

August 17, 2020

U.S. Army Corps of Engineers
Chicago District, Planning Branch
Attn: Alex Hoxsie
231 North LaSalle Street, Suite 1500
Chicago, Illinois 60604

RE: Chicago Area Waterway Systems Final Integrated Environmental Impact Statement and Dredged Material Management Plan (CEQ #20190081)
Sent via email to: CELRC_Planning_Econ@usace.army.mil

Dear Mr. Hoxsie:

Openlands and the Sierra Club appreciate the opportunity to comment on the Final Integrated Environmental Impact Statement (FEIS) and Dredged Material Management Plan (DMMP) for the Chicago Area Waterways (CAWS), which was released on July 17, 2020¹. We have serious concerns regarding the alternatives analysis and proposed plan for a vertical expansion of the existing Chicago Area Combined Disposal Facility (CDF) to store sediment dredged from the Calumet River:

1. The analysis falls short of what is currently required by the National Environmental Policy Act and the Clean Water Act to evaluate all reasonable alternatives and select the least damaging alternative.
2. Selecting the most damaging alternative to expand the CDF continues to pollute Chicago's rivers and threatens to contaminate Lake Michigan, our main source of drinking water.
3. The alternative is borne on the backs of divested communities, perpetuating long-standing environmental justice issues on Chicago's south side by continuing to stockpile 26,000 cubic yards per year of contaminated sediment in what should be a new lakefront park.
4. Another reasonable alternative exists that was not adequately explored, which would eliminate both the need to expand the CDF and, over time, reduce a significant source of the dredged material. This alternative, which was summarily dismissed, would improve water quality, remove a serious threat to the City's lake water, and offer an equitable solution that improves the quality of life in communities that have faced historic pollution.

We urge the United States Army Corps of Engineers (Corps) to pause and reconsider the proposed reasonable alternative as the least damaging and most compelling option in light of our

¹ Federal Register (Jul. 17, 2020)

<https://www.federalregister.gov/documents/2020/07/17/2020-15444/environmental-impact-statements-notice-of-availability>

comments, so that Chicago is more resilient, equitable, healthy and competitive, living up to its name: “Urbs in Horto” - City in a Garden.

Openlands is a non-profit organization, whose mission is to protect the natural and open spaces of northeastern Illinois and the surrounding region to ensure cleaner air and water, protect natural habitats and wildlife, and help balance and enrich our lives. Openlands was one of many organizations that participated in the water quality standards proceedings before the Illinois Pollution Control Board to better protect the resurgence of people recreating on and in the CAWS and Lower Des Plaines River, as well as aquatic life that depends upon the integrity of these waters.

In addition to its involvement in stormwater management programs, such as Space to Grow, a strong number of its 9,000 supporters hike, bike, watch wildlife, canoe, kayak, and otherwise recreate on and along areas of the CAWS, including areas of the Chicago River system that are subject to this FEIS.

The Sierra Club, Illinois Chapter, a non-profit organization represents over 30,000 members in Illinois including nearly 10,000 members in Chicago alone. The Sierra Club has been working for many years with partners like Openlands to improve the quality of the waters in the CAWS and to prevent pollution of Lake Michigan, the drinking water source for 6.6 million Illinoisans.

The FEIS and DMMP evaluate alternatives to dispose of dredged materials generated in the operation and maintenance of the CAWS, which is made up of six federal navigation projects: Calumet Harbor and River; the Calumet-Saganashkee (Cal-Sag) Channel; Chicago Harbor; Chicago River; the South Branch of the Chicago River; and the Chicago Sanitary and Ship Canal. Specifically, the drafts evaluate potential locations along to Calumet Harbor and Calumet River to confine 20 years’ worth of dredged material.

Currently, contaminated sediment dredged within the CAWS is disposed in a CDF in Calumet Harbor, located on Lake Michigan near 95th Street. The 43-acre facility is anticipated to be filled to capacity by 2022. Finding that the contaminated sediment is not suited for open water placement or in-water beneficial use, the USACE’s Tentatively Selected Plan (TSP) is to vertically expand the existing CDF facility. A DMDF with a 530,000 cubic yard capacity would be built on top of the CDF.

I. The FEIS Did Not Adequately Consider Reasonable Alternatives as Required under NEPA and the Clean Water Act.

The FEIS and DMMP should be revised to include a complete identification of all reasonable alternatives for managing sediment dredged from the Calumet River. The USACE must “rigorously explore and objectively evaluate all reasonable alternatives” for achieving the purpose and goals

of the project.² This requirement is the heart of NEPA and extends to “all alternatives that appear reasonable and appropriate for study,”³ “The existence of a viable but unexamined alternative renders an environmental impact statement inadequate.”⁴

The CDF facility was not compared to reasonable alternatives in evaluating the best option to manage dredged sediment from the CAWS. In developing the TSP, the DMMP / EIS provided that “when all sites are environmentally compliant and technically feasible, then the selected alternative is the least costly option.” It is a primary error in the DMMP/EIS to take this statement as correct. The Corps must consider less environmentally damaging alternatives.⁵

Four alternative sites were assessed in the EIS and DMMP: LTV, Wisconsin Steel, KCBK, and 116th and Burley. As shown below, all four sites are 100% industrial, uncapped brownfields with long histories of unregulated deposition of polluted waste products.⁶ No comprehensive Phase 2 environmental studies (test borings) were accomplished on the sites, yet costs for CDF development were projected which could be substantially incorrect.

