Main Stem Lagoon Dredging Project

FINDINGS OF FACT AND RECORD OF DECISION

Background

The Bassett Creek Watershed Management Commission's (BCWMC) current Capital Improvement Program (CIP) includes Project BC 7 "dredging of accumulated sediment in Main Stem of Bassett Creek just north of Highway 55, Theodore Wirth Regional Park" (Main Stem Lagoon Dredging Project; Project). The Project includes dredging accumulated sediment from three lagoons (D, E, and F) along the Main Stem of Bassett Creek to improve water quality, improve habitat, and alleviate flooding.

The City of Golden Valley filed the EAW with the EQB and circulated the EAW to the EQB's EAW Distribution List for review and comment. The notice was published in the EQB Monitor on November 30, 2021, announcing a 30-day comment period which ended on December 30, 2021. The City of Golden Valley issued a news release informing the public that the EAW was available at the City of Golden Valley's web page (https://www.goldenvalleymn.gov/government/legals/index.php) and at City Hall. Parties wishing to make comments were directed to Drew Chirpich from the City of Golden Valley.

Brief Project Description

Project-related activities include the removal of sediment from Lagoons D, E, and F (Figure 3 of the EAW). As planned, the Project would dredge all three lagoons (D, E, and F) to a depth of 6 feet, removing approximately 39,600 cubic yards of accumulated sediment. The lagoon bathymetry and bottom elevation currently varies from a deeper flow channel to sediment islands. In general, the depth of excavation will vary between 0 to 10 feet, roughly from 820 feet above mean sea level (amsl) to 810.6 feet amsl. After construction the approximate 6-foot depth of the three lagoons would significantly increase the water quality treatment storage provided by the lagoons. The increase treatment storage will remove an estimated 600 pounds of total phosphorus (TP) and 156,000 pounds of total suspended solids, annually, and result in significant water quality benefits for downstream stretches of the creek and the Mississippi River. The project would also increase flood storage by approximately 2.19 acre-feet.

Sediment removal would occur with mechanical dredging, using an excavator to scoop the sediment, with no grading taking place within the bottom of the lagoons. Excavation would be completed during the winter months when water levels are low.

Sediment from the three lagoons was tested in Fall 2019 for contaminants as part of Project planning. Testing results indicate that the sediment removed from the lagoons is not suitable for off-site reuse under the MPCA's Best Management Practices for the Off-Site Reuse of Unregulated Fill document due to concentrations of polycyclic aromatic hydrocarbons (PAHs) as benzo[a]pyrene (BaP) equivalents and diesel range organics (DRO). In addition, BaP equivalents are above the MPCA Industrial Soil Reference Value (SRV), indicating the sediments are not suitable for reuse at other commercial or industrial properties. Based on the sediment sampling results and MPCA guidelines, the dredged material will

require landfill disposal. If required, the dredged material would be stockpiled and allowed to dewater prior to hauling. Once selected, the contractor would be responsible for locating a suitable landfill for disposal of the dredged material.

The Project is located on public property (Theodore Wirth Regional Park), which is owned by the Minneapolis Park and Recreation Board (MPRB). Site access during construction would occur via Theodore Wirth Parkway.

It is anticipated that construction would begin in January 2023. Dredging activities would be completed by March 2023. The overall Project, including restoration, would be completed by summer 2023.

Summary of EAW Comments Received and Associated Responses

The 30-day EAW review and comment period began November 30, 2021 and terminated December 30, 2021. Comments were received from five state agencies and one private resident during the public comment period, as noted below:

- Minnesota Department of Natural Resources
- Minnesota Pollution Control Agency
- Minnesota State Historic Preservation Office
- Metropolitan Council
- Office of State Archeologist
- David Stack; Resident

Exhibit A includes a summary of all the provided comments and responses to them.

Environmental Issue Summary

Based on the information contained in the EAW and in the written comments received, the Main Stem Lagoon Dredging Project does not create significant environmental issues. With the exception of permanent tree removal, adverse impacts to the environment would generally be temporary in nature and related to Project dredging activities. Long-term effects are beneficial to both the human and natural environments.

Comparison of Potential Impacts with Evaluation Criteria under Minnesota Rules

In deciding whether a Project has the potential for significant environmental effects and whether an Environmental Impact Statement (EIS) is needed, the City of Golden Valley must consider the impacts that may be reasonably expected to occur from the Project with four criteria by which potential impacts must be evaluated (Minnesota Rules, Part 4410.1700, Subp. 7A through 7D).

A. Type, extent, and reversibility of environmental impacts

Based upon information provided in the EAW and the responses to agency comments, the City of Golden Valley concludes that the potential environmental effects of the Project will be limited in extent, temporary, or reversible. In general, long-term Project effects are beneficial both to the human and natural environments.

B. Cumulative potential effects. The RGU shall consider the following factors: whether the cumulative potential effect is significant; whether the contribution from the Project is significant when viewed in connection with other contributions to the cumulative potential effect; the degree to which the Project complies with approved mitigation measures specifically designed to address the cumulative potential effect; and the efforts of the proposer to minimize the contributions from the Project.

