

DRAFT

**FINDINGS OF FACT AND RECORD OF DECISION
ENVIRONMENTAL ASSESSMENT WORKSHEET FOR:
COFFEE CREEK BANK STABILIZATION IN ENGER PARK**

Responsible Governmental Unit: City of Duluth

Contact Person:

Charles Froseth, Land Use Supervisor
Planning Division
411 West First Street, Room 208
Duluth, MN 55802-1198

Phone: 218-730-5325

Email: cfroseth@duluthmn.gov

Proposer: City of Duluth (Engineering Division)

Contact Person:

Chris Kleist, Program Coordinator
Planning Division
411 West First Street, Room 210
Duluth, MN 55802-1198

Phone: 218-735-4063

Email: ckleist@duluthmn.gov

I. ENVIRONMENTAL REVIEW AND RECORD OF DECISION

The City of Duluth prepared a mandatory Environmental Assessment Worksheet (EAW) according to the Environmental Review Rules of the Minnesota Environmental Quality Board (EQB) under Rule 4410.4300.

Project summary: This project will stabilize stream banks that were washed out by the June 2012 flood. The City of Duluth will remove a partially washed out culvert and restore approximately 1100' of stream channel to a natural state through an old pond bed formed by a dam that was also blown out in the same flood event.

II. EAW NOTIFICATION AND DISTRIBUTION

On January 31, 2014, the City distributed the EAW to the official EQB mailing list and published a press release. The EAW notice was printed in the EQB on February 3, 2014.

III. COMMENT PERIOD, PUBLIC MEETING, AND RECORD OF DECISION

The comment period started February 3, 2014, and ended at 4:30 PM on March 5, 2014.

IV. SUBSTANTIVE COMMENTS RECEIVED AND RESPONSES TO THESE COMMENTS

A total of three comments were received (in order of date of receipt):

- 1 Minnesota Historical Society (February 26),
- 2 Minnesota Department of Natural Resources (February 28), and
- 3 Minnesota Pollution Control Agency (March 3),

The following section provides a summary of these comments and responses to them. Comment letters (and responses) are attached at the end of this document.

1. Minnesota Historical Society dated February 26, 2014

Comment: No properties listed in the Natural or State Registers of Historic Places, and no known or suspected archeological properties in the area that will be affected by this project.

Response: No response needed.

2. Minnesota Department of Natural Resources dated February 28, 2014

Comment: Questions/comments on Item 6 (2 comments), 8, 9, 11 (2 comments) and 13 (2 comments). Correspondence also included documents on wildlife friendly erosion control and information on Blanding's Turtle.

Response: See attached response letter received March 7, 2014

3. Minnesota Pollution Control Agency Dated March 3, 2014

Comment: Questions/comments on Item 8, 10, 11 (2 comments) and 12 (3 comments).

Response: See attached response letter received March 7, 2014

V. DRAFT DECISION ON THE NEED FOR AN ENVIRONMENTAL IMPACT STATEMENT

Based on the Environmental Assessment Worksheet, comments received during the comment period, and responses to the questions raised and issues identified, the Planning Division recommends the Duluth City Planning Commission, as the responsible governmental unit (RGU) for this environmental review, concludes the following:

1. The Environmental Assessment Worksheet, this "Findings of Fact and Record of Decision" document, and related documentation for the project that were prepared in compliance with the procedures of the Minnesota Environmental Policy Act and Minn. Rules, Parts 4410.1000 to 4410.1700.
2. The Environmental Assessment Worksheet, this "Findings of Fact and Record of Decision" document, and related documentation for the project have satisfactorily addressed all of the issues for which existing information could have been reasonably obtained.
3. The project does not have the potential for significant environmental effects based upon the above findings and the evaluation of the following four criteria (per Minn. Rules, Parts 4410.1700 Subp. 7):
 - Type, extent, and reversibility of environmental effects.
 - Cumulative effects of related or anticipated future projects.
 - Extent to which the environmental effects are subject to mitigation by ongoing public regulatory authority.
 - Extent to which environmental effects can be anticipated and controlled as a result of other environmental studies undertaken by public agencies or the project proposer, or of environmental reviews previously prepared on similar projects.
4. The finding by the City that the EAW is adequate and no EIS is required provides no endorsement, approval or right to develop the proposal by the City and cannot be relied upon as an indication of such approval.

Consequently, the City makes a Negative Declaration and does not require the development of an Environmental Impact Statement (EIS) for this project. Note that this decision has no impact on the question of ownership and the Public Trust Doctrine raised by the Minnesota Department of Natural Resources.