KCBX	Deposition of dredging spoils before 1953
LTV	Deposition of “steel industry waste” and “ash & cinders” before 1953
116th/Burley	Deposition of “steel industry waste” and “dredging spoils” before 1953
Wisconsin Steel	Dep. of “steel industry waste”, “ash and cinders”, “dredging spoils” 1902-1927

None of these alternative sites should have been compared and contrasted with the existing CDF within the given context in the studies because of their known on-site pollutants. Since each of them adjoins the Calumet River, they are probable sources of windblown, non-point stormwater, and infiltrated stormwater sources of polluted sedimentation in the Calumet River. Since these sites did not meet the criteria of “environmentally compliant”, and the existing CDF if properly contained and capped might be considered “environmentally compliant”, the only viable site for a facility truly assessed in the study was the existing CDF. It is not the most or least costly, but the only site.

² 40 C.F.R 1502.14(a). Please note that, since the new NEPA procedural rules do not take effect until September 14, the rules that are in accord with historic case law cited above are still mandatory for the FEIS and DMMP.

³ *DuBois v. U.S. Dep’t of Agriculture*, 102 F.3d 1273, 1286 (1st Cir. 1996).

⁴ *Simmons*, 120 F.3d at 670; *Alaska Wilderness Recreation & Tourism v. Morrison*, 67 F.3d 723, 729 (9th Cir. 1995).

⁵ *Simmons*, 120 F.3d 664; *Van Abbema v. Fornell*, 807 F.2d 633, 638 (7th Cir. 1986).

⁶ See *Characterization of Fill Deposits in the Calumet Region of Northwestern Indiana and Northeastern Illinois*, U.S. Geological Survey Report 96-4126 (1997).

The analysis of the CDF also fails to consider the Landfill Moratorium of the City of Chicago. In June 2005 the Chicago City Council imposed a ban on new landfills in the city for a 20-year period. Residents of the southeast side of Chicago had tried for years to see this ban imposed. The DMMP/EIS does not acknowledge this legal moratorium, which precludes locating the “new” CDF facility within City limits.

Moreover, the FEIS muddies the water by creating a sliding timeline in the potential use of the CDF beyond the proposed 20-year time horizon. The FEIS recommends that the plan for the proposed CDF “should consider the long-term sustainability of the project and opportunities for providing additional dredged material management capacity beyond the current planning period of analysis either as part of the current Base Plan or through expansion or modification of the Base Plan in the future.”⁷ This intent was never brought up in any public meeting or hearing during the site selection process.

The FEIS sets the stage for a major expansion of the proposed CDF in the future, as well as an extension of multiple years by which the site would be withheld from public access, a position never publicly stated in any of the public hearings or meetings during the multi-year site selection process.

This change in the proposal represents an expansive shift in the scope of the proposal for the site location of the CDF, upsetting the alternatives and environmental impact analysis. It sets the stage for the landfilling of contaminated sediments to be an activity that, for generations to come, never leaves the southeast side of Chicago, nor allows the development of the site to public access uses. It would close one of the last remaining gaps in the lakefront park system, denying the community access to a new lakefront park that they were promised would come to fruition starting in 2022.

II. Source Reduction and Out-of-City Landfilling is a Reasonable Alternative to the CDF Facility.

With the moratorium in place, the Corps should have taken a harder look at alternatives to disposal facilities. Fortunately, one exists: Combine actions to reduce sediment at its source with transporting dredged material to a landfill outside of the City. Ultimately, reductions in sediment will make it less expensive to dewater and transport, since much of the load will be alleviated. This alternative will also ultimately prevent contaminants on neighboring industrial sites from polluting the water, improving the quality and availability of the CAWS. Overall, it will eventually eliminate, rather than perpetuate the continued piling of contaminated dredged material on land in divested communities that have historically endured pollution.

The Corps refers to its ERDC report that identified the industrial corridor along the Calumet River as the primary geographic source of contaminants. The surrounding communities, neighborhoods, and environmental groups for years have raised the issue of uncovered materials storage in the industrial corridor. The ERDC office of the USACE found in a 2017 study that heavy metal pollution sources in the

⁷ See FEIS, Sec. 1.15, p.23.

Calumet River were likely from “anthropogenic activities along this stretch of the river.” The principal sources would be a combination of surface stormwater runoff, wind-blown material, infiltrated stormwater into adjoining brownfields causing groundwater flow transferring pollutants to the river, and stormwater or combined-sewer outfalls. The ERDC report established effectively little impact from Lake Calumet, Pullman Creek, Indian Creek or backwash from Calumet Harbor. Lake Calumet itself provides a large sink for sediments that have filled the northwest corner of the lake and continue to fill the lake’s center channel, since it was dredged 20+ years ago. The “anthropogenic activities” are located on approximately 2,500 acres of industrial properties and abandoned uncapped brownfields along the Calumet River corridor.

The FEIS acknowledges this opportunity:

“Source Reduction 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.”⁸

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

⁸ FEIS at p. 67.

completed until 2026. By 2026, the need for the project could be largely or fully eliminated through pursuit of alternatives.

The FEIS notes that while “best management practices at the individual property/parcel level may be effective in reducing sediment accumulation from non-point sources and overland flow, it is outside of the Corps’ authority to regulate those practices for private landowners.” FEIS Executive Summary, p. 4-5.

