Brown's Creek Park EAW Comments and Responses to Comments

Dated completed: 01/03/2024

Organization / Person	Comment	Response to Comment
Minnesota Indian Affairs Council	The Minnesota Indian Affairs Council (MIAC) has completed the EAW for the proposed - Brown's Creek Restoration Project, Following review, the proposed project does not seem in any way to potentially damage or alter known cultural resources within the area. MIAC does not have any specific recommendations. For any questions or concerns regarding this review, please reply back to MIAC's cultural resource personnel.	Comment noted, no response needed.
Minnesota Pollution Control Agency	MPCA staff has reviewed the EAW and have no comments at this time. Requested that a notice of decision on the need for an Environmental Impact Statement.	Comment noted, notice of decision on need for an EIS forthcoming.
State Historic Preservation Office	We previously provided comments on this project in a letter dated November 3, 3023, to Mike Magner of the Minnesota Department of Natural Resources. We have reviewed the cultural resources survey letter report, Phase I Archaeological Survey for proposed trout stream habitat improvements on Brown's Creek, Washington County, Minnesota (August 19, 2023) as prepared by Mississippi Valley Archaeology Center. Based on the results of the survey, 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. (SHPO also noted the potential need for historic-resource review under federal law.)	Comment noted. As noted in the EAW, the project will be supported by federal grant funds provided through the Minnesota Pollution Control Agency, and all applicable regulatory requirements will be addressed in obtaining permits for the project.
Metropolitan Council	Item 6. Project Summary: The EAW states "The project will also include the creation of an American Disability Act-compliant 'spur' off Brown's Creek State Trail to improve public access to the creek." No additional expansion of the existing fixed route transit network is planned given the current transit investments and surrounding development patterns. Increasing the availability of existing (non-fixed route) public transportation services within Stillwater may be an option.	Comment noted. The BCWD is working with the Minnesota Department of Natural Resources Parks & Trails to incorporate ADA-site access from Brown's Creek State Trail, and will note the opportunity for transit connections in working with the City of Stillwater on the project as well.
Metropolitan Council	Item 7. Climate Adaptation and Resilience: The EAW adequately addresses climate adaptation and resilience, including disclosure of potential climate hazards and impacts, with proposed on-site adaptations. The project will include reconnecting the creek with the floodplain, installing grade control riffles to limit channel incision, installing woody material and boulders for instream habitat, removing woody invasive species, and reestablishing native riparian vegetation. The project would restore stream pattern and dimension to better accommodate flood events. The project proposes planting native vegetation to provide deep rooted vegetation to stabilize the creek, which would improve resiliency of the creek. Reconnecting the floodplain will slow flood waters and allow the water to spread out over a wider area, thereby decreasing flood energy and bank scour. These are all best management practices for stormwater management over the long-term. The project's nature and scale appears to reduce on-site vulnerabilities related to potential climate hazards (extreme heat and localized flooding).	Comment noted. No response needed.
Metropolitan Council	Item 10. Land Use: The EAW does not acknowledge the future land use guidance of the parcels. It should note that the western parcel has a future land use guidance of "Park, Rec, or Open Space" and that the eastern two parcels have a future land use guidance of "Medium Density Residential." Additionally, the parcel owned by the DNR (PIN 2003020320020) has a future land use guidance of Medium Density Residential; however, on page 14, the EAW indicates that this area will remain as open space. The City will need to submit a comprehensive plan amendment in the future to reflect that change in the City's 2040 Plan. Similarly, the noted RA zoning for the eastern two parcels does not align with the parcels' Medium Density Residential land use guidance. Minn. Stat § 473.865 requires that planned land use and zoning be reconciled.	Comments noted. EAW text will be updated to reflect the future land use guidance as specified in the comment provided. BCWD also will work with the City of Stillwater on the project under terms that will be captured in a cooperative agreement between the parties. While BCWD will confirm that the project is consistent with the city's long-term land-use planning and zoning, Stillwater will retain decisionmaking authority and responsibility for compliance with applicable statutory requirements.