The Main Stem Dredging Project is not dependent on the initiation or development of any other project.

For each of the environmental effects listed in the EAW and Responses to Comments, the Main Stem Dredging Project is not expected to contribute to cumulative potential effects on the Project area relative to other contributors. There are no related projects affecting the Project area at this time that would result in significant cumulative impacts when combined with the Project.

C. The extent to which environmental effects are subject to mitigation by ongoing public regulatory authority. The RGU may rely on mitigation measures that are specific and that can be reasonably expected to effectively mitigate the identified environmental impacts of the Project.

Mitigation of any impacts from the Project will be achieved through design and inclusion of best management practices (BMPs), or regulations currently in place, including permit approvals, enforcement of regulations, or other programs as listed in the following table:

Table -1 Permits and Approval

Unit of Government	Type of Application	Status
U.S. Army Corps of Engineers	• Section 404 Permit	• To be obtained
Minnesota Pollution Control Agency	• Section 401 Water Quality Certification • NPDES/SDS Construction Stormwater Permit • Spill Prevention Plan approval	• To be obtained • To be obtained • To be obtained
Minnesota Department of Natural Resources	• Work in Public Waters Permit	• To be obtained
City of Golden Valley	• Wetland Conservation Act approval • Stormwater Management Permit	• To be obtained • To be obtained
Minneapolis Park and Recreation Board	• Construction Permit and Parkway Permit	• To be obtained

D. The extent to which environmental effects can be anticipated and controlled as a result of other available environmental studies undertaken by public agencies or the Project proposer, including other EIS's.

No other environmental effects, other than what is noted in the EAW, are anticipated.

Decision on the Need for an Environmental Impact Statement

Minnesota Rules 4410.0300, Subp. 3. Purpose, states (in part):

> *Environmental documents shall not be used to justify a decision, nor shall indications of adverse environmental effects necessarily require that a Project be disapproved. Environmental documents shall be used as guides in issuing, amending, and denying permits and carrying out other responsibility of governmental units to avoid or minimize adverse environmental effects and to restore and enhance environmental quality.*

Minnesota Rules 4410.0300, Subp. 4. Objectives, further sets forth:

> *The process created by parts 4410.0200 to 4410.6500 is designed to:*
>
> *A. Provide usable information to the Project proposer, governmental decision makers, and the public concerning the primary environmental effects of a proposed Project;*
> *B. Provide the public with systematic access to decision makers, which will help to maintain public awareness of environmental concerns and encourage accountability in public and private decision making;*
> *C. Delegate authority and responsibility for environmental review to the governmental unit most closely involved in the Project;*
> *D. Reduce delay and uncertainty of the environmental review process, and*
> *E. Eliminate duplication.*

Based on the Environmental Assessment Worksheet and related documentation for the Main Stem Lagoon Dredging Project, the City of Golden Valley, as the Responsible Governmental Unit (RGU) for this environmental review, makes the following conclusions:

1. The Environmental Assessment Worksheet and related documentation for the Main Stem Lagoon Dredging Project were prepared in compliance with the procedures of the Minnesota Environmental Policy Act and Minnesota Rules, Parts 4410.1000 to 4410.1700.

2. The record demonstrates that implementation of this Project does not have the potential for significant environmental effects. Therefore, the RGU makes a Negative Declaration and does not require the preparation of an Environmental Impact Statement (EIS) for the Main Stem Lagoon Dredging Project.

Signature: _____ **Date:** 1-19-22

Marc Nevinski

Title: Physical Development Director
City of Golden Valley

Attached Exhibits:

A. Response to EAW Comments

Attachment A
Main Stem Dredging EAW
Project Response to Comments

Minnesota Department of Natural Resources (DNR)

Comment 1: Page 3, Project Description. The EAW notes the three lagoons were constructed in 1937. The project would dredge all three lagoons to a depth of six feet. Sediment removal would occur with no grading taking place within the bottom of the lagoons. How was the dredge depth and lagoon bottoms determined? Are there cross-sections or excavation depth records from the original construction?

Response 1: *The lagoons were originally constructed in 1937 and had varying depths ranging from eight to twelve feet. We are proposing to dredge the ponds to a depth of six feet to preserve the wetland characteristics of the lagoons.*

Comment 2: Page 13, Soils and Topography; Page 17, Stormwater. Due to entanglement issues with small animals, use of erosion control blankets should be limited to 'bio-netting' or 'natural netting' types, and specifically not products containing plastic mesh netting or other plastic components. These are Category 3N or 4N in the 2016 & 2018 MnDOT Standards Specifications for Construction. 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 do not allow any materials with synthetic (plastic) fiber additives in areas that drain to Public Waters (see attachment).

Response 2: *Comment noted.*

Comment 3: Page 18, Wetlands. Soil structure is irreplaceable, and damaging it reduces soil function and encourages the spread of invasive species. In order to prevent soil compaction, please use poly and/or timber construction mats when working within wetland boundaries in unfrozen conditions. Please do not store equipment, materials, or spoil piles within wetlands.