Yet, as of the date of this study, the Corps is *required* to evaluate all reasonable alternatives, even those outside of its jurisdiction.⁹ This is similar to environmental studies about roads that fail to consider transit because that alternative would require another agency to take action.

The FEIS did not consider Landfilling with Source Reduction as part or all of an alternative, and instead focused solely on removing annual sediment loads. This is akin to choosing to capture 25,000 cubic yards of leaking oil each year from a broken oil pipeline instead of fixing the pipe. The alternative of reducing the amount of sediment entering the waterways must be fully evaluated, rather than narrowly focusing on removing sediment once it is already in the waterway. Both the Draft EIS and FEIS make clear that this alternative shows promise, but then inexplicably fail to consider it. Dredged sediment from the Calumet River (25,000 cubic yards per year) was not fairly assessed in the current FEIS or DMMP as a management measure for three reasons: “Cost, Scale, and No guarantee of capacity.” All three reasons are insufficient grounds for denial, and a landfill alternative should be reassessed for the following reasons:

1. Cost.

The CDF Vertical Expansion is arguably the “most expensive” alternative. The Corps fails to consider the costs of full compliance with water quality standards for both the lake and river. It does not account for measures to ensure (if possible) that the facility would be properly engineered, and impenetrable to pounding high waves and other escalating storm impacts due to climate change and lake fluctuations. (We have concerns that even this alternative will not be compliant, given natural resource and community impacts.)

The cost also does not consider the lost value of lakefront parkland as an important city amenity in a divested area. The EIS should include the appraised value of replacement parkland that is comparable in view and use to the community. This should include the importance of the 30 to 40 acres as significant

⁹ See 40 C.F.R. 1502.14(c) (EIS must “include reasonable alternatives not within the jurisdiction of the lead agency.”; cited by Milwaukee Inner-City Congregations Allied for Hope v. Gottlieb, 944 F. Supp. 2d 656 (W.D. Wisc. 2013) (“[E]ven if the defendants do not have the authority to expand transit capacity of the region, ... NEPA still requires them to examine and identify any cumulative environmental impacts that might result ...” if that alternative were not selected. *Id.* at 669. Again, any changes to this underlying rule have not gone into effect.

lakefront habitat for wildlife, including birds that rest along the Lake Michigan Migratory Flyway.¹⁰ The loss of significant acreage which would have been added to this migratory flyway after 2022 should also be evaluated as part of the environmental impacts of the Proposed CDF.

The true full costs of the CDF should be juxtaposed to the reasonable alternative of disposing sediment in out-of-city landfills in the northeastern Illinois and northwestern Indiana region, as well as source reductions well beyond the 20-year horizon. Since the amount of sediment will slowly reduce over time, the amount that it will cost to landfill should also be accordingly reduced to reflect resolving that issue.

The FEIS skews the likely cost of source reductions and landfilling as a reasonable alternative. The EIS states that landfills are “potentially viable for small-scale applications. However, due to the increased cost of pursuing private management at the scale of this study and the lack of assured capacity, it was not retained for inclusion in the study alternatives.” All three assumptions are incorrect.

- a. *Landfilling is viable for projects much larger than the projected scale (26,000 cubic yards per year) of the Source Reduction / Landfilling alternative.*

The EIS rejected the cost of the landfilling / source reduction alternative “due to the increased cost of pursuing private management at the scale of this study.” The proposed alternative is more akin to a small-scale landfill operation. Between 2001 and 2017, the maximum amount dredged by the Corps was 135,000 cu. yds. in 2003. No dredging occurred over the span of four years, and the remaining four years respectively saw the removal of: 7,000, 35,000, 56,000 and 60,000 cubic yards per year. These are not large amounts compared to the 2014 to 2015 Grand Calumet River restoration project between Cline Avenue and Kennedy Avenue in Indiana, where 350,000 cu. yds. of contaminated dredgings were trucked to a landfill more than 50 miles distant.

- b. *The FEIS makes assumptions on the cost of the source reduction/landfill alternative without providing a factual basis.*

The FEIS does not assess the costs of a landfill alternative, and does not compare these costs to the CDF alternatives while factoring in costs for these alternatives that were not included as described elsewhere in these comments. The EIS makes an assumption without a factual basis.

- c. *The FEIS conclusion that there is a lack of assured landfill capacity is unfounded.*

The Army Corps refused to include an assessment of landfilling alternatives, while 10 miles to the SE 350,000 cubic yards of contaminated dredgings, from one restoration stretch of the Grand Calumet River, were landfilled at a site 50 miles distant. The multi-billion-dollar landfill industry is handling the residential, commercial, and industrial waste stream of the entire bi-state Chicago metropolitan region. It will continue to do so at existing sites which collectively have enormous capacity, and new sites that the industry will develop, as long into the future as the metropolitan region generates waste. The

¹⁰ See e.g. https://www.bcnbirds.org/greenpapers_files/GPflyway.html#:~:text=Literally%20millions%20of%20birds%20migrate,they%20follow%20as%20they%20migrate.

contaminated dredge material can be deposited at any certified landfill, which the Army corps admitted in its public meeting at its headquarters in the spring of 2019.