	Item 18. Greenhouse Gas (GHG) Emissions/Carbon Footprint: The GHG emission sources for this project include the operation of construction equipment, and tree and brush removal during the conversion of forest to prairie/wetland. Total emissions from construction equipment were estimated at 37.01 tons of carbon dioxide equivalents (CO2e) which were calculated using the appropriate global warming potential for each GHG and the appropriate unit conversion factor. Land use conversion from forest to grassland is the second category of emissions from the project. It is estimated that select tree harvest proposed for the project will remove approximately 80% of the trees from a 2.02-acre area, which is equivalent to 1.62 acres of forest converted to grassland. The average carbon loss per acre for conversion from forest to grassland would be an estimated loss of 14.81 tons of CO2e per acre converted, which equates to 24.00 tons for the proposed land conversion. However, all harvested trees and brush will be reincorporated into the project for stream and floodplain habitat enhancements, which is assumed to be a carbon sink. As a result, the total potential project-related emissions are estimated at 37.01 tons of CO2e. In summary, the project will reduce the potential for bank erosion through bank reshaping and reconnection of the floodplain. Establishment of diverse, native vegetation will increase sequestration of carbon through the dense growth of plants and subsequent storage of carbon in the soil through the root systems. The project, as proposed, does not have the potential for significant environmental effects based on the type, extent and reversibility of impacts related to emissions of greenhouse gasses which are reasonably expected to occur.	Comment noted. No response needed.
Minnesota Trout Unlimited	No specific comment on EAW; statement of support for the proposed project.	Comment noted, no response needed.
Washington County	Ensure traffic control for access off the County Road; access should be via Neal Ave if possible. If not, possible access should meet the county road at a 90-degree angle.	Proposed access to project area west of Neal will be off McKusick Road to limit impacts to existing wetlands. Access to the project area east of Neal Ave will be off Neal Ave.
	There is the possibility of a future pedestrian underpass under the county road. This is an area that pedestrians want to cross to reach Brown's Creek Trail, and the steam culvert is a promising location elevation-wise. Would a trail along the creek ever be plausible, and is it compatible with the work being done?	road is not compatible with soft soils associated with seepage
Washington County	The project will need to protect the existing curb and gutter, storm sewer outlets, and guardrail.	Comment noted. Coonstruction plan notes and contract requirements will ensure all existing infrastructure is protected.
Washington County	While the disposal site is located on the City of Stillwater property, this location would make for a good stormwater management basin for a future project.	Comment noted. The proposed spoils area is a disturbed upland meadow that appears have been filled previously, based on notes from members of the Technical Advisory Committee for the project. Hauling soil off the project site would incur significant cost to the project. This site would have limitations as a stormwater managment basin given the proximity to a cold-water trout stream. BCWD would be willing to discuss project specific ideas to determine feasiblity.
Washington County	We find the Brown's Creek Restoration Project EAW in general alignment with the Washington County Groundwater Plan. In particular note, we appreciate considerations taken for habitat protection/securement at various trophic levels and for planning efforts to increase long-term native species' and floodplain resilience.	Comment noted, no response needed.
	This project is within the Browns Creek Central High Priority Area of the Washington County Land and Water Legacy Program Top Ten Priority Areas. The county appreciates the effort to restore critical water resources in this area. This project is aligned with the goals of the Land and Water Legacy Program and has taken the necessary precautions to maintain best stewardship practices.	Comment noted, no response needed.
	Page 7, Project Description. We support the Brown's Creek Restoration Project that connects the incised channel with the floodplain and reconnects several oxbows.	Comment noted, no response needed.
Resources		will be provided once complete (expected by January 15, 2024).
Resources	features are encountered during construction to avoid contamination groundwater.	encountered including spring seeps and springs. There are construction plan call outs that depict the locations of springs and seeps identified in the project area.
Resources	Please use only appropriate BWSR-approved native seed mixes, and do not apply fertilizer. Wildlife-friendly erosion control materials are required.	Comment noted. Requirements regarding state-listed species from the Natural Heritage Review Letter will be incorporated into the stormwater pollution prevention plan and construction plans as noted. In addition, the project specifications include state-approved seed mixes, and no fertilizers are proposed. The existing construction plan includes requirements for wildlife-friendly erosion control materials.

Resources

Minnesota Department of Natural Page 19, Rare Features. This section should discuss that a Natural Heritage letter was issued on May 9, 2023 and include it in the appendix. Please see the attached Natural Heritage letter and include it with DNR comments in the Record of Decision. It contains required avoidance measures for the state-threatened Blanding's turtle. The Natural Heritage letter also recommends a rare plant survey be conducted. This section of the EAW does not mention that state-threatened Tubercled rein orchid (Platanthera flava var herbiola), has also been documented in the vicinity. Please refer to the Natural Heritage letter for further direction on the rare plant survey process.

