

Ms. Carrie Webb Natural Resources Program Coordinator Wisconsin Department of Natural Resources 2984 Shawano Ave. Green Bay, WI 54313-6727

Dear Ms. Webb,

On behalf of Milwaukee Riverkeeper, we are in support of Alternative 3, the Dredged Material Management Facility (DMMF) as detailed in the "Analysis of Dredged Material Management Alternatives for the Milwaukee Estuary Area of Concern" document. Alternative 3 is the most cost-effective option, and will allow for the most contaminated sediment to be removed from the Milwaukee, Menomonee, and Kinnickinnic Rivers. Removing the maximum amount of contaminated sediment is imperative to improving water quality and wildlife habitat, and helping us achieve our vision of clean, fishable and swimmable rivers in the Milwaukee River Basin.

We do not see Alternative 1, or doing nothing, to be an option for our rivers or community. Alternative 2, or the Orchard Ridge landfill option, is problematic. Besides the fact that it is significantly more expensive than Alternative 3, and that the remaining landfill volume would be overwhelmed by the amount of sediment that is proposed to be dredged and disposed, is that the current facility expansion at Orchard Ridge is already filling in/impacting two existing tributaries to the Menomonee River upstream. It would be likely that sending sediment from the proposed dredging activities in Milwaukee to that facility would require additional filling of streams and result in increased impact and runoff to our waterways from construction and filling activities.

We generally support both mechanical and hydraulic dredging, and understand that hydraulic dredging would result in less bridge openings and disturbance in the City of Milwaukee, and that is why it is a preferred option. We have monitored dredging activities at the Cedar Creek Superfund Site over the last few years, as well as past dredging activities in the Milwaukee and Kinnickinnic Rivers, so have a general understanding of how mechanical and hydraulic dredging works. That said, it is somewhat concerning to envision two pipelines or tubes (one 8 inches in diameter and one 12 inches in diameter) that would be used for hydraulic dredging, extending from some of the proposed clean up reaches to the existing Confided Disposal Facility (CDF) and proposed DMMF in the inner harbor. That is a very long distance in some cases (e.g., the upper Milwaukee sites from Estabrook Park to the former North Avenue Dam), and that distance far exceeds the distance I've witnessed in the past between the area of dredging and disposal. In addition, wind, waves, seiche, and boating activities could all disturb those pipelines or tubes placed in our downtown rivers, which are very active and vibrant throughout most of the year, even if those pipelines are buoyed and placed along the side of the river (and somehow manipulated so they don't stray into the active navigational channel). We keep our Riverkeeper boat near the harbor entrance, and had several weather events this past year where we had 5+ foot rolling waves coming into the river mouth (requiring moving and/or babysitting our boat), not to mention the fact that wave action and conditions are generally much worse in the inner harbor area than the rivers during extreme storms. We are wondering what kind of monitoring and contingency plans will be in place to deal with these types of weather events, which are becoming relatively common? In addition, how will conflicts be minimized with recreational and commercial boaters? I realize that the design process/feasibility work is still at an early stage, but it's worth thinking about now, especially if there is a big cost differential between mechanical and hydraulic dredging. Due to distance/geographical concerns, and the long period of expected dredging that will occur, it may make sense to mechanically dredge some areas.

In addition, it seems very unlikely that hydraulic dredging would work upstream of the former North Avenue Dam on the Milwaukee River? In that section, several impacted river sections have significant flow at different times of year and some areas of rapids that could make hydraulic dredging challenging. In addition, it is likely that there may be more removal of contaminated sediment from floodplains than from instream areas between the former Estabrook Dam and former North Avenue Dam, due to flow inhibiting in-stream deposition of sediments in large areas of the river and due to former inundation of these floodplain areas. It seems in this area, that it may be more cost effective to truck that material either to the CDF/DMMF or to a landfill directly. That would presumably be costlier and may require an area for dewatering/bag placement upstream on the Milwaukee River? Has that been considered as part of the cost analysis?

Given the public scrutiny on this project, and the fact that the DMMF would result in filling of a public trust resource, it would seem appropriate to have a better sense of the ultimate public use of this site even at this early stage of the process. Clearly, the Port does use former lakebed properties (as is allowed under the State's lakebed grants to the City) for services that benefit the public (e.g., sewage treatment, salt storage). However, given the high profile of this particular lakefront site and its importance as a migratory corridor for a variety of birds and ducks, it would seem appropriate to ensure that as much of the site as possible could be dedicated to public use after filling operations are complete. We would also like to see the CDF eventually become a publically accessible space, or at least a site where the public could view waterfowl and wildlife in the future. There could be a way to allow ship mooring along the seawalls that will be constructed (similar to the Lake Express set-up), while still allowing for public use at the site. Converting the CDF and DMMF into natural areas at the end of dredging activities would also help the City of Milwaukee to meet its goal in the "Refresh Milwaukee Sustainability Plan" to increase the acreage of natural areas in Milwaukee by 10 percent annually. In addition, naturalizing these sites would help us to meet many habitat goals of regional plans such as the Great Lakes Action Plan, Lake Michigan LAMP, Great Lakes Water Quality Agreement, etc.

We are interested in more information about how the dewatered fluids will be treated prior to discharge from the DMMF to Lake Michigan. We understand that there will be a WPDES permit that goes into more detail on this element of the project, along with public comment opportunities as project design progresses. We are especially interested in more information

on how well granular activated carbon works to remove PCBs, PAHs, and PFAS from effluent prior to discharge. While we understand that many of those substances will be/should be bound to sediment that will remain in the DMMF, it is likely that residual contamination will be present in the dewatered effluent as well, at some level. Given that PFAS are more soluble and mobile, and likely to be regulated in the next few years, it would seem prudent to ensure the design of this facility can be built in such a way to allow additional treatment opportunities for these emerging chemicals of concern, which are likely to be found in much of our dredged sediment.

We'd also like to encourage the Department and City of Milwaukee to provide as many public comment opportunities as possible going forward to ensure that community concerns and questions are addressed to the maximum extent possible.

Thank you for your consideration of these comments.

Sincerely,

Cheryl Nenn Riverkeeper

Cc: Jennifer Bolger Breceda, Executive Director