Subsidies could be identified to make the cost of transporting dredged Calumet River sediment comparable to the development of vertical expansion at the existing CDF site. The Calumet Tax Increment Financing District (TIF) could be a source of this funding, as the goals of a TIF District is to enhance the local community, encourage reinvestment, and develop a sustainable employment base. The TSP instead proposes continuing 25 years of landfilling at the current CDF site. As expressed in our discussion of environmental justice issues, this will perpetuate the perception of the Calumet area as a dumping ground, an image the community has combated for decades to overcome. Another source of funding could be the institution of a special service area tax on the industrial properties in the Calumet River corridor to subsidize removal of the sediments which emanate from these sites.

2. Scale.

The amount of annual transport and disposal of dredged sediment in an out-of-city landfill is minimal compared to the amount of surrounding truck traffic and landfill capacity in the surrounding metropolitan region. If dredging generated 25,000 cubic yards of sediment per year, it would likely take four to five 30 cubic-yard trucks per day for 200 days to transport the dredged material to a certified landfill. This is a small number of trucks considering the thousands of trucks that pass through daily in area IDOT ADT truck movement counts. For instance:

Bishop Ford Expressway & 107th	10,800 trucks/day (2018)
95th Street & Calumet River	470 trucks/day (2017)
Indianapolis Boulevard & 102nd	840 trucks/day (2017)
Skyway & 102nd	4550 trucks/day (2013)

The EIS 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.

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.¹¹ 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.

¹¹ *Simmons*, 120 F.3d at 669.

3. No Guarantee of Capacity.

The Chicago Metro region has landfills which in 2017 had 85 million cubic yards of capacity remaining. The annual fill rate is 7.7 million cubic yards per year. The landfill industry continues to open new facilities as existing landfills begin to reach capacity. New or expanded landfills have continued to open over the last 40 years. With the waste generation of a metropolitan region there will continue to be expanded landfill capacity.

4. The Distortion of Cost, Scale and Capacity is Compounded by Failing to Consider Other Contributing Factors, such as the Tunnel and Reservoir Project, which Make Landfilling and Source Reduction More Viable

It is unclear from the EIS whether the Corps considered whether the portion of the Tunnel and Reservoir Project (TARP) that is already complete will obviate a substantial portion of its purpose and need, and render the landfill/source reduction alternative the more attractive solution. 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, the consideration of costs/benefits, and the public interest required by the Corps regulations established under the Clean Water Act. This is evidenced by the 2017 Corps report referenced above.

III. The FEIS and DMMP Fail to Account for the Full Environmental Impacts of the CDF Extension Alternative, and Compare it to the Sediment Reduction and Landfilling Alternative

The FEIS is fatally flawed 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 USACE is required to take a “hard look” at the environmental consequences of all reasonable alternatives.¹² The discussion of environmental impacts is designed to provide a “scientific and analytical basis” for comparing the various alternatives for achieving the agency’s goals.¹³ A proper analysis of the alternatives can be carried out only if the agency provides a complete and accurate description of the environmental consequences of all reasonable alternatives.

Since the FEIS excluded the alternative of source reduction and landfilling, on its face, it does not include the requisite analysis of all direct, indirect and cumulative effects of federal actions of each reasonable alternative to the Agency’s proposed action.¹⁴ Moreover, the analysis of the CDF expansion is deficient

¹² *Baltimore Gas & Elec. Co. v. Natural Resources Defense Council*, 462 U.S. 87, 97 (1983); *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989).

¹³ 40 C.F.R. 1502.16; *DuBois v. U.S. Dep’t of Agriculture*, 102 F.3d 1273, 1286 (1st Cir. 1996).

¹⁴ See e.g. *Fox Bay Partners v. U.S. Army Corps of Eng’rs*, 831 F.Supp 605, 608-09 ((N.D. Ill. 1993).

in that it does not consider relevant factors and important aspects of its actions.¹⁵ 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.¹⁶

A. Water quality impacts from Point Source and Non-Point Source Pollution Must be Addressed in Much Greater detail in the FEIS.

1. The Corps must address serious deficiencies in its analysis of whether the CDF will cause water quality issues or violations in Lake Michigan and the Calumet River System.

The FEIS makes clear that the sediments that are to be placed into the CDF 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 2016.¹⁷

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 must not be seriously considered 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.

¹⁵ See *Friends of the Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1128 (8th Cir. 1999).

¹⁶ See, 33 U.S.C. § 1344(c), 40 CFR §230.10(c)(4) and 33 U.S.C. §320.4.

¹⁷Monitoring reports from 1996 through 2016 can be viewed at:

https://www.lrc.usace.army.mil/Portals/36/docs/projects/calumetharbor/FOIA%202019_Routine%20Water%20Monitoring%20Reports/2016%20Routine%20Water%20Monitoring%20Report.pdf

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.

In addition, given the grave concerns regarding the potential for the expanded CDF to erode into Lake Michigan, more attention must be paid to whether the DCCP can meet Illinois' regional conditions of NW 16¹⁸ to not cause violations of the Illinois Environmental Protection Act (Act), water pollution defined and prohibited by the Act, violation of applicable water quality standards and interference with water use practices near public recreation areas or water supply intakes.

2. The FEIS Must Fully Evaluate Non-Point Source Reductions as Part of a Reasonable Alternative and Compare it to the Environmental Impacts of the Proposed CDF.

While the Corps may not have the authority, it does have the ability, and should show the same leadership it displayed in 2017, to provide strategies and recommendations within the EIS on non-point source reduction that give guidance to the governmental agencies that do have authority: the City of Chicago, IEPA, and USEPA. At the very least, the FEIS must include a robust environmental analysis of non-point source reductions as part of a reasonable alternative, and this must be compared to the proposed CDF to understand the difference in environmental impacts.

