

August 1, 2019

U.S. Army Corps of Engineers ATTN: Planning Branch 231 S. LaSalle St., Suite 1500 Chicago, IL 60604

Comments submitted by email to CELRC\_Planning\_Econ@usace.army.mil

RE: <u>Public comment on draft Chicago Area Waterway System Dredged Material</u> <u>Management Plan, integrated Environmental Impact Statement</u>

Dear U.S. Army Corps Officials,

These comments are submitted on behalf of the Sierra Club, Illinois Chapter, a non-profit organization representing over 30,000 members in Illinois including nearly 10,000 members in Chicago alone, in regards to the draft Chicago Area Waterway System Dredged Material Management Plan, integrated Environmental Impact Statement (DEIS). These comments supplement the comments being filed by the Friends of the Parks which are incorporated by reference.

These comments are also being submitted to the Illinois Environmental Protection Agency for use in its consideration of this proposal under Section 401 of the Clean Water Act and other relevant statutes.

The DEIS is not adequate under the National Environmental Policy Act (NEPA) and the project cannot properly be undertaken under the Clean Water Act because alternatives have not been properly considered and the full cumulative impacts on local communities and the environment have not been given proper weight. The Corps must consider less environmentally damaging alternatives. *Simmons v. U.S. Army Corps of Engineers*, 120 F.3d 664 (7th Cir. 1997); *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986). The Clean Water Act, 33 U.S.C. §1231 et seq., requires that federal agencies carefully consider the direct, indirect and cumulative effects of federal actions. *Fox Bay Partners v. U.S. Army Corps of Eng'rs*, 831 F.Supp 605, 608-09 ((N.D. Ill. 1993). Similarly, NEPA requires federal agencies to take a "hard look" at the environmental impacts of proposed agency actions. *See Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989); 42 U.S.C. § 4331 *et. seq.* To take a "hard look" under NEPA, agencies must consider the relevant factors and the important aspects of their actions. *See Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999).

Further, it appears that the proposal would negatively impact people living in nearby communities and is not economically justified and, thus, is not in the public interest and cannot be permitted under the Clean Water Act. See, 33 U.S.C. § 1344(c), 40 CFR §230.10(c)(4) and 33 U.S.C. §320.4.

#### I. Alternatives have not been properly considered.

A. <u>The alternative of reducing the amount of sediment entering the waterways must</u> <u>be fully evaluated.</u>

The issue of reducing the amount of sediment entering the waterways must be addressed, rather than narrowly focusing on removing sediment once it is already in the waterway. The DEIS actually makes clear that this alternative shows promise but then inexplicably fails to consider it. In particular, the DEIS states:

While dredging needs would not be completely eliminated, reducing dredging requirements could provide cost savings and extend the life of sediment management alternatives. Best management practices that address sediment sources can improve the financial and environmental sustainability of the navigation projects and may provide significant benefits. However, these opportunities may also require significant detailed analyses to determine their effectiveness. The USACE Chicago District has been working with the Engineer Research and Development Center (ERDC) in Vicksburg, MS to investigate potential principal sources of sediment and associated contamination deposited in the Calumet River (Perkey, Chappell, and Seiter 2017). Based on the results of their preliminary investigation, it appears the sediment sources are primarily stormwater and combined overflow sewer outfalls, channel outlets (particularly the channel outlet known as Pullman Creek), non-point sources and overland flow.

Why, then, does the Corps not go on to consider whether the need for this project could be completely or substantially obviated by fully addressing the CSOs and non-point pollution that is the ultimate source of the problem? Certainly, it has not been carefully considered whether full compliance by the Metropolitan Water Reclamation District, the City of Chicago and other municipalities in the area with the requirements regarding CSOs and MS4s would substantially reduce the need for continuing to add to the confined disposal facility. Reducing pollution before it reaches the CAWS and Calumet Harbor could be a superior approach as an environmental matter and could save significant financial resources. It would also help to protect the densely populated residential neighborhoods that are immediately adjacent to all of the alternative locations considered by the Corps for a new CDF.