STATE HISTORIC PRESERVATION OFFICE

February 26, 2014

Mr. Charles Froseth
Land Use Supervisor
City of Duluth
411 West First St., Room 206
Duluth, MN 55802



RE: EAW – Coffee Creek Bank Stabilization in Enger Park
T50 R14 S29 SE
Duluth, St. Louis County
SHPO Number: 2014-1003

Dear Mr. Froseth:

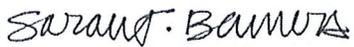
Thank you for the opportunity to review and comment on the above project. It has been reviewed pursuant to the responsibilities given the Minnesota Historical Society by the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Based on our review of the project information, we conclude that there are **no properties** listed in the National or State Registers of Historic Places, and no known or suspected archaeological properties in the area that will be affected by this project.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36CFR800, Procedures of the Advisory Council on Historic Preservation for the protection of historic properties. If this project is considered for federal assistance, or requires a federal permit or license, it should be submitted to our office by the responsible federal agency.

Please contact our Compliance Section at (651) 259-3455 if you have any questions regarding our review of this project.

Sincerely,



Sarah J. Beimers, Manager
Government Programs and Compliance



Minnesota Department of Natural Resources
Northeast Region • 1201 East Highway 2 • Grand Rapids MN • 55744



February 28, 2014

Chris Kleist
Program Coordinator
411 West 1st Street Rm 211
Duluth, MN 55802

RE: Coffee Creek Stabilization in Enger Park EAW

Dear Mr. Kleist,

The Department of Natural Resources (DNR) Northeast Region has reviewed the Coffee Creek Environmental Assessment Worksheet (EAW) and has the following comments for your consideration.

Following the 2012 flood, the City of Duluth and DNR, along with many others, coordinated to identify opportunities to work together to enhance natural function of water resource systems impacted by the flood. Coffee Creek was a resource identified as high priority to both the city and department. The document highlights the opportunity for continued coordination through the City's master planning effort. As mentioned in Item 9 of the EAW, the proposed work aligns with the City's master plan work (currently in progress) for the golf course, incorporating more natural stream channel design and natural habitat restoration and protection through this process.

The proposed Coffee Creek stabilization proposal, outlined in the EAW, provides a brief description of the overall project. If the project is a comprehensive stream restoration approach that offers long-term improved natural function and protection in response to sustained damage to infrastructure and the creek itself, careful attention is needed to the design. This will be critical to providing the intended stream stability and resource enhancement outcome as well as work toward achieving balance between the cold water stream system and the existing land use. Since the proposed project will require a DNR permit for work in the bed of public waters, the final design detail will need to be incorporated for the DNR in the permit process.

The DNR has received a permit application for work in the bed of public waters for this proposed restoration work as well as a design basis from BARR Engineering dated Thursday February 27th, 2014. We will provide more resource comments directly for the DNR permit application upon evaluation of the most recent design basis memo and any updated information. Some other areas within the EAW that need clarification or additional information include the following:

Item 6. Project Description:

DNR permit 2013-0118 authorized temporary replacement of the flood damaged crossing to be replaced by September 15, 2015, with a DNR approved permanent crossing (additional conditions apply and should be referenced). The EAW references the need to replace this structure, but indicates that the proposed work will occur in the final of three phases, as funding allows. The DNR encourages the City to include this work in an earlier phase. Perhaps through the master plan there may be opportunity to eliminate the need for crossing in this location? The EAW refers to several aspects of the overall restoration of this site, which includes the area at the lower end of the original dam creating the impoundment, all the way upstream to the overflow diversion structure to Miller Creek. This is going to require new channel construction in both the old impoundment as well as through the old dam location. This document only seems to address the removal of the portions of the stream currently within a culvert to be day lighted. It may have been beneficial to include all channel changes and construction required in the greater restoration of this reach in this EAW.

Item 6. Project Description. Subpart d:

The document identifies creation of a 60 ft. wide floodplain along the constructed stream channel. To function as a floodplain, this entire area should be relatively flat at an elevation near bank full. Cross sections were not provided in the EAW, but this is a critical design element if this area is to truly function as "floodplain".

Item 8. Permits and approvals required:

States the City is seeking DNR authorization under the Flood GP (2001-1172); however, it should be noted that the scope and nature of the work will require that project be reviewed as an individual permit. Requirement of a MNDNR Protected Waters Permit is not included in the list of required permits.

Item 9. Land use:

It should be noted that the proposed work will affected a FEMA mapped detailed study area, which will require a letter of map revision, or possibly even a conditional letter of map revision.

Item 11. Water resources:

Both Coffee Creek and Lake Superior should be identified as DNR public water. The DNR PWI number for Lake Superior is 16-1P.

Item 11. Subpart b, sub-item iii, Water appropriation:

The proposed restoration does not include appropriation, however, the pond that washed out previously provided a point of taking for water appropriation for golf course watering under DNR permit 1992-2075. This is something the City and DNR should follow-up to amend the existing permit to remove Coffee Creek as a water source. Although, the proposed work does not relate to water used for golf course irrigation, this is an area for future coordination. DNR Ecological and Water Resources (EWR) has not been actively involved with the City's master planning effort recently, so we are interested to learn more about how the plan may incorporate water conservation methods to address water use associated with irrigation and also the coordinated City/DNR Fisheries work, which would provide separation of Buckingham Creek (DNR public water) from an existing irrigation pond?