Response 3: *Comment noted.*

Comment 4: Page 24, Rare Features. Impacts to Blanding's turtles, state-listed as threatened, may occur as a result of this project. Please coordinate with the DNR Regional Nongame Specialist, Erica Hoaglund (651-259-5772 or Erica.Hoaglund@state.mn.us), on avoidance measures for this species. It may be that the timing of the dredging and bank stabilization will need to be adjusted to avoid impacting overwintering turtles, or that dewatering should occur early enough in the season so that the lagoon reaches its lowest water level in the fall giving overwintering turtles the opportunity to relocate. Please distribute the attached flyer to all contractors working in the area and report any sightings to the DNR.

Response 4: *A threatened and endangered species consultation letter was sent to Lisa Joyel in October 2021. The letter was also sent to Eric Hoaglund for concurrence in December 2021. We are waiting on a response from the DNR. The Blanding's Turtle flyer will be distributed to the contractor.*

Minnesota Pollution Control Agency

Comment 1: The EAW provides very little information on the amount of area to be disturbed beyond the lagoons that will be dredged. The National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) Construction Stormwater Permit (CSW Permit) is only required if the Project will disturb one acre or more above the Ordinary High Water Level (OHWL) of the surface water. Work areas below the OHWL are under jurisdiction of the Minnesota Department of Natural Resources Public Waters permit and do not require CSW Permit coverage.

Response 1: *Temporary Disturbance outside of the three lagoons will occur from site access. No grading or excavation will occur outside of the three lagoons. the project will not disturb one acre or more above the OHWL and an NPDES/SDS permit will not be required.*

Comment 2: Construction stormwater Best Management Practices (BMPs) will need to include redundant(double) downgradient sediment controls located above the OHWL for soil disturbances within 50 feet of the water bodies at the site.

Response 2: *Any soil disturbance within 50 feet of Bassett Creek will have redundant downgradient sediment controls to prevent sedimentation into the waterbodies.*

Comment 3: Soil piles will require both downgradient sediment controls installed at the perimeter of the piles and soil stabilization cover applied immediately and completed within 7 days of creating the piles due to the water impairments.

Response 3: *The dredged material will be dewatered in place and hauled off-site. If the soil is stockpiled for more than 7 days a soil stabilization cover will be applied to the stockpile.*

Comment 4: In addition, any inactively worked exposed soil areas will require temporary or permanent soil stabilization BMPs to be installed within 7 days. Tracking control BMPs should be installed to prevent sediment tracking from equipment entering the surface waters. Please direct questions regarding CSW Permit requirements to Roberta Getman at 507-206-2629 or Roberta.Getman@state.mn.us.

Response 1: *Comment noted.*

Comment 2: The MPCA recommends that equipment used during construction be appropriately muffled, and that the construction itself be done during daytime hours (7:00 am to 10:00 pm) as is feasible, to further reduce potential impacts on nearby receptors. For noise related questions, please contact Maggie Wenger at 651-757-2007 or Maggie.Wenger@state.mn.us.

Response 2: *Construction will be limited to daytime hours (7:00 am to 10:00 PM). Equipment used on site will be muffled to reduce noise levels.*

State Historic Preservation Office

Comment 1: We initially provided comments on this project in a letter dated December 29, 2021 recommending that Phase I archaeological survey be completed for terrestrial areas that will be affected by the construction activities. Tyler Conley from Barr Engineering has

provided our office with additional information clarifying that no grading or excavation will occur outside of the lagoons and that the dredged material will be stockpiled in the lagoons themselves. Based on this additional information, we agree that no archaeological survey is needed for the project as it is currently proposed. Therefore, based on information that is available to us at this time, we conclude that there are no known or suspected archaeological properties located in the area that will be affected by this project.

Response 1: *Comment noted.*

Comment 2: Theodore With Park, Theodore Wirth Parkway, and the Bassett Creek Lagoons are all contributing resources to the historic district. From the documentation provided, it appears that the proposed project will not adversely affect these historic resources, but care should be taken to return the landscape to its current condition and to minimize tree removal. We note that the plans call for installing approximately 30 CY of riprap between Theodore Wirth Parkway and Lagoon E to repair an existing eroded riprap area. We recommend minimizing the amount of riprap as much as possible, and that any new riprap be natural uncut stone like fieldstone that blends in as much as possible with the natural environment.

Response 2: *Comment noted.*

Office State Archaeologist

Comment 1: Upon further review, and clarification from Tyler Conley, from Barr Engineering, on January 5, 2022, the Office of the State Archaeologist is updating their comments on the Main Stem Lagoon Dredging Project Environmental Assessment Worksheet. Given the project, as currently proposed, is not anticipated to cause ground disturbance beyond recently accumulated sediment deposits in the lagoons, the Office of the State Archaeologist has no concerns at this time.

Response 1: *Comment noted.*

Metropolitan Council

Comment 1: The EAW indicates that the Chalet parking lot may be used to stage equipment and provide project parking. Metro Transit requests to have advance notice of the staging plan (e.g. what portion(s) of the Chalet lot is proposed for project staging activities). At this time, the project is not expected to have direct impacts to transit, however Metro Transit's ongoing understanding of the project plan will inform bus operations decisions should any issues arise.

