

Memorandum

To: BCWMC Technical Advisory Committee (TAC)
From: Barr Engineering Co. (Barr) (Karen Chandler, P.E.; Patrick Brockamp, PE)
Subject: Feasibility Study Scope for Main Stem Lagoon Dredging Project, Wirth Park (2027, CIP Project BC-7)
Date: July 31, 2025

At their April 17, 2025 meeting, the Commission approved the TAC's recommended 5-year (2025 – 2029) CIP, which included the Main Stem Bassett Creek Lagoon Dredging, Wirth Park (BC-7) project to dredge lagoons (either Lagoons D, E, and F, or Lagoon G) in Theodore Wirth Park, slated for construction in 2027. This means a feasibility study for the project needs to begin soon so it can be completed by June 2026. This memo presents background information about the project and the preliminary feasibility study work scope.

Staff is seeking input from the TAC on appropriate elements, tasks, and considerations as the final scope is developed for Commission consideration at their August 21st meeting.

1 Background Information

At their October 2023 meeting, the Commission agreed with a TAC recommendation to evaluate additional dredging of Lagoons D, E, and F or dredging of Lagoon G, while considering other potential CIP projects for the next 5-year CIP. There was acknowledgement that because the original Lagoon Dredging Project was not constructed to specifications, additional dredging may be warranted.

Related background documents you may wish to review include:

- [October 2023 TAC agenda with discussion of this project](#)
- [October 2023 TAC recommendation approved by Commission](#)
- [Lagoon Dredging Project webpage with final report](#)

At their February and March 2024 meetings, the TAC discussed potentially adding this project to the next 5-year CIP. Minneapolis Park and Recreation Board (MPRB) staff proposed that the Commission consider either (a) performing additional dredging in Lagoons D, E, and F, or (b) dredging accumulated sediment in Lagoon G, further upstream in Theodore Wirth Park. The TAC discussed the pros and cons of both options. They noted that it may be difficult for a contractor to remove additional sediment in Lagoons D, E, and F due to now-steeper side slopes. They also discussed the more natural features of Lagoon G, noting that although it was constructed as an open water lagoon in the 1930's, the stream seems to have reclaimed its channel through the area. The group wondered if the area should be left in its more natural state closer to conditions before the 1930's or if the presumably contaminated sediment should be removed to improve environmental conditions. Because of these complex questions, the TAC recommended that the Commission perform another feasibility study to fully assess the dredging options and their impacts.

The original Main Stem Lagoon Dredging Project was constructed under budget, leaving a current budget balance of approximately \$1,165,000. The proposed 5-year CIP budget of \$800,000 spread over years

2027 (\$200,000) and 2028 (\$600,000) reflects the estimated costs (in 2024) of a new feasibility study (\$75,000), plus the funds needed to design and construct the higher of the two options (\$1,900,000 for option (b)) minus the budget balance.

2 Preliminary Scope for Feasibility Study

The following preliminary work scope items (and discussion) are based on the original feasibility study work scope, the feasibility study results, and project construction/follow-up.

2.1 Project Meetings

Assume the same project meeting tasks as the previous feasibility study:

- a) Project kick-off meeting with BCWMC staff, commissioners, Minneapolis and Golden Valley staff, and MPRB staff and preparation of meeting notes.
- b) Meeting with BCWMC staff, Minneapolis and Golden Valley staff, MPRB staff, USACE, MN DNR and MPCA to discuss concept alternatives and review environmental review and permit requirements for project; and prepare meeting minutes to confirm regulatory agencies' discussion results.
- c) Prepare bi-weekly project email updates.

2.2 Desktop and Field Studies

Because the proposed work in Lagoons D, E, and F is a continuation of previously completed work, and the proposed work in Lagoon G is new work, some of the work tasks below may only apply to the proposed Lagoon G work. If so, this is noted below.