If revised, the FEIS could still lay the groundwork in identifying principal responsible property owners who are allowing contaminants to enter the river. As it stands, the FEIS fails to identify basic recommendations to minimize and control non-point pollution from entering the river, such as covering/roofing materials storage, periodic street sweeping of industrial yards, and capping of unused, exposed brownfields.

The FEIS should identify funding sources for implementing non-point source reduction strategies, and to control non-point contaminant discharges by wind or stormwater runoff into the river. For instance, the FEIS could list funding sources such as GLPF funding, Coastal Management funding, Chi-Cal grants, State of Illinois Capital Development Infrastructure funding, and other sources. Non-point and point source reductions are wholly tied to the dredging volumes and financing assessments of the EIS. The FEIS fails to recognize and consider the importance of alternatives that address this connection.

With the upcoming focus on studying water quality parameters in the CAWS, the Corps could have proposed a requirement that overlaps with that effort to identify the primary source types and locations of pollutants entering the Calumet River system. After two years of study, the Corps could develop an intergovernmental strategy to begin source reduction of pollutants by year three, with a goal of achieving a sediment load removal of 5,000 cubic yards per year by 2030.

¹⁸ Final Notice of Issuance of Nationwide Permits, Illinois EPA, Feb. 27, 2017, at: <https://www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/NWP-IEPA-2017.pdf> at p. 12.

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, save significant financial resources, and offer an equitable solution for south side residents.

1. Windblown and Stormwater runoff of on-site pollutants.

The City of Chicago has recently responded to outside, unroofed, manganese storage, but still has not effectively required covers on other stored material, nor has required periodic street-sweeping of surface pollutants at active industrial sites.

2. Storm sewers (SS) and combined sanitary sewers (CSS).

The City of Chicago should monitor all nine SS and CSS outfalls to determine the 2-3 most egregious discharges of pollution into the river and begin design work to install traps and filters that would eliminate or greatly minimize heavy metal and other pollutants of concern. GLRI funding should be sourced for these retrofits.

3. Pollutant transfer from adjoining uncapped brownfields driven into the Calumet River by infiltrated stormwater.

The most difficult situation to assess and allocate responsibility towards, but total suspended solids (TSS) monitors and chemical monitors should be installed along both riverbanks to determine the most egregious sources. Property owners responsible for these primary sources should be considered Principal Responsible parties by the USEPA and given a limited period of time to fully cap their landholdings substantially at their expense or have enforcement action taken. Great Lakes Restoration Initiative funding should be sought to assist in financing the capping. Multiple best management practices could be identified and instituted in short time frames, while a thorough, comprehensive two-year study of the adjoining brownfields is undertaken to determine the most egregious sources of pollution.

A Source Reduction strategy should be an integral component of the TSP regardless of what dredging and storage alternative is assessed. If the Army Corps and associated responsible public agencies had designed and implemented a source reduction initiative in the 1990's, in the early years of the existing CDF, the surrounding community and neighborhoods would not be facing a proposal to extend filling dredged material for an additional 20 years. Given the environmental justice issues inherent in this project area, and associated air and water pollution impacts, any consideration to accommodate, or even estimate, the storage demand for an additional 20 years should not occur in a vacuum without an aggressive source reduction component.

C. **The FEIS Fails to Address How Point Source Reductions Will Affect Dredging Volumes and Costs Associated with Either the Proposed CDF or the Landfill/Sediment Reduction Alternatives.**

The FEIS refers to how the Corps is “actively involved in efforts such as the Chicago Underflow Plan (CUP) that help reduce stormwater and combined sewer overflows in the waterways now and in the future.” No further description of the CUP or other efforts are “included in the EIS which would allow one to assess the potential effectiveness and timing of these actions on point-source reduction. This information will affect the projection of dredging volumes and financing assessments in the EIS. Since combined sewer overflows are picking up contaminants from the industrial land uses along the Calumet River, the same basic site management strategies listed in the comments re: non-point source reduction would also apply to minimizing the contaminant loads from the point-sources. The FEIS point-source reduction reference should have substantially expanded and discussed the same three non-point source reduction recommendations listed in this response.

Successful source reduction would result in a lessening of the contaminated dredging material that needs to be deposited in a storage facility. This EIS identifies its proposed CDF site based on a design capacity, rather than a commitment of a specific closure year, regardless of whether full capacity is achieved. Thus a 20-year proposed capacity could become a 40 or 60-year utilization of the site if effective source-reduction of contaminants into the river is achieved. This situation was never discussed in public meetings, nor is it clearly explained in the EIS.

The FEIS should be revised to include the following:

- The EIS should establish a commitment to a 20-year closure date of its proposed CDF and confirm it through a federal court order; and
- The EIS should include several 20-year scenarios of contaminated dredging storage needs and the financing of these needs based on the effectiveness of 3-5 source reduction rates which lessen contaminated dredging volumes.

D. The FEIS Omits an Analysis of Climate Change Impacts on the Existing and Proposed CDF

As of the date of this EIS, climate change must be evaluated as a cumulative impact in studying and comparing all reasonable alternatives. (cite) Yet, the FEIS falls short in considering severe damage that could need to be addressed in either its impacts or economic analysis.