Response 1: *The Minneapolis Park and Recreation Board will not allow the contractor to use the Chalet parking lot as a staging area. No impacts to Metro Transit operations are expected.*

Comment 2: The proposed dredging project may have an impact on multiple Metropolitan Council Interceptors in multiple locations. To assess the potential impacts to our interceptor system, prior to initiating this project, preliminary plans should be sent to Tim Wedin, Interceptor Engineering Assistant Manager (651-602-4571) at the Metropolitan Council Environmental Services.

Response 2: *Comment noted. We are aware of a deep sanitary sewer on the east side of the project site, which will not be affected by the project.*

Comment 3: Two existing units of the Regional Parks System, Theodore Wirth Regional Park and Victory Memorial Parkway Regional Trail, are within the project area; and a planned unit, Luce Line Regional Trail, is less than 0.1 mile south of the project area. The EAW acknowledges that the project will take place within Theodore Wirth Regional Park, recognizes Minneapolis Park and Recreation Board is the owner, and reference the proximity to the Luce Line Regional Trail. The EAW also cites the Theodore Wirth Regional Park Master Plan. The EAW does not reference the Victory Memorial Parkway Regional Trail, which travels along Theodore Wirth Parkway in the project area, but does reference the Grand Rounds Trail which is synonymous with the Victory Memorial Parkway Regional Trail in this area.

Response 3: *Comment noted.*

Comment 4: The EAW notes that the Main Stem Lagoon Dredging Project will "improve water quality, improve habitat and alleviate flooding" (p. 3). These proposed benefits align with the "two key outcomes" cited for the park in its master plan; that "Wirth Park's unique natural and ecological resources will be protected and enhanced" and "Wirth Park's natural resource will be a basis for recreational and visitor experiences" (p. 11). The proposed removal of invasive and undesirable tree species (pp. 26, 31) also aligns with generally accepted and beneficial natural resource management activities in the Regional Parks System. Beneficial effects of the proposed project are articulated further on page 31 of the EAW.

Response 4: *Comment noted.*

Comment 5: Two existing units of the Regional Parks System, Theodore Wirth Regional Park and Victory Memorial Parkway Regional Trail, are within the project area; and a planned unit, Luce Line Regional Trail, is less than 0.1 mile south of the project area.

Response 5: *Comment noted.*

Comment 6: Council staff encourage the Proposer (Bassett Creek Watershed Management Commission) and RGU (City of Golden Valley) to coordinate with the Minneapolis Park and Recreation Board prior to and during the dredging project. Any construction activities that will impact the use of Theodore Wirth Parkway or Victory Memorial Parkway Regional Trail/Grand Rounds trail should be communicated to the public via onsite signage and online channels.

Response 6: *The BCWMC has been coordinating with MPRB, the City of Golden Valley, and the City of Minneapolis. Coordination will continue through construction of the project. The BCWMC will work with MPRB to communicate trail disruptions to the public.*

David Stack; Resident

Section 6 - Project Description - a.

Comment 1: Stated here are three purposes for this project, "to improve water quality, improve

habitat, and alleviate flooding". One goal for Bassett Creek that I hold in high value is stream restoration. I am thinking that it would be environmentally beneficial to restore the creek and floodplain closer to its historical condition that existed prior to settlement by peoples of European descent. This is a good area to restore the creek and floodplain closer to pre-settlement conditions because there is the space here to do so. The creek and floodplain are not tightly hemmed in by modern development. In this light, I think it is important to learn what this area was like in historical pre-settlement days.

Response 1: *While the BCWMC agrees that stream restoration is an important technique to improve water quality and habitats along linear stream segments, that is not the objective of this particular project. The historical nature of the lagoons as envisioned by the park's namesake, Theodore Wirth, and their construction by the Civilian Conservation Corps, offer cultural values which are desirable to keep intact in this instance. Further, this project will provide significant water quality benefits for downstream stretches of the creek and the Mississippi River, including removing an estimated 600 pounds of total phosphorus (TP) and 156,000 pounds of total suspended solids, annually. For context, typical BWCMC capital projects, including streambank restoration projects, usually remove less than 100 of pounds of TP annually.*

Comment 2: I am thinking that the 1937 dredging project brought about degradation of the historical pre-settlement natural environment of the creek and its floodplain in this area. We did a lot things in the 1930s that we do not consider as environmentally friendly anymore. Back in the 1930s we drained wetlands, filled in wetlands, removed creek meanders, straightened and channelized creeks, buried creeks in storm sewer pipes and tunnels, filled in floodplains, isolated floodplains behind levees, dumped untreated human sewage into creeks and rivers, allowed the dumping of all forms of contaminants into creeks and rivers, had very little to no regulation, monitoring and enforcement of soil laden runoff from construction sites, and used creek banks, wetlands and floodplains as garbage dumping sites.

Response 2: *Comment noted.*

Comment 3: What is estimated to have been the average depth of the historical pre-settlement creek in this area? Has a creek biology expert ever put together a listing of the probable populations of native animals, plants and other organisms of the creek's pre-settlement aquatic, benthic and riparian habitats in this area?