The DNR has received a permit application for work in the bed of public waters for this proposed restoration work. The City is aware that the application is considered incomplete at this time. DNR has communicated that additional supporting information is necessary to continue reviewing this proposal including technical analysis supporting the proposed design.

Item 13. Fish, Wildlife, plant communities and sensitive ecological resources (rare features):

The vegetative buffer proposed only lists native seed and shrubs. In trout streams in the northeast, it is critical that trees be planted at a density and with a maximum height capable of creating greater than 90% canopy cover over the stream channel. Without this canopy cover, there will be significant temperature impacts to the stream, in the form of warming from radiant solar energy. Trees should be as large as possible at planting (we recommend a minimum height of 5 feet).

The EAW identifies that Coffee Creek will be diverted around the active project reach, but does not identify the location of inlet and outlet of diversion. Diversion should be as close as possible to the start and end of construction zone, and there should be plans to identify how fish within the construction zone will be captured and relocated. We recommend that they be relocated upstream of the project area to avoid mortality when this reach is dewatered. This will allow them the best possible chance to re-colonize the newly constructed stream reach, as moving them downstream would put them below the temporary culvert through the dam remnant which is currently a fish barrier.

A rock filter dike is identified in the stream channel downstream of the proposed project area at the lower end of the old pond. Sediment control should not be taking place within the stream channel, and this structure may block fish trying to migrate downstream. As the stream will be diverted during construction, this structure will not be providing any benefit and should not be placed, even temporarily, within the stream channel.

Item 13. Fish, Wildlife, plant communities and sensitive ecological resources (rare features): Subpart b:

According to the Minnesota Environmental Quality Board's EAW Guidelines for Item 13, the DNR's Division of Ecological Resources should be contacted for a listing of ecologically sensitive resources near the project site. It is not apparent that this has been done. The Division of Ecological Resources maintains the Natural Heritage Information System (NHIS), a collection of databases that provides information on Minnesota's rare plants, animals, native plant communities, and other rare features. The NHIS is continually updated as new information becomes available, and is the most complete source of data on Minnesota's rare natural features.

Based upon a review of the NHIS, Blanding's turtles (*Emydoidea blandingii*), a state-listed threatened species, have been reported from the vicinity of the proposed project and may be encountered on site. For your information, attached is a Blanding's turtle fact sheet that describes the habitat use and life history of this species. The fact sheet also provides two lists of recommendations for avoiding and minimizing impacts to this rare turtle. **Please refer to the first list of recommendations for your project.** In addition, if erosion control mesh will be used, the DNR recommends that the mesh be limited to wildlife-friendly materials (see enclosed fact sheet). If greater protection for turtles is desired, the second list of additional recommendations can also be implemented.

The attached flyer should be given to all contractors working in the area. If Blanding's turtles are found on the 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 should be moved by hand out of harm's way, otherwise they should be left undisturbed.

In the future, the EAW preparer should contact the Endangered Species Review Coordinator at 651-259-5109 to initiate a Natural Heritage Review prior to submitting an EAW.

Please feel free to call or email me with any questions you may have. Thanks for the opportunity to comment.

Sincerely,



Rian Reed
Regional Environmental Assessment Ecologist
MNDNR
1201 East Hwy 2
Grand Rapids, MN 55744
218-999-7826
rian.reed@state.mn.us

C: Lisa Joyal
Mike Peloquin
Deserae Hendrickson
Patty Fowler
Karl Koller

Wildlife Friendly Erosion Control

Wildlife entanglement in, and death from, plastic netting and other man-made plastic materials has been documented in birds (Johnson, 1990; Fuller-Perrine and Tobin, 1993), fish (Johnson, 1990), mammals (Derraik, 2002), and reptiles (Barton and Kinkead, 2005; Kapfer and Paloski, 2011). Yet the use of these materials continues in many cases, without consideration for wildlife impacts. Plastic netting is frequently used for erosion control during construction and landscape projects and can negatively impact terrestrial and aquatic wildlife populations as well as snag in maintenance machinery resulting in costly repairs and delays. However, wildlife friendly erosion control materials do exist, and are sold by several large erosion control material companies. Below are a few key considerations before starting a project.

