 3. Map of project area with the Hinckley City and Drinking Water Supply Management Area boundaries. The boundaries of the Hinckley AMA are also shown.



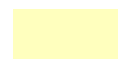
0 0.075 0.15 0.3 0.45 0.6 Miles



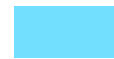
Project area

project area wetlands

Circular 39 class



1 - Seasonally flooded Basin



3 - Shallow Marsh



4 - Deep Marsh



6 - Shrub Swamp



7 - Wooded Swamp

Figure 4. NWI Circular 39 wetland types near project area.



Figure 5. Photo of Grindstone Dam and reservoir

Attachment 2:

Natural Heritage review letter, July 2019



Minnesota Department of Natural Resources
Division of Ecological & Water Resources
500 Lafayette Road, Box 25
St. Paul, MN 55155-4025

July 16, 2019

Correspondence # ERDB 20190379

Ms. Leslie George
MN DNR Fisheries
PO Box 398
Hinckley, MN 55037

RE: Natural Heritage Review of the proposed Grindstone River Dam Removal,
T41N R21W Sections 23 & 24; Pine County

Dear Ms. George,

As requested, the Minnesota Natural Heritage Information System has been queried to determine if any rare species or other significant natural features are known to occur within an approximate one-mile radius of the proposed project. Based on this query, rare features have been documented within the search area (for details, please visit the [Rare Species Guide Website](#) for more information on the biology, habitat use, and conservation measures of these rare species). Please note that the following rare features may be adversely affected by the proposed project:

- Mucket (*Actinonaias ligamentina*), elktoe (*Alasmidonta marginata*), fluted-shell (*Lasmigona costata*), state-listed threatened mussel species, have been documented in the Grindstone River, just downstream of the dam. Current conditions at this site are unknown; surveys conducted over three years ago are insufficient for environmental review or permitting purposes. As mussels are particularly vulnerable to deterioration in water quality, especially increased siltation, it is important that effective erosion prevention and sediment control practices be implemented and maintained near the river.

Minnesota's Endangered Species Statute (Minnesota Statutes, section 84.0895) and associated Rules (Minnesota Rules, part 6212.1800 to 6212.2300 and chapter 6134) prohibit the take of threatened or endangered species without a permit. In order to determine the potential for a take of state-protected mussels, **a qualified surveyor (see enclosed list) will need to conduct a mussel survey and/or relocation in any potential mussel habitat prior to construction within these habitats.**

Please note that the surveyor will need to obtain a permit from the DNR Endangered Species Coordinator (Richard.Baker@state.mn.us; 651-259-5073) before conducting any mussel surveys and will need to follow established survey protocol (see enclosed protocol). The extent of the mussel survey should include all areas of the riverbed that will be directly impacted by excavation, pile driving, placing of fill or riprap,

driving of equipment, or dewatering; as well as any areas downstream that will receive sediment from project activities. Please send the results of all survey work to the DNR Endangered Species Environmental Review Coordinator (Lisa.Joyal@state.mn.us; 651-259-5109). **No work in the riverbed shall occur until potential impacts to mussels have been resolved** to the satisfaction of the DNR's Endangered Species Coordinator (Richard.Baker@state.mn.us; 651-259-5073).

- Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been reported in the vicinity of the proposed project, but outside of the one-mile search radius. This project has the potential to impact this rare turtle through direct fatalities or habitat disturbance/destruction due to dewatering, excavation, fill, or other construction activities associated with the project. Actions to avoid or minimize disturbance to this state-protected turtle may include, but are not limited to, the following recommendations:
 - Timing of dewatering should take place between June 1st and August 31st; preferably July 1st through August 31st. Drawdowns should reach their lowest level by September 1st and should stay dewatered through at least December 1st. Water should be drawn down to less than 14 inches deep in areas where you want to discourage reptile overwintering.
 - Avoid in-stream work from November 1st to April 15th when turtles may be hibernating in the stream banks or sediment, unless the area is unsuitable for hibernation (less than 14 inches deep).
 - Areas where there will be instream work from should be checked for turtles prior to disturbance.
 - Avoid elevating water levels during active nesting season, May 15th to July 31st.
 - Areas where there will be bank and upland construction during active season, April 15th through October 31st, should be checked for turtles prior to the use of heavy equipment or any ground disturbance.
 - Turtle movement should be consider during project design.
 - Monitor for turtles during construction and report any sightings to the DNR Nongame Specialist, Gaea Crozier at 218-328-8811 or gaea.crozier@state.mn.us.
 - Use of [erosion control](#) blanket shall be limited to 'bio-netting' or 'naturalnetting' types, and specifically not products containing plastic mesh netting or other plastic components. Also be aware that hydro-mulch products may contain small synthetic (plastic) fibers to aid in its matrix strength. These loose fibers could potentially re-suspend and make their way into Public Waters. As such, please review mulch products and not allow any materials with synthetic (plastic) fiber additives in areas that drain to Public Waters.
 - Be cautious using instream erosion and sediment control practices as turtles are mobile in streams and may get trapped.