Response 3: *We do not have data on the pre-settlement depths of the Creek. An assessment of pre-settlement vegetation, habitat, and wildlife was not completed for this project because the intent of the project is not to restore the lagoons to their pre-settlement communities. An assessment of existing wildlife and impacts that may occur to wildlife and their habitats can be found in Item 13 of the EAW.*

Comment 4: What is estimated to have been the average depth of the historical pre-settlement

floodplain wetlands in this area? How many acres of this project area are estimated to have been floodplain wetlands pre-settlement? Has a floodplain wetlands biology expert ever put together a listing of the probable populations of native animals, plants and other organisms of the floodplain wetlands pre-settlement aquatic, benthic and riparian habitats in this area?

Response 4: *The 1937 project converted 65 acres of wetlands into 36 acres of upland and 27 acres of open water (lagoons). An assessment of pre-settlement vegetation, native animals, and site conditions is beyond the scope of this project. The intent of the project is to remove accumulated sediment from the lagoons along Bassett Creek, not to restore the creek to pre-settlement conditions.*

Comment 5: Will this project improve water quality under normal flow conditions?

Response 5: *Yes. The project will improve water quality by removing accumulated sediment from the three lagoons. Increasing the capacity of the lagoons will allow more capacity for suspended sediment to settle within the lagoons, reducing the amount of sediment and nutrients transported downstream under normal flow conditions. See Response 1.*

Comment 6: If normal flow water quality improvement is expected, then will sample studies document this? Are water quality testing results on file of samples taken during normal flow condition downstream from the project? Will there be equivalent normal flow studies after completion of the project? Will the future normal flow samples be taken in the same location and under the same conditions as the samples taken before the project?

Response 6: *The Metropolitan Council, in coordination with the BCWMC has been continuously monitoring stream flow and water quality of Bassett Creek near the old Irving Avenue bridge since 2000. Last year, the monitoring equipment was moved to the Van White Blvd crossing to accommodate a city infrastructure project. This "Watershed Outlet Monitoring Program" monitoring site will remain active for the foreseeable future. The water sampling results are available for review on the BCWMC website here: Bassett Creek Watershed Management Commission :: Main Stem Bassett Creek (bassettcreekwmo.org)*

Comment 7: Will this project improve water quality under high flow event conditions?

Response 7: *Yes; more sediment is expected to settle in the lagoons under high flow conditions than under low flow conditions. See Response 5.*

Comment 8: In like manner as with normal flow, if high flow water quality improvement is expected, then, has there been, and will there be in the future, sample testing to document this?

Response 8: *See Response 6. Monitoring is continuous under all flow conditions.*

Comment 9: In the purpose of improving habitat, can a listing be provided of the species of plants and animals that will gain improved habitat?

Response 9: *The purpose of the project is to increase the storage capacity of the lagoons by removing accumulated sediment. The project is not targeting habitat improvements for specific plant or animal species; therefore, such species lists were not developed for the project. Habitat improvements will occur as an indirect result of the project by removing accumulated sediment that currently limits aquatic habitat. These types of improvements are more favorable to habitat generalists such as smallmouth bass, bluegill, sunfish, carp, dragonflies, damselflies, beetles, water bugs, leeches, and water striders.*

Section 6 - Project Description - b.

Comment 10: It is stated here that the sediment planned for removal contains three types of contaminants: 1. benzo[a]pyrene (BaP) equivalents; 2. polycyclic aromatic hydrocarbons (PAHs); 3. diesel range organics (DRO).Can a brief separate description be provided on the sources and methods that each of these three types of contaminants got into the creek, and thus subsequently into the lagoon sediments?

Response 10: *The contaminants are from nonpoint source pollution that have accumulated in the watershed over time. There are multiple sources of each pollutant that could have contributed to the ultimate accumulation in the creek over the last 90 years. Identifying the sources and transport mechanisms of each pollutant is beyond the scope of this project.*

Comment 11: Are any of these three types of contaminants still entering the creek, or continuing to be washed downstream into the lagoons? If so, what will be done to reduce or stop future contamination of the lagoons by these substances?

Response 11: *Due to their nonpoint source origins, it is possible that these pollutants could still enter Bassett Creek from the watershed after the project has been completed. However, Federal, State, and local laws developed and enforced over the last several decades have helped control the transport of these contaminants to waters. One of the general purposes of maintenance dredging is to periodically remove these urban contaminants in accumulated sediment. This is a common practice following state and federal guidelines.*

Comment 12: I have been informed that the 1937 work dredged to a depth of nine feet. It is stated that this planned work will dredge to a depth of six feet. So, this means that three feet of post-1937 sedimentation is being left in-place on the bottom of the lagoons.

Response 12: *Comment noted. The 1937 work dredged to a depth of eight to 12 feet; the proposed project plans to dredge to a depth of six feet.*

Comment 13: Are any of the above three identified contaminants being left in-place in the three feet

of post-1937 sedimentation between six feet and nine feet of depth? If so, are there any potential environmental harms that this may cause?

Response 13: *Soil samples were collected in the lagoons to a depth of 6 feet. It is unknown if these contaminants extend deeper.*

Section 6 - Project Description - d.