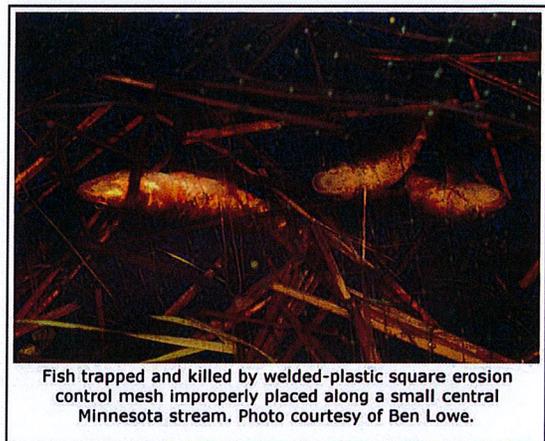
Know Your Options

- Remember to consult with local natural resource authorities (DNR, USFWS, etc.) before starting a project. They can help you identify sensitive areas and rare species.
- When erosion control is necessary, select products with biodegradable netting (natural fiber, biodegradable polyesters, etc.).
- DO NOT use products that require UV-light to biodegrade (also called, “photodegradable”). These do not biodegrade properly when shaded by vegetation.
- Use netting with rectangular shaped mesh (not square mesh).
- Use netting with flexible (non-welded) mesh.



Know the Landscape

- It is especially important to use wildlife friendly erosion control around:
 - Areas with threatened or endangered species.
 - Wetlands, rivers, lakes, and other watercourses.
 - Habitat transition zones (prairie – woodland edges, rocky outcrop – woodland edges, steep rocky slopes, etc.).
 - Areas with threatened or endangered species.
- Use erosion mesh wisely, not all areas with disturbed ground necessitate its use. Do not use plastic mesh unless it is specifically required. Other erosion control options exist (open weave textile (OWT), rolled erosion control products (RECPs) with woven natural fiber netting).



Protect Wildlife

- Avoid photodegradable erosion control materials where possible.
- Use only biodegradable materials (typically made from natural fibers), preferably those that will biodegrade under a variety of conditions.
- Wildlife friendly erosion control material costs are often similar to conventional plastic netting.



Plains Gartersnake trapped and killed by welded-plastic square erosion control mesh placed along a newly installed cement culvert in southern Minnesota. ©MN DNR, Carol Hall



A small vole that was strangled and killed by plastic erosion control material with welded and square mesh. Photo taken in southern Minnesota and provided courtesy of Tom Jessen.



Literature Referenced

Barton, C. and K. Kinkead. 2005. Do erosion control and snakes mesh? Soil and Water Conservation Society 60:33A-35A.

Derraik, J.G.B. 2002. The pollution of the marine environment by plastic debris: a review. Marine Pollution Bulletin 44:842-852.

Fuller-Perrine, L.D., and M.E. Tobin. 1993. A method for applying and removing bird-exclusion netting in commercial vineyards. Wildlife Society Bulletin 21:47-51.

Johnson, S.W. 1990. Distribution, abundance, and source of entanglement debris and other plastics on Alaskan beaches, 1982-1988. Proceedings of the Second International Conference on Marine Debris 331-348.

Kapfer, J. M., and R. A. Paloski. 2011. On the threat to snakes of mesh deployed for erosion control and wildlife exclusion. Herpetological Conservation and Biology 6:1-9.

Environmental Review Fact Sheet Series

Endangered, Threatened, and Special Concern Species of Minnesota

Blanding's Turtle

(Emydoidea blandingii)

Minnesota Status: Threatened
Federal Status: none

State Rank¹: S2
Global Rank¹: G4

HABITAT USE

Blanding's turtles need both wetland and upland habitats to complete their life cycle. The types of wetlands used include ponds, marshes, shrub swamps, bogs, and ditches and streams with slow-moving water. In Minnesota, Blanding's turtles are primarily marsh and pond inhabitants. Calm, shallow water bodies (Type 1-3 wetlands) with mud bottoms and abundant aquatic vegetation (e.g., cattails, water lilies) are preferred, and extensive marshes bordering rivers provide excellent habitat. Small temporary wetlands (those that dry up in the late summer or fall) are frequently used in spring and summer -- these fishless pools are amphibian and invertebrate breeding habitat, which provides an important food source for Blanding's turtles. Also, the warmer water of these shallower areas probably aids in the development of eggs within the female turtle. Nesting occurs in open (grassy or brushy) sandy uplands, often some distance from water bodies. Frequently, nesting occurs in traditional nesting grounds on undeveloped land. Blanding's turtles have also been known to nest successfully on residential property (especially in low density housing situations), and to utilize disturbed areas such as farm fields, gardens, under power lines, and road shoulders (especially of dirt roads). Although Blanding's turtles may travel through woodlots during their seasonal movements, shady areas (including forests and lawns with shade trees) are not used for nesting. Wetlands with deeper water are needed in times of drought, and during the winter. Blanding's turtles overwinter in the muddy bottoms of deeper marshes and ponds, or other water bodies where they are protected from freezing.

LIFE HISTORY

Individuals emerge from overwintering and begin basking in late March or early April on warm, sunny days. The increase in body temperature which occurs during basking is necessary for egg development within the female turtle. Nesting in Minnesota typically occurs during June, and females are most active in late afternoon and at dusk. Nesting can occur as much as a mile from wetlands. The nest is dug by the female in an open sandy area and 6-15 eggs are laid. The female turtle returns to the marsh within 24 hours of laying eggs. After a development period of approximately two months, hatchlings leave the nest from mid-August through early-October. Nesting females and hatchlings are often at risk of being killed while crossing roads between wetlands and nesting areas. In addition to movements associated with nesting, all ages and both sexes move between wetlands from April through November. These movements peak in June and July and again in September and October as turtles move to and from overwintering sites. In late autumn (typically November), Blanding's turtles bury themselves in the substrate (the mud at the bottom) of deeper wetlands to overwinter.