1. The FEIS is silent on how storm events and lake levels could damage the CDF, polluting the lake and resulting in greater expenses for repairs.

The FEIS describes various GHG emission rates of economic end-users, but is silent on the critical impacts of climate change on the existing and proposed CDF’s, storm events and lake levels.

The World Climate Research Program published, in the *Reviews of Geophysics* 7-22-2020¹⁹, its newest assessment of climate change, narrowing the expected temperature rise to represent a 2.6 degree Celsius to 4.1 degree Celsius increase. This recent assessment of expected climate change impacts should be incorporated in the FEIS, with an analysis of storm and lake level events that would potentially challenge the integrity of the CDF's and their construction standards. Corps reports raise substantial questions and concerns regarding the design standards which have been made with regard to the current CDF. "Stone sizes on in-lake CDF's were typically designed to withstand a 20-year storm. Dike Height was typically designed to limit overtopping by waves with a 20-year lake level and a 20-year storm."²⁰

The FEIS fails to evaluate three key points that are critical to evaluating the effectiveness and impacts of its proposed CDF alternative:

- The FEIS does not incorporate up-to-date climate projections and an assessment of those scenarios on storm, wind and wave events, Lake Michigan lake levels, rainfall intensity, infiltration and erosion, and other factors that will affect the integrity of the existing and proposed CDF.
- The FEIS fails to identify the storm and lake level design standards under which the existing CDF was constructed, as well as the design standards which guide the proposed CDF.
- The FEIS fails to report if the storm and lake-level design standards of the existing CDF was improved during its 38-year life to date.

2. The FEIS does not evaluate the integrity of the Calumet Harbor Breakwater to Protect the Existing and Proposed CDF from more intense inclement weather.

The integrity of the current and proposed CDFs, under the stresses of strongly elevated lake levels and strong storm and wave events, depends on the design and integrity of the Calumet Harbor breakwater. This exposes the current and proposed CDF's to the substantial risk that a storm and wave event will enter from the southeast where there is no breakwater in place.

The Calumet Harbor breakwater requires repair and restoration on a periodic basis as various sections deteriorate. Repairs as reported by the Corps in recent years run into millions of dollars. Since the existing CDF represents the largest facility investment value among the land uses "protected" by the breakwater, the FEIS should have recognized the critical importance of maintaining and enlarging the breakwater to protect this publicly financed investment. Yet, the FEIS is deficient in its analysis in that it failed to consider the following:

- Changes in lake level, storm and wave events that are anticipated to occur under climate change scenarios;

¹⁹ *International analysis narrows range of climate sensitivity to CO2*, World Climate Research Programme, Jul. 22, 2020.

(<https://www.wcrp-climate.org/news/science-highlights/1604-climate-sensitivity-2020>)

²⁰*Great Lakes Confined Disposal Facilities*, USACE and USEPA, Apr. 2003, p. 14.

- Projected costs over a 20-year period to maintain the Calumet Harbor breakwater;
- Projected costs to enlarge the Calumet Harbor breakwater due to increased intensity or occurrence of storm events associated with climate change and lake level fluctuations;
- Impacts on the Existing and Proposed CDF of current expected storm events or climate change-induced storm events with wind and wave events from the southeast into the harbor where there is no breakwater protection;
- An assessment of the risks and related costs of damage by higher lake levels and more intense storm events on the integrity of the Existing and Proposed CDF if such events occurred when the breakwater deteriorates prior to repairs;
- Estimated costs of increasing the size and effectiveness of the breakwater under climate change scenarios as a necessary investment to protect the integrity of the Existing and Proposed CDF;
- An amendment of the 20-year projected costs of the proposed CDF at the lakeshore location to include a specific apportionment of funds to repair the breakwater under current short term conditions, and costs to construct a larger breakwater to withstand climate change conditions.

3. Failure to Consider the Risk of Contamination Due to Storm Events Skews the Risk Analysis of the Proposed CDF Alternative in the FEIS.

The FEIS asserts that the risk of contamination associated with the Vertical Expansion (CDF) Alternative is the “lowest of all study alternatives.”²¹ Yet, the risk of contamination due to current potential storm, wind, and wave events as well as potential such events due to climate change make this lakefront site the highest risk site as compared to the inland “Upland Site” alternatives which do not face the Lake Michigan impacts.

E. The FEIS Fails to Consider Mitigating Air Quality Considerations in Landfilling Dredged Material

The FEIS fails to consider the current shift in truck and auto engine technology to electric, which greatly modifies, and potentially negates, statements in the EIS regarding air pollution created by vehicles. Multiple sections of the FEIS²² discuss air quality, especially as related to GHG and vehicle emissions. The air quality assumptions are based on an apparent and misguided belief that gasoline and diesel powered vehicles will continue to be dominant in the 20-year future of this report. The FEIS fails to consider the current shift in truck and auto engine technology to electric, which greatly modifies, and potentially negates, statements in the EIS regarding air pollution created by vehicles. The FEIS also does not factor the ongoing shift in truck and auto engine technology to electric, which should reduce estimates in the EIS regarding air pollution created by vehicles.

²¹ See HTRW, p. 126.

²² See FEIS, pp. 38,39,95-98.

Moreover, the FEIS uses 2017 as a base for traffic estimates, even though that number is higher than both the three-year average and 2010. Coal traffic is assumed 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.”