- a) Bathymetric surveys – We recommend performing this survey for Lagoon G only. The post-construction bathymetry survey of Lagoons D, E, and F can be used for the feasibility study, so a new bathymetry is not needed. Per the December 2023 TAC recommendations, the survey should include use of sonar or an extra wide foot on the survey rod because a normal foot will sink in the soft sediment. Also, based on the TAC recommendations, the bathymetric survey may need repeating during final design to have better pre-dredge sediment depths (within one year of construction) to develop better plan quantities. If the Lagoons D, E, and F option is selected for construction, a bathymetric survey would be needed during final design.
- b) Topographic and utility location survey – We recommend performing this survey only for Lagoon G, as we already performed this survey for Lagoons D, E, and F.
- c) Tree location, diameter, species, and condition survey – A tree survey should not be needed for Lagoons D, E, F as the proposed work is all in the water. For Lagoon G, we recommend discussing tree survey needs with the MPRB forester.
- d) Wetland delineations – Assume field wetland delineation is needed for Lagoon G, and that a desktop review and wetland updates would be needed for Lagoons D, E, and F. The LGU would be consulted regarding a time extension to allow the previous wetland delineations to remain valid for the future dredging work. This can be confirmed for the final work scope.

- e) Stream restoration/stability review – Assume this project does not include reviewing the streams upstream and downstream of Lagoon G, as both stretches were restored in a previous Bassett Creek Main Stem stream restoration project.
- f) Desktop study to assess for potential contamination – We recommend checking What's In My Neighborhood (WIMN) for both options; for the previous feasibility study, we performed a file review of a leak contamination site. If WIMN shows the same information as for the previous feasibility study, the information from the previous feasibility study could be re-used for this feasibility study.
- g) Sediment sampling – Recommend performing for Lagoon G only, as sediment sampling was performed as part of the previous feasibility study for Lagoons D, E, and F. Per the December 2023 TAC recommendations, several samples could be collected, as part of feasibility study (or design), to determine in-situ unit weight of sediment for later inclusion in bid documents.
- h) Threatened and endangered species desktop review – Assume this review is needed for both options. If the new review notes the same species that were listed in the previous feasibility study, the text from the previous study can likely be re-used in this feasibility study.
- i) Cultural resources desktop review – Assume this review is needed for Lagoon G only, as there is nothing new for Lagoons D, E, and F. This can be confirmed for the final work scope.
- j) Project easements – Assume no easements needed, as it's all public land.

2.3 Evaluation and Concept Plans

This task includes evaluating permit requirements, including the need for an EAW. We expect an EAW will be required for Lagoon G, and possibly required for Lagoons D, E, and F. If required, an EAW would be prepared during final design.

This task includes fully assessing the dredging options and their impacts, keeping in mind the issues/considerations from the April 2024 TAC memo to the Commission and other considerations from the Commission Engineer:

- Completing the dredging in Lagoons D, E, and F. The TAC noted that it may be difficult for a contractor to remove additional sediment in the lagoons due to now-steeper side slopes. An even larger issue is the lack of sediment volume to build an access road and the deeper water creates an access issue. To use backhoes to dredge, the contractor might have to haul in temporary fill to create an access road. Hydraulic dredging might be a better option for performing this work. Also, turtles could be a bigger issue with this follow-up project because of the deeper, more suitable turtle habitat. There are also more issues due to required access off of the parkway, conflicts with park users (winter sports enthusiasts), and the MPRB permitting required.
- Dredging Lagoon G. The TAC noted the more natural features of Lagoon G—although it was constructed as an open water lagoon in the 1930's, the stream seems to have reclaimed its channel through the area. The group wondered if the area should be left in its more natural state closer to conditions before the 1930's or if the presumably contaminated sediment should be removed to improve environmental conditions. MPRB staff noted that dredging Lagoon G is a viable option, as there is a haul/access route off of Golden Valley Road. This also means that site

access and hauling would not require use of the parkway (which is not designed for heavy traffic). The access route would cross through the rough of Hole #12 of the golf course, avoiding the fairway, resulting in minimal restoration needed on the golf course.

2.4 Public Engagement

There were only two attendees at the February 2020 open house for the previous Lagoon D, E, and F dredging project. However, during review of the EAW, there was considerable input and concern from some members of the public regarding impacts on wildlife and questions about the benefits of dredging rather than leaving the channel to continue to naturalize over time. At this meeting, the TAC could discuss the best means to gather public input on this project. If there are no clear recommendations from the TAC, we will assume an open house/public meeting.

2.5 Feasibility Report

Assume the typical feasibility report work tasks:

- a) Prepare draft report for review by City staff, MPRB staff, and BCWMC staff/interested commissioners; revise report based upon review comments.
- b) Present draft feasibility study findings at BCWMC meeting.
- c) Prepare final report for approval at BCWMC meeting and for use at future project public hearing.
- d) Present final feasibility study findings at BCWMC meeting.