It is unclear from the DEIS whether the Corps has even carefully considered whether the portion of the Tunnel and Reservoir Project (TARP) that has already been completed will obviate a substantial portion of the need for the project. Using loading data from prior decades regarding sediment loading without adjusting for the work that has been done to control pollution is inappropriate. This failure to study what has already occurred detracts both from the necessary consideration of alternatives of the project by potentially distorting the costs of the no action alternative, and distorts the consideration of costs/benefits and the public interest required by the Corps regulations established under the Clean Water Act.

The Army Corps Research and Development Center in Vicksburg, MS issued a report in 2017 on an assessment of sediment source locations that necessitate the removal of 25,000 cubic yards of hazardous material each year. The sources assessed included Pullman Creek, Indian Creek, Lake Calumet, Calumet Harbor within the breakwater, and the adjoining land uses along the river itself. The study concluded that the primary source of the polluted sediment comes from the "anthropogenic activities along the river," meaning the uncapped river corridor brownfields which infiltrate stormwater into the river, or run off surface water, and/or allow wind-blown polluted surface soils and bulk material storage into the river.

Where appropriate and supported by the surrounding community, brownfields in the Calumet region should be capped and seeded to pasture grass or prairie to infiltrate rainwater and remove polluted sediment to prevent it from entering the river. One capped acre of brownfield would remove approximately ten cubic yards of polluted sediment (on average) from entering the river each year.

The city, state, and federal agencies must work together to find a solution that would minimize or eliminate the source of 25,000 cubic yards of polluted sediment entering the river. It is far beyond time for these agencies to create a plan to minimize or eliminate sediment and secure funding to implement the plan with community input.

The Army Corps should identify the "hot spots" in the river corridor that are generating polluted sediment loads, develop a plan that would rate every acre in terms of its role in sediment loading to the river, and then start capping and solving the sediment problem in systematic order based on reducing the loads in the shortest time frame.

Admittedly, it will take time to address the sources of polluted sediment, but the current CDF has capacity for several years and the new CDF is not proposed to be completed until 2026. By 2026, the need for the project could be largely or fully eliminated through pursuit of alternatives.

#### B. Alternative forms of transportation are not considered.

The DEIS mentions only in passing that there are forms of transportation in addition to shallow and deep draft shipping. There is no clear consideration of how much of the traffic for which dredging may be needed could be replaced economically by alternative means of transportation. This constitutes both a failure to consider alternatives and a fundamental mistake in the cost/benefit analysis and public interest review.

# <u>C</u>. The alternative of dewatering and delivering the material to a nearby landfill should be fully evaluated.

The alternative of landfilling the material was rejected as not viable for "this scale of study." (DEIS p. 74) However, the scale of the problem has not been properly considered because the current and future loadings given improved wastewater treatment and capping of eroding areas have not been studied. Even if the alternative of landfilling the material is inadequate by itself, the Corps must consider combinations of approaches that will address the purpose and need. *Simmons*, 120 F.3d at 669. This could include approaches that address varying qualities of sediment and handling them differently—for example, finding alternatives to land disposal for sediments of sufficient quality.

# II. Cumulative impacts from this proposed project and other pollution sources and waste supplies in the area must be assessed.

# A. <u>The Sierra Club agrees with comments submitted by the US EPA regarding air</u> <u>quality and environmental justice</u>.

The impact on overall air quality in communities surrounding the CDF must be evaluated, and the disproportionate levels of air pollution already experienced by the predominantly minority populations and/or low-income populations around the project location must be considered. The Corps should also consider unique vulnerabilities, special exposure pathways, prior exposures, social determinants of health and cultural practices associated with minority populations and low income populations in the affected environment, and the degree to which any other extenuating factors amplify identified impacts such as the presence of vulnerable populations (pregnant women, elderly, groups with high asthma rates or other health concerns) and the condition of physical infrastructure (e.g., substandard housing conditions, old or no in-home HV AC/filtration roads, older windows, inability to make in-home changes due to rental vs. home-ownership).

This additional environmental justice analysis is needed to ensure a comprehensive review of potential disproportionately high and adverse impacts to minority populations and low-income populations. The Corps should reassess whether there are, in fact, any disproportionately high

and adverse impacts expected, and if those disproportionately high and adverse impacts are considered "significant" under NEPA through a review of context and intensity. Consistent with applicable requirements, the Corps should state in the FEIS whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted. (See 40 CFR §1502.2(c)).

