US Army Corps of Engineers

Date: February 2, 2023

Oakland Harbor Turning Basins Widening, CA

Navigation Feasibility Study

Frequently Asked Questions

EXISTING CONDITIONS AND TURNING BASIN WIDTH CHALLENGES

1. **What is a turning basin?**
   A: A turning basin allows vessels to turn around in the same manner that cul-de-sacs allow vehicles to turn around.

2. **Why does Oakland have turning basins?**
   A: Oakland has turning basins because Oakland's inner and outer harbor channels are dead ends for deep draft vessels. Oakland has two designated widened areas of the navigation channel – one circle at the inner harbor and one circle at the outer harbor – for vessels to turn around. These existing turning basins serving Oakland's marine terminals are too narrow for vessels calling Oakland today to turn around. Without turning basins, vessels would either not be permitted to dock at one or more marine terminals or would be restricted to departing the Oakland harbor in reverse.

3. **What is the importance of Oakland's turning basins?**
   A: Vessels need to turn around to enter or exit the Port. They also require flexibility to turn around on arrival or departure to ensure they berth (or dock) on the side of their electrical "shore power" connection so they can plug into the electrical grid and turn off their auxiliary engines while at dock. Furthermore, for emergency and natural disaster readiness, the preferred orientation is to have a vessel berthed with the bow (the front of the ship) positioned toward open ocean for urgent undocking if necessitated. In addition, vessels are not intended to be maneuvered in reverse and any requirement to do so adds additional costs, safety concerns, and delay to this high-risk maneuver. Transits in reverse are to be avoided; thus, Oakland's turning basins are located adjacent to or just beyond its marine terminals.

4. **Does the location of a turning basin matter?**
   A: Yes, Oakland's turning basins are geographically placed to minimize the impacts of currents and wind when a vessel is turning around, both of which can be quite strong in the Oakland harbor. Turning basins are typically situated near the terminals they are intended to serve to avoid maneuvering in reverse, to minimize disruption of traffic in the rest of the harbor, and to reduce time in transit.

5. **Why are the current turning basins' widths a concern?**
   A: Improvements were last completed to both existing basins around 2005 to accommodate maneuvering of a 1,139-foot vessel (6,500 twenty-foot equivalent units (TEU) class vessel). Turning vessels longer than 1,139 feet in length have added restrictions and experience delays that can lead to cascading delays for other vessels of all sizes calling Oakland.

6. **What is the largest vessel that can fit in Oakland's turning basins today?**
   A: Although the turning basins are designed for a vessel 1,139 feet in length, vessels as large as 1,210 feet can turn around during restricted hours with the addition of a second Pilot and additional tugboats. These requirements and restrictions increase transportation costs and increase maneuvering inefficiencies in the Oakland harbor.

7. **What are the added restrictions for the larger vessels?**
   A: Vessels longer than what Oakland's turning basins were designed for, that is a vessel with a length exceeding 1,139 feet, require additional tugboats and pilots, and have restricted hours when they can turn around. These additional requirements and associated additional costs are due to the limited width of Oakland's current turning basins. Vessels that exceed 1,210 feet in length have more restrictions that limit these vessels to berthing on their port (left) side at Berths 55-59 and require a stern (back of the vessel) first departure (maneuvering in reverse) down the navigation channel with a turn near the Oakland entrance channel (not a designated turning basin) during daylight hours only and when current and winds are at a minimum. Current/wind can change quickly so what may seem like "minimum" can change quickly. Delays can range from an additional 1-2 hours while in transit to multiple days waiting for an arrival or departure window.

PROCESS TO REVIEW TURNING BASIN WIDTH CHALLENGES

8. **What is a feasibility study?**
   A: A feasibility study involves assessing problems and opportunities, formulating alternatives to address those problems, comparing those alternatives, and recommending an alternative. United States Army Corps of Engineers (USACE) feasibility studies are guided by the "3x3x3 rule," which states that feasibility reports will be produced in no more than three years; with a cost not greater than $3 million; and involve all three levels of Corps review – district, division and headquarters – throughout the study process. The goal of the Oakland Harbor Turning Basins Widening navigation feasibility study is to identify if there is a technically feasible, environmentally acceptable, and economically justified recommendation for federal participation in a navigation improvement project for the Oakland Harbor.