IMPACTS / THREATS / CAUSES OF DECLINE

- loss of wetland habitat through drainage or flooding (converting wetlands into ponds or lakes)
- loss of upland habitat through development or conversion to agriculture
- human disturbance, including collection for the pet trade* and road kills during seasonal movements
- increase in predator populations (skunks, raccoons, etc.) which prey on nests and young

*It is illegal to possess this threatened species.

RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS

These recommendations apply to typical construction projects and general land use within Blanding's turtle habitat, and are provided to help local governments, developers, contractors, and homeowners minimize or avoid detrimental impacts to Blanding's turtle populations. **List 1** describes minimum measures which we recommend to prevent harm to Blanding's turtles during construction or other work within Blanding's turtle habitat. **List 2** contains recommendations which offer even greater protection for Blanding's turtles populations; this list should be used *in addition to the first list* in areas which are known to be of state-wide importance to Blanding's turtles (contact the DNR's Natural Heritage and Nongame Research Program if you wish to determine if your project or home is in one of these areas), or in any other area where greater protection for Blanding's turtles is desired.

List 1. Recommendations for all areas inhabited by Blanding's turtles.	List 2. Additional recommendations for areas known to be of state-wide importance to Blanding's turtles.
GENERAL	
A flyer with an illustration of a Blanding's turtle should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.	Turtle crossing signs can be installed adjacent to road-crossing areas used by Blanding's turtles to increase public awareness and reduce road kills.
Turtles which are in imminent danger should be moved, by hand, out of harms way. Turtles which are not in imminent danger should be left undisturbed.	Workers in the area should be aware that Blanding's turtles nest in June, generally after 4pm, and should be advised to minimize disturbance if turtles are seen.
If a Blanding's turtle nests in your yard, do not disturb the nest.	If you would like to provide more protection for a Blanding's turtle nest on your property, see "Protecting Blanding's Turtle Nests" on page 3 of this fact sheet.
Silt fencing should be set up to keep turtles out of construction areas. It is <u>critical</u> that silt fencing be removed after the area has been revegetated.	Construction in potential nesting areas should be limited to the period between September 15 and June 1 (this is the time when activity of adults and hatchlings in upland areas is at a minimum).
WETLANDS	
Small, vegetated temporary wetlands (Types 2 & 3) should not be dredged, deepened, filled, or converted to storm water retention basins (these wetlands provide important habitat during spring and summer).	Shallow portions of wetlands should not be disturbed during prime basking time (mid morning to mid- afternoon in May and June). A wide buffer should be left along the shore to minimize human activity near wetlands (basking Blanding's turtles are more easily disturbed than other turtle species).
Wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.	Wetlands should be protected from road, lawn, and other chemical run-off by a vegetated buffer strip at least 50' wide. This area should be left unmowed and in a natural condition.
ROADS	
Roads should be kept to minimum standards on widths and lanes (this reduces road kills by slowing traffic and reducing the distance turtles need to cross).	Tunnels should be considered in areas with concentrations of turtle crossings (more than 10 turtles per year per 100 meters of road), and in areas of lower density if the level of road use would make a safe crossing impossible for turtles. Contact your DNR Regional Nongame Specialist for further information on wildlife tunnels.
Roads should be ditched, not curbed or below grade. If curbs must be used, 4 inch high curbs at a 3:1 slope are preferred (Blanding's turtles have great difficulty climbing traditional curbs; curbs and below grade roads trap turtles on the road and can cause road kills).	Roads should be ditched, not curbed or below grade.

ROADS cont.	
Culverts between wetland areas, or between wetland areas and nesting areas, should be 36 inches or greater in diameter, and elliptical or flat-bottomed.	Road placement should avoid separating wetlands from adjacent upland nesting sites, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details).
Wetland crossings should be bridged, or include raised roadways with culverts which are 36 in or greater in diameter and flat-bottomed or elliptical (raised roadways discourage turtles from leaving the wetland to bask on roads).	Road placement should avoid bisecting wetlands, or these roads should be fenced to prevent turtles from attempting to cross them (contact your DNR Nongame Specialist for details). This is especially important for roads with more than 2 lanes.
Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.	Roads crossing streams should be bridged.
UTILITIES	
Utility access and maintenance roads should be kept to a minimum (this reduces road-kill potential).	
Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.	
LANDSCAPING AND VEGETATION MANAGEMENT	
Terrain should be left with as much natural contour as possible.	As much natural landscape as possible should be preserved (installation of sod or wood chips, paving, and planting of trees within nesting habitat can make that habitat unusable to nesting Blanding's turtles).
Graded areas should be revegetated with native grasses and forbs (some non-natives form dense patches through which it is difficult for turtles to travel).	Open space should include some areas at higher elevations for nesting. These areas should be retained in native vegetation, and should be connected to wetlands by a wide corridor of native vegetation.
Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1 st and before June 1 st).	Ditches and utility access roads should not be mowed or managed through use of chemicals. If vegetation management is required, it should be done mechanically, as infrequently as possible, and fall through spring (mowing can kill turtles present during mowing, and makes it easier for predators to locate turtles crossing roads).