The [Blanding's turtle flyer](#) should be given to all contractors working in the area. If Blanding's turtles are encountered on site, please remember that state law and rules prohibit the destruction of threatened or endangered species, except under certain prescribed conditions. If turtles are in imminent danger, they must be moved by hand out of harm's way, otherwise they are to be left undisturbed. For additional information, please see the [Blanding's turtle fact sheet](#), which describes the habitat use and life history of this species. Please coordinate with the DNR Regional Nongame Specialist, Gaea Crozier, for further assistance with this species and additional recommendations.

- The mudpuppy (*Necturus maculosus*), a state-listed species of special concern, in the vicinity of the proposed project. These species are particularly vulnerable to deterioration in water quality, especially increased siltation. As such, it is important that effective erosion prevention and sediment control practices be implemented and maintained during construction and operation of the proposed project.
- The Environmental Assessment Worksheet should address whether the proposed project has the potential to adversely affect the above rare features and, if so, it should identify specific measures that will be taken to avoid or minimize disturbance. Sufficient information should be provided so the DNR can determine whether a takings permit will be needed for any of the above protected species.
- Please include a copy of this letter in any state or local license or permit application. Please note that measures to avoid or minimize disturbance to the above rare features may be included as restrictions or conditions in any required permits or licenses.

The Natural Heritage Information System (NHIS), a collection of databases that contains information about Minnesota's rare natural features, is maintained by the Division of Ecological and Water Resources, Department of Natural Resources. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities, and other natural features. However, the NHIS is not an exhaustive inventory and thus does not represent all of the occurrences of rare features within the state. Therefore, ecologically significant features for which we have no records may exist within the project area. If additional information becomes available regarding rare features in the vicinity of the project, further review may be necessary.

For environmental review purposes, the results of this Natural Heritage Review are valid for one year; the results are only valid for the project location (noted above) and the project description provided on the NHIS Data Request Form. Please contact me if project details change or for an updated review if construction has not occurred within one year.

The Natural Heritage Review does not constitute review or approval by the Department of Natural Resources as a whole. Instead, it identifies issues regarding known occurrences of rare features and potential effects to these rare features. If needed, please contact your [DNR Regional Environmental Assessment Ecologist](#) to determine whether there are other natural resource concerns associated with the proposed project. Please be aware that additional site assessments or review may be required. Thank you for consulting us on this matter, and for your interest in preserving Minnesota's rare natural resources.

Sincerely,



Samantha Bump
Natural Heritage Review Specialist
Samantha.Bump@state.mn.us

Enc. Rare Species Survey Protocol

Links: Rare Species Guide

<http://www.dnr.state.mn.us/rsg/index.html>

DNR Regional Environmental Assessment Ecologist Contact Info

http://www.dnr.state.mn.us/eco/ereview/erp_regioncontacts.html

Cc: Margi Coyle, Rich Baker, Gaea Crozier

Attachment 3:
State Historic Preservation Office
letter, March 2020

March 6, 2020

Archaeology Department
Attn: Miranda Van Vleet
Minnesota Historical Society
328 Kellogg Blvd. W
St. Paul, MN 55102

RE: Grindstone River Dam Removal
T41 R21 S24 NW, Hinckley, Pine County
SHPO Number: 2020-0750

Dear Ms. Van Vleet:

Thank you for continuing consultation on the above project. Information received in our office on February 25, 2020 has been reviewed pursuant to the responsibilities given the State Historic Preservation Office by the Minnesota Historic Sites Act (Minn. Stat. 138.665-666) and the Minnesota Field Archaeology Act (Minn. Stat. 138.40).

As we understand it, the Minnesota Department of Natural Resources (MnDNR) is proposing to remove the Grindstone River Dam in Pine County. We previously provided comments on the proposed project in a letter dated February 7, 2020 agreeing that your agency's identification efforts in regards to archaeological resources were adequate and that no further archaeological survey work is warranted for the project as it is currently proposed.

As previously stated, there are no properties listed in the National or State Registers of Historic Places (NRHP) located within the proposed project area. However, as the **Grindstone River Dam (PN-HNC-017)** will be removed as a result of the proposed project, the MnDNR requested our office's review regarding the dam's eligibility for listing in the NRHP.

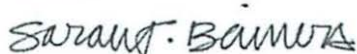
In our February 7th letter, we requested that your agency provide further information on the Grindstone River Dam, as we did not have sufficient information at that time to concur with your agency's determination that the dam was not eligible for listing in the NRHP.

We have reviewed the revised Phase II inventory form for the dam that was included with your February 24th submittal, and based on information that is available to us at this time, we agree with your agency's determination that the Grindstone River Dam is **not eligible** for listing in the NRHP. Therefore, we conclude that no properties listed in, or eligible for listing in, the NRHP will be affected by the proposed project.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR § 800. If this project is considered for federal financial assistance, or requires a federal permit or license, then review and consultation with our office will need to be initiated by the lead federal agency. Be advised that comments and recommendations provided by our office for this state-level review may differ from findings and determinations made by the federal agency as part of review and consultation under Section 106.

Please contact Kelly Gragg-Johnson, Environmental Review Specialist, at (651) 201-3285 or kelly.graggjohnson@state.mn.us if you have any questions regarding our review of this project.

Sincerely,



Sarah J. Beimers
Environmental Review Program Manager