9. **Who is the lead on the Oakland Harbor Turning Basins Widening Feasibility Navigation Study?**
   A: USACE is the lead and the Port of Oakland (Port) is the non-federal sponsor. Both USACE and the Port comprise the project team and each have roles with coordination and communication occurring regularly. The Port and USACE will split the cost, or cost share, the feasibility study equally.

10. **Where is this potential widening project in the overall process?**
    A: This potential turning basin widening project is currently in the feasibility study phase which includes performing environmental reviews. The study's purpose is to determine if there is a technically feasible, environmentally acceptable, and economically justified recommendation for federal participation in a navigation improvements project in the Oakland Harbor. At the end of this phase, USACE makes a recommendation to Congress about federal participation in a project. The feasibility study is almost at the halfway point. A tentatively selected plan was identified for recommendation and USACE released the Draft Integrated Feasibility Report and Environmental

Assessment (Draft IFR/EA) to the public for review on December 17, 2021. The comment period was extended from 30 days to 59 days to allow additional time for review and comment; the comment period closed on February 14, 2022. The draft report underwent internal USACE peer review. In response to comments received, USACE and the Port of refined the project, shifting the footprints of both the inner and outer harbor turning basins. Modifications to the preliminary design from these shifts resulted in a need to re-release the Draft IFR/EA for public comment.

The tentative date for the re-release of the Draft IFR/EA is March 2023. The general public will have online access to download and review the document. Comments may be submitted via email or via regular mail. Alternatively, hard copies of the document will be available at local libraries within the project area (in the city of Alameda and Oakland) and at the Port of Oakland headquarters. The addresses of these libraries are provided on USACE Project's website and the Port of Oakland Project's website, as well as in the announcement sent to all in the project stakeholder database. The project team will continue to refine assumptions, quantities, and estimates which will be presented in the final IFR/EA. The final integrated report is estimated to be released for State and Agency review in January 2024. The USACE Chief's Report, which is the Chief of Engineer's recommendation to Congress, is estimated to be completed June 2024.

The Port is the Lead Agency for environmental review under the California Environmental Quality Act (CEQA) and started the CEQA process in May 2022 with the issuance of a Notice of Preparation. A Draft Environmental Impact Report (Draft EIR) is anticipated to be released for public review late 2023.

11. What happens after the feasibility study phase?

A: After the feasibility study is completed, the project is ready to continue to the Preconstruction Engineering and Design (PED) phase. To initiate the PED phase, USACE must sign a Design Agreement with the Port of Oakland. After design, USACE and the Port of Oakland will need to execute a Project Partnership Agreement to initiate construction. Both the PED phase and Construction phase require congressional authorization for the project and then approval of sufficient funds for federal participation. Construction is currently estimated to start in 2027.

12. Does the public have a role in this study?

A: Yes, the feasibility study and environmental review, National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA) processes provide several opportunities for public review and comment on the feasibility and environmental documents. The public had the opportunity to review and provide comments on the Draft IFR/EA (Released to the public on December 17, 2021). The CEQA process, including the release of a Notice of Preparation, and public scoping meetings, occurred in May and June 2022, with the CEQA Draft EIR anticipated to be released late 2023 for public review and comment. Formal public informational meetings on the proposed project were held on August 23, 2021, and January 12, 2022, in addition to multiple informal community consultations with stakeholders. The public will have another opportunity to comment on the re-release of the Draft IFR/EA in March of 2023.

13. **What is happening now in the feasibility study phase?**
    A: On December 17, 2021, the USACE and the Port of Oakland released a Draft IFR/EA for public review. Public comments were received through February 14, 2022. Due to a shift in the inner and outer basin footprints, or location, and related project changes, resulting from comments received on the Draft IFR/EA, a second draft, with updated sections including updated environmental analyses, is scheduled to be released in March 2023. The general public will again have the opportunity to review and submit comments. This second draft report will reflect comments received on the first draft and will include a table of these comments and their responses.