The May 9, 2023 letter addressed to Aaron DeRusha was in response to a potential Conservation Partners Legacy Program grant for a larger project area than is proposed under the EAW for Brown's Creek stream restoration. Removal of invasive species from City of Stillwater property may be undertaken in the future, under a separate scope of work. As stated in the EAW, "A review of rare features for a one-mile search area around this project boundary was conducted using the Natural Heritage Information System database. No state-listed endangered, threatened, or special concern species were identified within the project site, but three state-listed species were identified within one mile of the project boundary, including Louisiana waterthrush (Parkesia motacilla), Blanding's turtle (Emydoidea blandingii), and water-willow (Decodon veticillatus var. laevigatus)." The difference between these reviews was that for our smaller project area, tubercled rein orchid and Goldie's fern were not found within one mile. It should be noted that the BCWD engineer has a NHIS license (LA-1068) and submitted a project-specific MCE (2023-00785) for review on October 13, 2023; no response has been provided to date. Blanding's turtle avoidance measures will be required in the construction plans and specifications.

Resources

Minnesota Department of Natural Section 14.c. Impacts to Ecological Resources. The project proposes increases in floodplain a: Soil compaction to be addressed through soil connectivity and infiltration in the riparian and upland habitats. Some questions still remain that should be addressed in this section: a. What method will be used to limit compaction or remedy areas of soil compaction following construction? b. Where any considerations made regarding aquatic organism passage through the box culvert? c. What method will be used to remove black locust to prevent a flush of black locust sprouts or seedlings? **d.** What method(s) will be taken to remove common buckthorn, glossy buckthorn, and exotic bush honeysuckle to limit resprouting and subsequent ongoing maintenance? e. We recommend that vegetation management include control of Sandbar Willow (Salix interior) migrating into the project area.

scarification/decompaction methods after construction and before seeding and final soil stabilization. b: Yes, the proposed project includes installation of constructed riffles downstream of the box culverts to raise the creek bed and increase the baseflow water elevation specifically to allow fish passage through the culverts. c: Cut stump treatment will be used on black locust and any other woody invasive species, and the project will include an post-construction vegetationmaintenance plan that will include followup treatments of resprouts. **d:** Same method as described under c. **e:** We will add sandbar willow to the list of species to manage as part of the vegetation-management plan.

Resources

Minnesota Department of Natural Project Design. As the project designs are finalized, DNR would like more information on how key features were determined in the design of the new stream channel, and offers the following questions and comments: a. What are the general stream widths and bankfull height in the design? b. Are all the constructed riffles grade control? Will some riffle material be mobile at bankfull to migrate downstream to the next riffle? This application may be limited by the sediments migrating in from upstream. Hopefully, the efficient channel will recruit some gravels into the project area. c. Will the project consider additional roughness across channel plugs to limit cutoffs occurring in the near term? Consider using remaining woody material that can be placed/partially buried onto the newly created floodplain. **d**. There may be an opportunity/benefit for BCWD and DNR Fisheries to coordinate management of the Aquatic Management Area (AMA) so the subsequent handoff of project and benefits can continue within the Brown's Creek AMA. e. With the added sunlight herbaceous wetland vegetation should do well in this area.

a: general stream width (minimum toe to toe width) is 9 feet (refer to Sheet 26, detail 1/26), bankfull height above baseflow water elevation is 1.8 feet per multiple details on Sheet 24. These dimensions are based off reference reach data collected upstream and downstream of the project area. **b**: Yes, all constructed riffles will act as grade control, but note the details shown on Sheet 26 (detail 2/26) call out the use of existing native gravel within the void spaces of the constructed riffle and over the riffle surface to emulate natural conditions. Some of these gravels are anticipated to be carried downstream to the next riffle during bankfull or greater flows. The reduced channel width should improve fine sediment transport and minimize embeddedness of coarse substrates in the channel. c: Yes, all channel plugs are being protected by woody material and toewood to prevent cutoff of oxbow channels. However, the project is located in a Zone AE floodplain which means certification of no-rise of the 100-year flood will be required. This will limit the ability to manipulate floodplain roughness. d: Comment noted; BCWD will work with DNR staff to coordinate long-term management of the Aquatic Management Area. e: Agreed.