Protecting Blanding's Turtle Nests: Most predation on turtle nests occurs within 48 hours after the eggs are laid. After this time, the scent is gone from the nest and it is more difficult for predators to locate the nest. Nests more than a week old probably do not need additional protection, unless they are in a particularly vulnerable spot, such as a yard where pets may disturb the nest. Turtle nests can be protected from predators and other disturbance by covering them with a piece of wire fencing (such as chicken wire), secured to the ground with stakes or rocks. The piece of fencing should measure at least 2 ft. x 2 ft., and should be of medium sized mesh (openings should be about 2 in. x 2 in.). It is *very important* that the fencing be **removed before August 1st** so the young turtles can escape from the nest when they hatch!

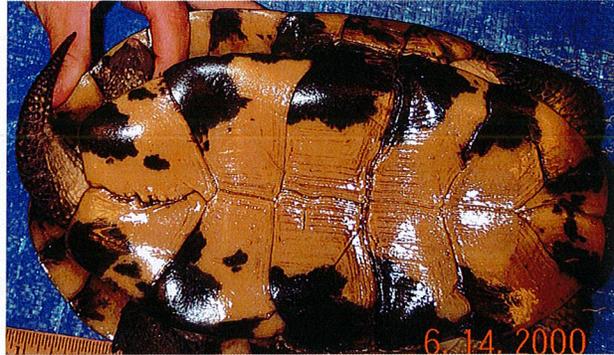
REFERENCES

- ¹Association for Biodiversity Information. "Heritage Status: Global, National, and Subnational Conservation Status Ranks." NatureServe. Version 1.3 (9 April 2001). <http://www.natureserve.org/ranking.htm> (15 April 2001).
- Coffin, B., and L. Pfannmuller. 1988. Minnesota's Endangered Flora and Fauna. University of Minnesota Press, Minneapolis, 473 pp.

REFERENCES (cont.)

- Moriarty, J. J., and M. Linck. 1994. Suggested guidelines for projects occurring in Blanding's turtle habitat. Unpublished report to the Minnesota DNR. 8 pp.
- Oldfield, B., and J. J. Moriarty. 1994. Amphibians and Reptiles Native to Minnesota. University of Minnesota Press, Minneapolis, 237 pp.
- Sajwaj, T. D., and J. W. Lang. 2000. Thermal ecology of Blanding's turtle in central Minnesota. *Chelonian Conservation and Biology* 3(4):626-636.

CAUTION



BLANDING'S TURTLES MAY BE ENCOUNTERED IN THIS AREA

The unique and rare Blanding's turtle has been found in this area. Blanding's turtles are state-listed as Threatened and are protected under Minnesota Statute 84.095, Protection of Threatened and Endangered Species. Please be careful of turtles on roads and in construction sites. For additional information on turtles, or to report a Blanding's turtle sighting, contact the DNR Nongame Specialist nearest you: Bemidji (218-308-2641); Grand Rapids (218-327-4518); New Ulm (507-359-6033); Rochester (507-280-5070); or St. Paul (651-259-5764).

DESCRIPTION: The Blanding's turtle is a medium to large turtle (5 to 10 inches) with a black or dark blue, dome-shaped shell with muted yellow spots and bars. The bottom of the shell is hinged across the front third, enabling the turtle to pull the front edge of the lower shell firmly against the top shell to provide additional protection when threatened. The head, legs, and tail are dark brown or blue-gray with small dots of light brown or yellow. A distinctive field mark is the bright yellow chin and neck.

**BLANDING'S TURTLES DO NOT MAKE GOOD PETS
IT IS ILLEGAL TO KEEP THIS THREATENED SPECIES IN CAPTIVITY**

SUMMARY OF RECOMMENDATIONS FOR AVOIDING AND MINIMIZING IMPACTS TO BLANDING'S TURTLE POPULATIONS

(see Blanding's Turtle Fact Sheet for full recommendations)