Comment 14: Is the dredging of creekbeds and floodplains currently considered a best management practice by water resources experts for the protection of waters further downstream from phosphorus and suspended solids? Where else has this been done in recent years?

Response 14: *The proposed project includes sediment removal from constructed basins and does not propose to dredge creekbeds or floodplains independently. The lagoons will function as stormwater basins, which have an important role in providing a place for accumulated sediment to settle out of the water column and, in doing so, also allow pollutants such as phosphorus to settle out of the water column. However, these types of features require periodic maintenance through sediment removal to continue performing as planned.*

Comment 15: Comments and Question: PAHs, elevated lead, and petroleum associated with DRO are being removed to a depth of six feet. The 1937 project dredged to a depth of nine feet. Are any contaminants being left in-place at the six to nine foot depths?

Response 15: *See Response 13.*

Comment 16: Yes, this project will restore the 1937 design aesthetics of a view of open water. Is this 1937 aesthetic of dredging to produce a view of open water currently considered an environmentally friendly practice? It is stated here that this project will restore the intended function of the 1937 dredging project. Other than producing what most people considered an aesthetically pleasing view of open water, what is listed in the original 1937 project literature as the original dredging project's function? Granted, as it turned out, the dredged lagoons functioned as collection basins for sediment and contaminants, but, was this actually mentioned as a planned function in the 1937 project's literature?

Response 16: *Based on historical clippings from this period, the intent of the 1937 project was to provide "increased opportunities for recreation and human enjoyment". The 1937 project resulted in the creation of uplands adjacent to open water lagoons, both of which were used for recreation. This project maintains the culturally historic nature of the area while significantly improving water quality in the creek.*

Comment 17: This project is stated here as preserving natural beauty along the creek. The concept of beauty is a subjective matter. Granted, most people in 1937 probably considered an open water pond more beautiful than a shallow floodplain wetland with emergent vegetation. However I personally would find more beauty in a view of the creek and

floodplain restored to more of a pre-settlement condition.

Response 17: *Comment noted.*

Comment 18: It is stated here that this project will contribute to natural habitat quality. As asked for previously, to prove this claim, please provide a list of the native plant and animal species that will benefit from their natural habitat quality being improved by this project. Would it be considered true that the 1937 project caused degradation of the historical pre-settlement natural habitat quality plants and animals native to this area?

Response 18: *The purpose of the project is to increase the storage capacity of the lagoons by removing accumulated sediment. The project is not targeting habitat improvements for specific plant or animal species; therefore, such species lists were not developed for the project. Habitat improvements will occur as an indirect result of the project by removing accumulated sediment that currently limits aquatic habitat. These types of improvements are more favorable to habitat generalists such as smallmouth bass, bluegill, sunfish, carp, dragonflies, damselflies, beetles, water bugs, leeches, and water striders.*

As is typical of urban areas undergoing development, the 1937 project altered the project area from pre-settlement conditions.

Comment 19: It is stated here that habitat is improved for fish and other aquatic species by deepening the lagoons. As asked for previously, to prove this claim, please provide a list of the fish species and the other aquatic species that will benefit from their habitat being improved.

Response 19: *Please refer to Response 18.*

Section 6 - Project Description - f.

Comment 20: It is stated here that the 1937 dredging project created 36 acres of usable recreation land. How much of this 36 acres had previously been floodplain, and how much is still considered as floodplain?

Response 20: *An assessment of 1937 floodplains was not completed as part of this EAW. The intent of the EAW is to assess this project's effects on the existing environment, not against historic, pre-settlement conditions. The project will remove accumulated sediment from the floodplain of Bassett Creek, increasing the floodplain storage capacity. Item 11.iv.a of the EAW discusses the project-related impacts on existing floodplain conditions.*

Comment 21: It is stated here that the 1937 dredging project created 27 acres of open water. How much of this 27 acres had been dry land slightly above the normal water level, and how much was shallow wetland floodplain with emergent vegetation?

Response 21: *An assessment of 1937 wetland conditions was not completed as part of this EAW. The intent of the EAW is to assess this project's effects on the existing environment, not against historic pre-settlement conditions. Item 11.a.i and 11.iv.a discusses the project-related impacts on existing wetland conditions.*

Section 9 - Land Use

Bassett Creek Watershed Management Plan (2015-2025)

Comment 22: Is groundwater being protected with this project? As I have been informed, the 1937 project dredged to a depth of nine feet. This project is dredging to a depth of six feet. This leaves three feet of post-1937 sediment in-place at the bottom of the lagoons. Is this bottom three feet of sediment contaminated in any way? If so, is the groundwater going to be protected from the contaminants? Will the open water lagoons absorb heat in the summer to a point where the waters will become harmfully warm for any native plants or animals?

Response 22 *The contaminated materials will be dredged to a depth of six feet. It is unknown if the remaining sediment is contaminated. However, if the sediment is contaminated any residual contaminants would be immobile and are unlikely to leach into groundwater. Bassett Creek is a warm water stream and the plants and animals that currently live in the stream are suited to the warm water of the creek or lagoons.*

Theodore Wirth Regional Park Master Plan

Comment 23: Here it is stated that "The park will provide vital opportunities to experience and learn about the natural world in an urban setting." Would it not be more amenable to learning about the natural world if the creek and floodplain in this area was closer to historical pre-settlement natural condition, instead of the condition of artificial man-dredged lagoons?