14. **What is included in the draft Integrated Feasibility Report (IFR) and Environmental Assessment (EA)?**
    A: The Draft IFR/EA includes the analyses of an array of alternatives to address, which includes review of economics, environmental impacts, and cost engineering. The report recommends a Comprehensive Benefits Plan which includes new project elements such as plans for beneficial use of dredged materials by placing removed material from the expansion of the turning basins on wetland restoration sites, and the use of electric dredging equipment.

15. **Does the Draft Integrated Feasibility Report include a California Environmental Quality Act (CEQA) environmental review?**
    A: No, only a National Environmental Policy Act (NEPA) environmental review (a draft environmental assessment) is included in the Draft IFR/EA. The Port of Oakland is the lead agency for the California Environmental Quality Act (CEQA) process that began in May 2022.

16. **What is the purpose of the environmental review process?**
    A: The environmental review processes will identify environmental impacts of the proposed project and will include avoidance and minimization measures (National Environmental Policy Act) and mitigation measures (California Environmental Quality Act) to reduce or avoid potential impacts of the project.

17. **Where can I find the draft report and get study updates?**
    A: General study information, updates, and the Draft Integrated Feasibility Report and Environmental Assessment can be found at the following link.
    https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Current-Projects/Oakland-Harbor-Turning-Basins-Widening/

18. **I have questions and/or comments. How long was the comment period? Can I submit comments after the comment period? Whom do I contact?**
    A: The typical public comment period for a draft integrated report and environment assessment is 30 days. The second draft is scheduled to be released in March 2023 and the general public will have the opportunity to review and submit comments. This second draft report will reflect comments received on the first draft and will include a table of these comments and their responses.

Please note, that while the public is still able to submit comments after the comment period, such comments may not receive a formal response from the Corps and may not end up in the official public record. The Corps will endeavor to accommodate all comments, but time considerations may prevent full consideration of late comments. Questions regarding the Draft Integrated Feasibility Report and Environmental Assessment should be directed to **OaklandHarborTurningBasinsStudy@usace.army.mil** or mailed to:

Mr. Eric Jolliffe
450 Golden Gate Ave, 4th Floor
San Francisco, CA 94102

Additionally, during the current CEQA process with the Port of Oakland as the Lead Agency, comments may be submitted following the release of the Draft EIR anticipated to be late 2023. The typical public comment period for a Draft EIR is 45 days.

PROPOSED PROJECT (TENTATIVELY SELECTED PLAN) TO ADDRESS TURNING BASINS WIDTH CHALLENGES

19. What is being recommended?

A: The Tentatively Selected Plan detailed in the Draft Integrated Feasibility Report and Environmental Assessment involves widening both the Inner Harbor and Outer Harbor turning basins. The Tentatively Selected Plan also includes beneficial use of dredged material and electric dredges during construction in consideration of climate resiliency and environmental justice goals. The turning basins will be designed to provide enough space for a vessel 1,310 feet in length (19,000 twenty-foot equivalent units (TEU) class vessel, also known as a generation IV Post Panamax container vessel[1]) to turn around. The Tentatively Selected Plan is the National Environmental Policy Act (NEPA) proposed action. These improvements will allow vessels to navigate within the Oakland Harbor more efficiently. Larger vessels can carry more cargo, reducing the number of individual smaller vessel calls; the increase in cargo per vessel call yields economic benefits by allowing for more efficient use of containerships; and public health benefits by reducing air emissions from inefficient vessel navigation and vessel idling in the Bay.

20. What is a Comprehensive Benefits Plan?

A: In 2021, USACE was encouraged by the Assistant Secretary of the Army to make project recommendations based on reviewing and analyzing, on an equal basis, benefit categories (or "accounts") other than the standard national economic benefit account; these additional benefits include (a) the environment, (b) "other social effects" such as needs of environmental justice communities, and (c) the regional economy. Recommending a plan based on maximizing these equally weighted benefits, or the "Comprehensive Benefits Plan", still requires an approval by the Assistant Secretary of the Army, but seeking such approvals is now being encouraged. In April of 2022, the Assistant Secretary of the Army approved the recommendation for beneficial use of

[1] Post Panamax vessels are those whose size is larger than the Panama Canal's original vessel capacity.

dredged material. This means the Federal Government will cost share this improvement, while the Port has agreed to fund the increased cost of electric dredging, should the study be approved.