#### B. Water quality impacts must be addressed in much greater detail.

The DEIS makes clear that the sediments that are to be placed into the confined disposal facility may be highly polluted. It does not consider, however, the levels of pollutants likely to reach Lake Michigan or their potential impacts.

It is assumed, without proof, that nothing can travel from the CDF. The once a calendar year monitoring that has been done, however, indicates that as to a number of pollutants, pollution levels are higher in the immediate vicinity of the existing CDF than background levels and much higher than applicable water quality standards (e.g phosphorus, WQS =.007 mg/L). See e.g. Routine Monitoring for the Year 2016. On its face this would indicate that the CDF is leaking.

The Corps reports offer various untested theories as to why pollution levels might be expected to be higher near the CDF than background levels, but it is clear that what is needed is greater monitoring, not speculations as to why the monitoring reports do not mean what they seem to mean. Indeed, if the current calendar year monitoring program that calls for comparing near CDF pollutant levels for certain pollutants with background levels is not adequate to detect problems, expansion of the CDF should not be considered seriously until a more adequate monitoring system is devised, that improved system is put into effect for the amount of time needed to draw valid conclusions, and it is scientifically determined that the CDF is as secure as the Corps assumes.

While it is not proposed to bring much material from the Cal-Sag Channel, the extent to which phosphorus may enter Lake Michigan by being hauled from the Cal-Sag to the lake should be better studied. The Cal-Sag Channel sediment must contain high levels of phosphorus from the Metropolitan Water Reclamation District Calumet STP, the Thorn Creek Sanitary District and other sources. Taking this sediment—probably now in large part biologically unavailable to algae and cyano-bacteria from the bottom of a water body thought to be relatively insensitive to phosphorus pollution—and placing it into a facility on Lake Michigan is clearly not something that should be done without thorough study. Such a movement of phosphorus could potentially cause further violations of applicable Lake Michigan water quality standards.

Even if it is correct that the CDF will never allow pollution from the CDF into the lake, the act of stirring up the sediment in the Cal-Sag may cause the sediment that is not taken into the CDF to

become biologically available to nuisance algae. It cannot, then, be assumed that water quality in the Cal-Sag will benefit from expansion of the CDF. This is also true for the Calumet River and Calumet Harbor to an undetermined extent.

# III. Numerous flaws in the analysis potentially affect proper application of the cost/benefit analysis and the public interest test.

The DEIS recognizes that future tonnage may well be overestimated (DEIS pp. 53-5), but that does not fully recognize the tenuous basis for many of the numbers relied on in the DEIS to justify the project. 2017 is used as a base for traffic estimates although that number is higher than both the three-year average and 2010. Coal traffic is assumed by the DEIS to continue at its current level for the whole period, although the traffic has fallen considerably since 2000 and coal-generated electricity is acknowledged to be in steep decline, simply because coal traffic has not yet fallen to "zero."(Appendix B table 22)

Costs of the preferred alternative also appear to be estimated poorly. No cost is attributed to using the public land on which the CDF will sit and any consideration of increased closure costs seems to be absent. The failure to value the land that was promised to the public underscores the environmental justice and public trust issues raised by the proposed project.

In conclusion, we stress that the DEIS is not adequate under NEPA and the project cannot be permitted under the Clean Water Act because alternatives have not been properly considered and the full direct, indirect and cumulative impacts on local communities and the environment have not been thoroughly evaluated and given proper weight. The Corps must consider less environmentally damaging alternatives – specifically, alternative approaches to dealing with the sediment, not alternative locations that raise the same concerns as the proposal to expand the current CDF.

Thank you for your consideration of these comments.

Sincerely,

Katrina Phillips Clean Water Advocate Sierra Club, Illinois Chapter 70 E. Lake St, Suite 1500 Chicago, IL 60601 312.251.1680 Albert Ettinger Chapter Counsel 53 W. Jackson #1664 Chicago, Illinois 60604 773.818.4825

cc: IEPA, Bureau of Water Facility Evaluation Unit, % Darin.LeCrone@illinois.gov