Response 23: *Comment noted. The natural world, historic places, and society's impact on the environment could all be included in educational materials about the area.*

Comment 24: It is stated here that "The park will offer safe and equitable access to accommodate a variety of local and regional users in all seasons." A lot of kids hike over here in the winter from the nearby neighborhoods to slide on the sliding hill near Lagoon F. Does the dredging of the lagoons to a depth of six feet present a winter drowning danger to children that may venture out onto thin ice conditions? Are shallow vegetated benches planned for the shorelines of the lagoons? Would shallow vegetated benches produce good habitat for native plants and animals? Also, would shallow vegetated benches provide a shallow safe zone for a child who may venturing out onto thin ice to break through and not sink over their head and drown?

Response 24: *The proposed project does not incorporate shallow benches. The project was developed*

in close coordination with MPRB. Project designs, including the absences of benches, were approved by MPRB staff. If winter safety is a concern, MPRB could add signage or barriers.

SECTION 11 – Water Resources - a - i

Comment 25: Bassett Creek is mentioned in this section as impaired for fish bioassessments in 2004.

Response 25: *Comment noted.*

Comment 26: Can a listing be provided of the Bassett Creek native fish species involved in this impairment? List any non-native fish species involved in this impairment?

Response 26: *The BCWMC was not involved in the data collection used to list the stream as impaired. Please contact the MPCA to obtain the data used to list the stream as impaired.*

Comment 27: Is Bassett Creek still considered impaired for fish bioassessment as of December 2021?

Response 27: *Yes, the creek remains impaired for fish bioassessments.*

Comment 28: If the creek is still considered impaired for fish bioassessment, does this project help to alleviate this impairment? If so, which species of Bassett Creek native fish are improved? Which species, if any, of non-native fish are improved?

Response 28: *This impairment is a result of many environmental circumstances; resolving this impairment is beyond the scope of this project.*

Comment 29: Can a list be provided of the fish species that lived historically in this section of Bassett Creek prior to the 1937 dredging project?

Response 29: *Determining the fish communities present during pre-settlement is beyond the scope of this project.*

Comment 31: Bassett Creek is mentioned in this section as impaired for fecal coliform in 2008. Is Bassett Creek still considered impaired for fecal coliform as of December 2021?

Response 31: *According to the MPCA, this segment of Bassett Creek is listed as impaired for fecal coliform as of December 2021.*

Comment 32: Can a few sentences be provided to give a brief description of the fecal coliform impairment and the reason/s for it?

Response 32: *Fecal coliform bacteria are a group of naturally occurring bacteria that are passed through the fecal excrement of humans, livestock, and wildlife. Fecal coliform contamination accumulates from non-point sources of human and animal waste upstream of the project area and within the stream itself (e.g., waterfowl).*

Comment 33: If the creek is still considered impaired for fecal coliform, does this project help to alleviate this impairment?

Response 33: *The project will not help alleviate fecal coliform within the project area. Fecal coliform is likely transported into the project area from non-point source pollutants upstream of the project area. It is beyond the scope of the current project to address this impairment.*

Comment 34: What are considered the best practices to alleviate fecal coliform impairment? What practices have been conducted to help alleviate fecal coliform impairment in Bassett Creek?

Response 34: *The 2014 "Upper Mississippi River Bacteria TMDL Study & Protection Plan" describes the potential bacteria sources, and the reduction in pollutant loading and implementation activities needed to meet water quality standards. The BCWMC is working to better understand and address sources of bacteria in the watershed including assessing bacteria pollution through its regular water monitoring program, encouraging the control of large geese populations, providing education to residents about pet waste, and participating on the Minneapolis Pathogen Task Force.*

Comment 35: Would a shallow wetland floodplain with an abundance of emergent vegetation work better at filtering out fecal coliform contamination than the proposed wetland floodplain of six foot depth?

Response 35: *Addressing the fecal coliform impairment is beyond the scope of this project. See Response 34 for a list of watershed-wide efforts.*

Comment 36: Bassett Creek is mentioned in this section as impaired for chloride in 2010. Is Bassett Creek still considered impaired for chloride as of December 2021?

Response 36: *According to the MPCA, this segment of Bassett Creek is listed as impaired for chloride as of December 2021.*

Comment 37: What are considered the best practices to alleviate chloride impairment in Bassett Creek? What practices have been conducted to help alleviate chloride impairment in Bassett Creek?

Response 37: *Chloride pollution is of significant concern for the BCWMC. The BWCMC is working on multiple projects, programs, and studies to reduce chloride pollution including assessing chloride pollution and trends in lakes and streams, coordinating the Hennepin County Chloride Initiative, developing templates for winter maintenance plans for private developers and encouraging their use through project reviews, implementing the Parkers Lake Chloride Reduction Project (which is slated to develop structural best practices that might be useful in multiple locations), educating local officials, residents, and businesses on best practices, etc. Specifically addressing chloride pollution is beyond the scope of this project.*

Comment 38: If the creek is still considered impaired for chloride, does this project help to alleviate this impairment?