The impact of overall air quality in communities surrounding the CDF must be evaluated as cumulative impacts²³, and the disproportionate levels of air pollution already experienced by predominantly minority populations and/or low income populations around the project location must be considered. This should be properly called out as a social justice issue, and evaluated accordingly.

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 HVAC/filtration, 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.²⁴

F. The FEIS does not Account for Negative Health Consequences of Using Promised Parkland for the Proposed CDF

The EIS statement that there would be no adverse impact to the human environment is incorrect. Delaying the opportunity for developing the CDF site for public access and park uses will have negative health consequences for at least 20 years and much longer if the site utilization is extended in time.

G. Taking Promised Parkland to Build Up the CDF will Adversely Affect Wildlife

Delaying the opportunity for developing the Proposed CDF site for any level of habitat restoration for 20 years or longer will have negative effects on bird migration which is already under stress due to loss of habitat and climate change. The EIS statement that there would be no adverse impact to the natural

²³ Since this study predates September 14, 2020, it is required to include a thorough review of cumulative impacts that would be caused by each alternative compared to a no-action baseline.

²⁴ See 40 CFR §1502.2(c), as it is in effect of the date of the study.

environment is incorrect. During the COVID-19 pandemic it has become abundantly clear how important publicly accessible parks and preserves are to people and communities. To deny access to a promised public open space amenity for another generation, will cause significant negative health and quality of life consequences for the community.

In addition to the creation of environmental risk of CDF facility failure from storms and rising lake levels, the continued use of the site for the proposed CDF facility removes it from use by migrating birds. The Lake Michigan Migratory Flyway is a critical migration corridor and all habitats along the lakeshore are utilized during the migration season. Even if a portion of the site was set aside for bird habitat and the remainder active-use parkland, the site would become a critical refuge during the migration season.

IV. The FEIS and DMMP Fail to Account for the Environmental Justice Impacts of the CDF Extension Alternative

The FEIS and DMMP still do not disclose the full brunt of impacts to natural resources and environmental justice communities. For instance, the FEIS lists a litany of contaminants of concern that were identified in the Calumet Harbor and River sediment, such as arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, cyanide, etc. See 2019 DEIS, p. 28. While acknowledging that semi-volatile organic compounds were tested, the FEIS is silent on the results of relevant analytical testing.

Despite establishing that sediment from the area is highly contaminated, the FEIS does not assess how dewatering, transportation and disposal of sediment, as well as continued CDF operations, could expose the surrounding community to harmful acute or chronic levels of air pollution. This is despite the studied effects of contaminants such as manganese in the area, and known residential areas within a half mile to a mile of the CDF. The FEIS did not provide a comprehensive analysis and supporting data on exposure and risk, with proposed adequate mitigation measures to meet regulatory air emissions requirements.

In addition, the FEIS did not adequately address environmental justice in minority and low-income populations in the project area, in accordance with Executive Order 12898. That order requires that agencies “identify ... and address ... as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.” The Corps here did not state whether the affected communities meet the definition of an environmental justice population based on income because it compared the 22 percent of individuals in the area living under the poverty level to the general population of Chicago. The City of Chicago averages indicate that about 20 percent of individuals live below the poverty line. The USACE therefore concluded that the low-income population of the study area is not “meaningfully greater than the percentage in the general population.”

This conclusion remains flawed in that the poverty data in the FEIS draws from averages across Chicago neighborhoods where communities at both ends of the scale skew the overall average of

the general population. It is illogical that nearly a quarter of the residents in the study area living below the poverty line, most of whom are children, would not be considered significant.

Furthermore, the 22 percent of individuals in these communities living in poverty rises to the level at which the U.S. Census Bureau defines a locale as a “poverty area.” The Corps should recognize and adequately account for the adverse impacts this project would have on a poverty- stricken area.

Despite finding that the study area has a combined minority population of more than 83 percent and therefore clearly meets the definition of a minority community, the Corps found that the proposed action presents no potential for disproportionately high adverse impacts on human health and environment. Administrative agencies possess considerable discretion in how they conduct environmental justice analyses. As long as the analytical methodology is reasonable and adequately explained, the agency’s selection is owed deference²⁵ “An agency is not required to select the course of action that best serves environmental justice, only to take a ‘hard look’ at environmental justice issues.”²⁶ The Corps, however, improperly focused its analysis on whether any impacts from the proposed construction would be consistent across races and income levels, stating that short term impacts to residents “would be the same regardless of race or income.” The analysis should have instead looked at whether such adverse impacts would disproportionately affect low-income and minority communities as a result of the facility’s location and operation in communities that are predominantly made up of minority individuals and low-income households.

We concur with the U.S. EPA that the Corps failed to include a proper discussion of the adverse impacts to human health and environment that would result from the proposed action, such as degraded air and water quality, particularly for those populations that are most vulnerable to these negative effects. Given the high percentage of minority and low-income individuals in the surrounding communities, disproportionately high adverse impacts on air quality to these populations should have been considered. The FEIS likewise never included a full environmental justice analysis of the proposed action, fully addressing whether disproportionately high adverse impacts to minority and low-income populations exist, whether those adverse impacts are significant and further analyzing environmental health risks, exposure pathways and social context in determining whether health and environmental harms can be avoided.

The failure to include a full analysis of environmental justice is compounded by the discriminatory multi-year site selection process. Every site assessed by the Army Corps over the past several years was located in close proximity to African-American or Hispanic neighborhoods and communities, which have attempted over recent decades to climb out of economic and environmental stress.