21. Is the Oakland Turning Basins draft Integrated Feasibility Report recommending a Comprehensive Benefits Plan?

A: Yes, the draft report recommends a project with a greater cost to construct to incorporate the additional benefits of electric dredge use during construction and beneficial placement of all suitable dredged material at a wetland restoration site. Substantial investments will also be made to construct landside infrastructure to power the dredging equipment. Input received from community stakeholders on the importance of climate change resiliency and minimizing air and noise construction impacts informed the draft report's recommendation.

22. Is recommending a Comprehensive Benefits Plan noteworthy?

A: Yes, this is the first USACE navigation study in the nation to recommend a Comprehensive Benefits Plan.

23. What physical improvements are being recommended?

A: The Tentatively Selected Plan would install approximately 1,100 linear feet of new bulkhead and would impact approximately 6 acres of land on the Alameda side and approximately 4 acres of land at Howard Terminal. These numbers are subject to revision pending design.

24. Who pays to construct this project?

A: The cost of the project will be cost shared between the federal government and Port of Oakland.

25. What volume of material is being removed and where is it going?

A: The Tentatively Selected Plan requires the removal and placement of approximately 2,400,000 cubic yards of aquatic dredged and terrestrial excavated material (this is an estimate; final volume is pending design). Material will be placed at one of these locations depending on its composition and characteristics: Keller Canyon landfill, Kettleman Hills landfill, or at a beneficial use site for the protection, restoration, or creation of aquatic wetland habitats. Placing dredged material at a beneficial use site is more expensive than other dredged material management options like placing the material in the San Francisco Bay or the ocean. The beneficial use of dredged material beyond the Base Plan[2] benefits the environment by keeping sediment in system, accelerating wetland expansion, and creating habitat for endangered species. The non-federal sponsor, the Port of Oakland, supports the beneficial placement of dredged material and is willing to share in the incremental cost above the Base Plan.

26. How much wetlands would be created if the turning basins were widened as proposed?

A: The beneficial placement of dredged material has the potential to restore approximately 317 acres of wetlands assuming a 5-foot placement depth (estimated pending design and final determination on suitability of material for reuse). This would be consistent with placement at a deeply subsided restoration site, such as the currently permitted Montezuma Restoration Site. If

[2] Base Plan refers to the plan with the lowest cost upon which USACE bases its project selections.

another less subsided site was to become available and ready to accept material prior to construction, which is likely, then the beneficial placement of material from the Tentatively Selected Plan could accomplish even more acres of wetland restoration at a shallower placement depth. If other beneficial use sites become available and are permitted, they will be considered during the Preconstruction Engineering and Design phase.

Tentatively Selected Plan Excavated and Dredged Sediment Quantities and Placement Assumptions

MATERIAL	PRELIMINARY QUANTITY (cubic yards)	PLACEMENT LOCATION
Materials requiring Class I landfill placement -Potentially classified as hazardous -Terrestrial soils only, not aquatic dredge sediments	11,000	Kettleman Hills landfill
Materials requiring Class II landfill placement* - Non-hazardous but not suitable for beneficial use foundation or aquatic disposal	187,000	Keller Canyon landfill
Materials not suitable for aquatic placement at San Francisco Deep Ocean Disposal Site - Also unsuitable for cover material at upland beneficial use site	1,750,000	Upland beneficial use site, foundation
Materials suitable for unconfined aquatic disposal at San Francisco Deep Ocean Disposal Site or cover material at upland beneficial use site - Cleanest material	500,000	Upland beneficial use site, cover
TOTAL	**2.4 million**	

FUTURE WITH PROJECT

27. What would the improved turning basins look like?

A: The existing turning basins are not visible because they are underwater. The new basins will be the same: underwater, but wider.

28. Will ships longer than 1,310 feet be expected to call the Oakland Harbor Turning basins?

A: The longest container vessel currently in the World fleet is approximately 1,310 feet in length. Container vessels are getting wider, not longer. Future orders for container vessels have not been exceeding 1,310 feet in length, even though they exceed 24,000 TEUs. Those vessels do not currently call on Oakland, but they may eventually call in the future as larger vessels continue to be constructed and cascade from one service to another.