- This flyer should be given to all contractors working in the area. Homeowners should also be informed of the presence of Blanding's turtles in the area.
- Turtles that are in imminent danger should be moved, by hand, out of harms way. Turtles that are not in imminent danger should be left undisturbed to continue their travel among wetlands and/or nest sites.
- If a Blanding's turtle nests in your yard, do not disturb the nest and do not allow pets near the nest.
- Silt fencing should be set up to keep turtles out of construction areas. It is critical that silt fencing be removed after the area has been revegetated.
- Small, vegetated temporary wetlands should not be dredged, deepened, or filled.
- All wetlands should be protected from pollution; use of fertilizers and pesticides should be avoided, and run-off from lawns and streets should be controlled. Erosion should be prevented to keep sediment from reaching wetlands and lakes.
- Roads should be kept to minimum standards on widths and lanes.
- Roads should be ditched, not curbed or below grade. If curbs must be used, 4" high curbs at a 3:1 slope are preferred.
- Culverts under roads crossing wetland areas, between wetland areas, or between wetland and nesting areas should be at least 36 in. diameter and flat-bottomed or elliptical.
- Culverts under roads crossing streams should be oversized (at least twice as wide as the normal width of open water) and flat-bottomed or elliptical.
- Utility access and maintenance roads should be kept to a minimum.
- Because trenches can trap turtles, trenches should be checked for turtles prior to being backfilled and the sites should be returned to original grade.
- Terrain should be left with as much natural contour as possible.
- Graded areas should be revegetated with native grasses and forbs.
- Vegetation management in infrequently mowed areas -- such as in ditches, along utility access roads, and under power lines -- should be done mechanically (chemicals should not be used). Work should occur fall through spring (after October 1st and before June 1st).



Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

March 3, 2014

Mr. Charles Froseth
Land Use Supervisor
411 West First Street, Room 206
Duluth, MN 55802

RE: Coffee Creek Bank Stabilization in Enger Park Environmental Assessment Worksheet

Dear Mr. Froseth:

Thank you for the opportunity to review and comment on the Environmental Assessment Worksheet (EAW) for the Coffee Creek Bank Stabilization in Enger Park project (Project) located in Duluth, Minnesota. The Project consists of the stabilization of stream banks that were washed out by the June 2012 flood. The city of Duluth will remove a partially washed out culvert and restore approximately 1,100-feet of stream channel to a natural state through an old pond bed formed by a dam that was also blown out in the same flood. Regarding matters for which the Minnesota Pollution Control Agency (MPCA) has regulatory responsibility and other interests, the MPCA staff has the following comments for your consideration.

General comment – The MPCA applauds the efforts of the city of Duluth for looking beyond the immediate needs for streambank and infrastructure repair and embracing a more holistic perspective in natural resource sustainability through stream channel restoration and habitat improvement within the Coffee Creek watershed.

Regarding Item 8 of the EAW, Permits and Approvals: The project may require a Section 401 Water Quality Certification determination from MPCA depending upon the permitting mechanism utilized by the U.S. Army Corps of Engineers.

Regarding Item 10c of the EAW, Geological, Soils and topography/Landforms: This section of the EAW does not provide sufficient details on project activities, project phasing, or temporary and permanent measures that will be employed to manage stabilization of disturbed areas.

Regarding Item 11 of the EAW, Water Resources: The MPCA encourages the use of Best Management Practices (BMPs) to prevent and minimize sedimentation and turbidity during the entire construction/de-construction process including the proposed stream diversion process as well.

Regarding Item 11bii of the EAW, Ground Water: This section of the EAW does not describe the methods or types of stormwater BMPs that will be used during project construction. While the EAW references the Stormwater Pollution Prevention Plan (SWPPP), the SWPPP is not contained within the EAW to provide those details.

Mr. Charles Froseth
Page 2
March 3, 2014

Regarding Item 12a of the EAW, Contamination/Hazardous Material/Wastes: It should be noted that there is a closed leak site (Leak # 7387) located on the project property, Enger Park Golf Course. The leak was discovered May 20, 1994, and the project file was closed April 7, 1995. This leak site is located approximately 1,000 feet downhill (and down-gradient) of the proposed project.

Regarding Item 12b of the EAW: The project proposer should also consider recycling as much of the culvert materials as possible to reduce the volume of material disposed of in the landfill. Reuse of materials such as uncontaminated concrete should be in accordance with Minn. R. 7035.2860. Additional information is available on the MPCA's Solid Waste utilization webpage: <http://www.pca.state.mn.us/tchy863>.

Regarding Item 12c of the EAW: The operation of heavy equipment in and near streams and wetlands obligates the project proposers to develop a plan for managing fuels and lubricants, including a plan of action to implement in the event of spills. Project proposers and their contractors should be prepared to respond to spills and to recover and contain spilled material as quickly and thoroughly as possible. For petroleum spills that are five or more gallons, the project proposers and/or their contractors are required to contact the State Duty Officer at 651-649-5451 or 800-422-0798. Information on reporting spills and leaks is available on the MPCA website at: <http://www.pca.state.mn.us/index.php/view-document.html?gid=2807>.

We appreciate the opportunity to review this project. **Please provide your specific responses to our comments and notice of decision on the need for an Environmental Impact Statement (EIS).** Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this Environment Assessment/EAW/EIS/Alternative Urban Areawide Review please, contact me at 651-757-2482.