The proposed site for the CDF: 1) displaces an existing community facility, a site promised to the community for future parkland after its 2022 closure, capping, and seeding and 2) disrupts social patterns or activities, by not allowing the multiple recreational and social activities occurring in Calumet Park to expand to the site.

²⁵ *Communities Against Runway Expansion, Inc. v. F.A.A.*, 355 F.3d 678, 689 (D.C. Cir. 2004).

²⁶ *Sierra Club v. Fed. Energy Reg. Comm’n*, 867 F.3d 1357, 1368 (D.C. Cir. 2017).

The Social Consideration Consequence Rating of the Proposed CDF should have been rated as “high.” Instead, the FEIS states that the CDF (Vertical Expansion) “may be the most favorable site for local community to support.”²⁷ Yet, in multiple meetings and comments to the Corps, the community consistently expressed opposition to locating the Proposed CDF in the 10th Ward. Similarly, the FEIS erroneously states that “the likelihood that the proposed facility would negatively impact future development in the study area is “Low”.”²⁸

Building the “Vertical Expansion” (Proposed CDF) will have a direct bearing on property values in the surrounding area. It is unfathomable that property next to a CDF that is actively accepting contaminated dredging will have the same market value as a lakefront park. While the EIS notes that in Chicago, prominent aesthetic resources near the CAWS include the city skyline, the shoreline of Lake Michigan, city park...”, the EIS then goes on to disregard this importance in undervaluing the use of the existing CDF site as public open space.

The EIS fails to acknowledge that both its operating CDF and proposed CDF, located on the shoreline of Lake Michigan and bracketed north and south by Chicago Park District parks on the shoreline of Lake Michigan, substantially detracts from the aesthetic resources of the shoreline, city parks, which will result in negative consequences to public access, private and public investment, and quality of life of nearby neighborhoods.

The very act of reneging on its commitment to close the existing CDF after its capacity is reached in 2020 and transfer it as lakefront parkland is contrary to the Corps statement that “the construction of the [CDF] facility will not displace any existing community facilities or disrupt existing social patterns or activities.” To the contrary, the park will commandeer a promised community amenity for its operations. 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. This in itself represents a significant adverse impact, contrary to its finding in the FEIS.²⁹

Moreover, Executive Order #12898 does not use the qualifier “existing”. This qualifier was wrongly added by the Army Corps to narrow the scope of environmental justice impact assessment, in an attempt to justify the siting location. Executive Order #12898 does state: “The order is intended to promote non-discrimination in federal programs that affect human health impacts or environmental effects.”

The blind eye to Social Justice Issues compounds the Corps failure to adequately evaluate the impacts of the Proposed CDF to human health and the environment. The FEIS states that “No adverse impacts to the human and natural environment are anticipated as a result of constructing a DMDF. Therefore, no minority or low-income populations would be exposed to disproportionately high human health impacts or environmental effects.”³⁰

²⁷ See FEIS, Section 6.2.2., p. 127 (Social Considerations).

²⁸ *Id.*

²⁹ See FEIS, p. 106.

³⁰ FEIS, p. 106.

The proposal to continue the CDF activity for at least 20 years and (with the potential of substantially longer), removes a major addition of public parkland to Calumet Park, negating the healthy human activity that parklands create. A large addition to Calumet Park, especially on the lakefront, would have attracted an increase in the park's attendance and usage. Healthy active living opportunities at the site would have lowered incidences of multiple health issues, including diabetes, obesity, heart disease, certain cancers, as well provided for positive psychological health impacts, as multiple active living health studies have pointed out.

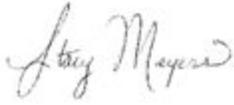
On a broader scale, many excellent transformative projects have occurred on the Southeast Side over the past 10 years: President Obama's creation of the Pullman National Monument, Ford's reinvestment and job expansion in its manufacturing plant, the redevelopment of the Republic Steel site into a major warehouse distribution center including a Ford pre-assembly facility, the creation of the Big Marsh Bike Park and restoration of 200 acres of habitat by the Chicago Park District, the opening of Steelworkers Park on Chicago's lakefront, the expansion of bike trails locally and across the state border, the Method Soap Plant, Gotham Greens, Walmart, Whole Foods Distribution Center, the Pullman Multi-Sport Complex, and the Ray and Joan Kroc YMCA Community Center.

These are the types of projects that give the Southeast Side jobs and a quality of life that is healthy, sustainable, and uplifting to neighborhoods and communities. The Southeast side community has fought for decades to close landfills, fly-by-night waste reclamation sites, and hazardous brownfields. The CDF is the only remaining contaminated waste deposition activity remaining in the Southeast side of Chicago and thus continues to cast an image of the Southeast side that communities have fought to overturn. If the CDF were to close in 2022, as promised, the economic development marketing opportunities for the SE side would be completely transformed to a positive image and positive opportunity for reinvestment. The continued operation of the CDF pushes this opportunity backwards, characterizing the SE side as the location of waste deposition. Immediately to the north of the existing CDF is the abandoned U.S. Steel site which represents a transformative development opportunity for the SE side. The CDF's continued operation has a direct and negative effect on investors who would seek to develop this site for positive quality of life land uses and job opportunities.

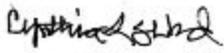
V. Conclusion

In conclusion, we stress that the FEIS 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.

Sincerely,



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