Response 38: *Addressing the chloride impairment is a separate BCWMC watershed-wide effort that is beyond the scope of this sediment removal project. See Response 40.*

Comment 39: Has there been discussion of stream restoration work in this section of Bassett Creek to create more of a natural creek habitat, something more similar to the historical pre-1937 dredging habitat? If so, could a few sentencers be provided to summarize the main points of the discussion/s.

Response 39: *The purpose of the project is to dredge accumulated sediment from the three lagoons in Bassett Creek. Creek restoration is beyond the scope of this project. Information on the previous stream restoration project for this area can be found on the BCWMC website here: https://www.bassettcreekwmo.org/projects/all-projects/bassett-creek-main-stem-restoration-project-golden-valley-ro*

Comment 40: It is stated in this section that "canoes and kayaks can navigate the creek in areas of adequate water depth". Having done so a number of times I will say that it is usually not that easy to kayak Bassett Creek due to various reasons. For one thing, there is often inadequate flow during late summer in the upper reaches. The lower reaches usually have adequate flow, but various obstacles cause difficulties - such as kayak unfriendly culverts, getting hung up on rocks, and a manmade dam at Fruen Mill. It would make kayaking much easier and more fun if placed rock could leave a little kayakable trough in the thalweg. Maybe cross-vanes for instance could have the center 3 or 4 feet of rocks lowered more.

Response 40: *Comment noted. Work beyond removal of accumulated sediment is beyond the scope of this project.*

Section 12 - Contamination/Hazardous Materials/wastes

Comment 41: The current plan is to excavate to a depth of six feet below normal water level. Is it true that the lagoons were originally excavated to a depth of nine feet? If so, are the three feet of sediments being left inplace below six feet contaminated? If so, what are they contaminated with?

Response 41: *See Response 13.*

Comment 42: Is it possible that most if not all of the contaminated sediment in the lagoons is stable and contained and not at a very high risk of scouring out and flowing downstream? We have had a number of heavy flow events in the past 20 to 30 years that should have caused scouring. It seems possible to me that the remaining sediment may be stable and may not required to be removed. It appears that the planners are ok with leaving three feet of possibly contaminated sediment at the bottom of the lagoons. And, the

planners were seriously considering dredging only to a depth of four feet - thus leaving five feet of possibly contaminated sediment at the bottom of the lagoons.

Response 42: *A portion of the accumulated sediment at the bottom of the lagoons is likely stable and contained within the lagoons. However, the presence of the accumulated sediment prohibits additional sediment from settling in the lagoons. As a result, the additional sediment is transported downstream. Upon project completion, the lower velocities in the lagoons mean it is less likely that contaminated material will be transported downstream than under current conditions.*

Comment 43: I am all in favor of restoring live flood storage space, that is space above the normal water level. But I have some questions about the need to removed sediments from the dead storage area, that is from below the normal water level. As I have been informed, the deepening of a floodplain below normal water level does not help in flood control. Adding more floodplain space above the normal water level is the critical practice for flood control. The great majority of sediment planned to be removed in the project is being dredged below the normal water level.

Response 43: *Most of the dredged sediment will be removed from below the normal water level, with a smaller amount removed from above the normal water level. The sediment dredged from above the normal water level will provide a small amount of additional flood storage. The primary purpose of the project is to improve water quality for downstream stretches of the creek and the Mississippi River including removing an estimated 600 pounds of total phosphorus (TP) and 156,000 pounds of total suspended solids, annually.*

Section 13

Comment 44: I think I have already covered my questions about plants and animals in other sections.

Response 44: *Comment noted.*

Section 19 - Cumulative Potential Effects - c. - Negative Effects

Comment 45: It is stated here that "negative effects from the Project would be temporary lasting only the duration of the construction activities". Is it not true that all rivers and creeks transport sediment - and, that the transport of sediment is a natural process with rivers and creeks? Will not the creek continue into the future to transport sediment into the lagoons? And, since the lagoons are manmade, and not natural, and not self scouring, will they not continue to gradually fill in with sediment again? If so, would not the continuing gradual long term sedimentation of the lagoons cause negative effects on the natural habitats of the benthic, aquatic or riparian organisms?

Response 45: *Sediment transport is a natural function of rivers and creeks. Since Bassett Creek flows through the lagoons, it is reasonable that sediment will continue to accumulate following construction and that maintenance to remove accumulated sediments may be*

required again in the future, depending on rate of deposition. Without maintenance to remove accumulated sediments, it is estimated that it will take over 120 years for the dredged lagoons to fill with sediment.

Section 19 - Cumulative Potential Effects - c. - Beneficial Effects

Comment 46: It is stated here that this project is "restoring permanent pool storage in the three lagoons." Granted, these lagoons may be relatively 'long term', but, are they really 'permanent'? As discussed above, will the lagoons not gradually refill with sediment and, and at some point in the future require another dredging project?

Response 46: *"Permanent" pool storage refers to the storage below the normal water level. Maintenance to remove accumulated sediments may be required again in the future, depending on rate of deposition.*