Sincerely,



Kevin Kain
Planner Principal
Environmental Review Unit
Resource Management and Assistance Division

KK:bt

cc: Craig Affeldt, MPCA, St. Paul
Jim Brist, MPCA St. Paul
Tom Estabrooks, MPCA Duluth
Patrick Carey, MPCA Duluth



City of Duluth

Department of Public Works/Utilities
Chris Kleist - Engineering Division
411 West First Street Room 211 • Duluth MN 55802
(218) 730-4063 ckleist@duluthmn.gov

March 3, 2014

Response to DNR Comments:

DNR Comment Letter Feb 28, 2014

Item 6. Project Description:

This comment is well taken. It is the City's intent to replace the temporary culverts at the utility/trail crossing eventually with a larger structure (most likely a large, bottomless, box culvert) that would allow fish passage as soon as funding allows.

We have evaluated the need for this crossing and have determined that the utility and trail location is absolutely necessary here.

Item 6. Project Description. Subpart d:

The proposed floodplain elevation was carefully selected based on Barr Engineering's estimate of the bankfull elevation resulting from in-depth analysis of creek flow data, reference reach cross sections and other factors as described in the project design basis memo dated February 27, 2014. Cross sections are shown in the engineering plans submitted to DNR with the permit application.

Item 8. Permits and approvals required:

This comment is correct; the EAW should have included MNDNR Protected Waters Permit in the list of required permits.

Item 9. Land use:

We have been communicating with DNR floodplain hydrologists in St. Paul regarding the need for a LOMR or CLOMR. Necessary map revisions will be made.

Item 11. Water Resources.

Coffee Creek discharges to the St. Louis River. Lake Superior was not specifically identified in this EAW because it is not within one mile of the project site.

Item 11. Subpart b, sub-item iii, Water appropriation:

This comment is correct that water appropriation of Coffee creek for use in Enger Golf Course is not directly related to this restoration project. However, they are certainly linked. It is the City's intent is to create an irrigation system which does not require any water from Coffee Creek. However, those plans are still being developed and funding for them has yet to be secured, so this project focuses on stream restoration and bank stabilization only.

The City is working with our design consultant, Barr Engineering, to provide the necessary information for the second point in this comment regarding the work in waters permit.

Item 13. Fish, Wildlife, plant communities and sensitive ecological resources (rare features):

We certainly agree that the ideal vegetation in the riparian buffer should be tall enough to provide significant shade to the stream channel. However, this area is the edge of a golf course fairway and we are balancing the ecological needs with the recreational uses. Vegetation will be as "tall" as possible, but will generally be restricted to native grasses and shrubs. Also, because this is a relatively small creek, the stream channel width of seven to ten feet will allow a substantial portion of the stream to be shaded by overhanging shrubs. The shrubs called for on the plans include species such as willow that can have a large horizontal spread.

The commenter's point about the stream diversion intake and outlets being located as close as possible to the start and end of the construction zone is well taken. This has been our intent, but we will clarify this in the plans and specs. The site will be dewatered gradually by slowly reducing the flow at the upstream end of the reach. The reach of channel to be dewatered will have any remaining fish removed and relocated to the downstream reaches (removed by hand and transported in buckets).

If it is the DNR's opinion is that there should not be sediment controls in the stream channel during construction then we will remove this item from the plans.

Item 13. Fish, Wildlife, plant communities and sensitive ecological resources (rare features): Subpart d:

The Blanding's Turtle flier will be given out to all contractors working on the project. If turtles are in imminent danger they should be moved by hand out of harm's way, otherwise they should be left undisturbed.



City of Duluth

Department of Public Works/Utilities
Chris Kleist - Engineering Division
411 West First Street Room 211 • Duluth MN 55802
(218) 730-4063 ckleist@duluthmn.gov

March 3, 2014

Response to MPCA Comments:

MPCA Comment Letter March 3, 2014

Item 8, permits and approvals:

We do not anticipate this project to requiring a 401 Water Quality Certification.

Item 10c, geological, soils, topography, landforms:

This item is addressed in the construction SWPPP.

Item 11, water resources:

This comment is well taken. The City of Duluth, the design consultant (Barr Engineering), and the construction contractor that we select will utilize all appropriate Best Management Practices (BMPs) during all construction phases to minimize erosion and sedimentation.

Item 11bii, ground water:

Items addressing this comment are covered in the construction SWPPP

Item 12a, contamination:

The closed contamination site will be avoided and is outside the limits of construction.

Item 12b, recycling:

This is an excellent point. Although we have not yet specified the preferred disposal method the contractor must use, the old culvert material likely will be disposed of in a manner that allows some type of reuse.

Item 12c, heavy equipment:

This comment is well taken. We are aware of the sensitivity of small coldwater trout streams to pollution from fuel spills and thus we will ensure that no fueling or lubricating activities occur within 100' of the stream. Additionally, we will require the contractor to have an emergency spill response kit on site during construction.