29. Do larger capacity container vessels mean more cargo for Oakland?

A: By itself, larger capacity vessels simply allow the same amount of cargo to be carried on fewer vessels (vessel calls). However, demand for cargo which is influenced by external macro and micro economic factors is forecasted to grow over time, independent of the Project. Larger vessels would be able to handle that additional cargo more efficiently.

30. Will widening the turning basins induce growth in terms of container volume throughput?

A: The feasibility study forecasts container cargo volume will continue to grow regardless of the project and consistent with previous analyses and other nationwide deep draft feasibility studies unrelated to this project. This project is not expected to induce cargo growth (shifts from other ports or new business). However, the project would allow the Port to accommodate the forecasted demand for trade, thereby maintaining economic benefits to the region over time, and would do so more efficiently (as discussed above). This efficiency results in environmental and economic benefits.

31. Are there other benefits to widening the turning basins in addition to improved transportation efficiencies?

A: Yes, economic benefits associated with sustained trade activity (see above) and air quality benefits. Decreasing delays (idle vessels waiting at anchor, offshore, or at dock) and vessel calls results in lower air pollutant emissions from vessels. Additionally, vessels longer than 1,210 feet are now restricted to docking on only one side of the vessel and may impact the ability to plug into the Port's electrical grid while at dock.

POTENTIAL IMPACTS

32. My property is nearby Oakland Harbor. How will the project construction impact me and my property?

A: During project construction, residents and businesses may experience traffic delays near the inner harbor project site. Other concerns may include noise, dust, and environmental impacts due to harbor widening construction activities. The project team is working to minimize or offset all impacts to the extent practicable. Best management practices will be utilized.

33. How will Howard Terminal be impacted by the project?

A: Approximately 10 acres of Howard Terminal is available for widening the inner harbor turning basin. Current planning indicates that about half of this area in Howard Terminal will be needed to construct the widening and to provide long-term access for operation and maintenance of the project after construction.

34. Why was an Environmental Assessment (EA) drafted instead of an Environmental Impact Statement (EIS)?

A: Federal agencies prepare an Environmental Impact Statement (EIS) if a proposed federal action is determined to significantly affect the quality of the human environment. An Environmental

Assessment (EA) is prepared to assess if a federal action will have significant effects or when a federal action is determined to have less than significant impacts with respect to established thresholds of significance and proposed avoidance and minimization measures. In the case of the Oakland Turning Basins Widening Project, an assessment is being conducted through the National Environmental Policy Act (NEPA) processes analyzing water quality, air quality, traffic, noise, biological resources, recreation, aesthetics, navigation, environmental justice, cultural resources, and socioeconomics, among other factors. USACE has made an initial determination that, with implementation of the recommended avoidance and minimization measures, the impacts of the proposed action would be less than significant and thus an EA is appropriate in this situation. A Draft finding of no significant impacts was prepared with respect to NEPA. USACE will evaluate and consider public and agency comments on the draft finding of no significant impacts before a final NEPA document and decision are made.

35. What consideration has been given to Environmental Justice communities?

A: Because of the long history of disproportionate impacts to the community of West Oakland with regards to air quality emissions, and the number of other large projects underway in the vicinity of the Port of Oakland, USACE and Port team met with the community August 23, 2021, and again on January 12, 2022, to receive feedback. Comments received have informed this feasibility study. Under the National Historic Preservation Act (NHPA) section 106, the cultural resources team coordinated with 6 tribes in the region to consult on the project and understand concerns. The project team provided updates to two neighborhood councils (Prescott and Lowell-Acorn) to garner direct feedback from community stakeholders. The project team is preparing to host another community meeting in February of 2023 that is focused on the neighborhoods surrounding the project area in West Oakland. The goals for this meeting are to update for the residents of West Oakland that a second draft is being released in March of 2023, inform stakeholders on how to submit comments, and hear any concerns related to the implementation of the proposed project improvements. Also, the environmental review pursuant to California Environmental Quality Act (CEQA) will allow additional opportunities for public involvement.

Because of the long history of disproportionate impacts of air quality on the community of West Oakland, USACE and Port team included the use of electrified dredging as a part of the selected plan, to reduce emissions during the construction period of the project.

36. Will there be more trucks in my neighborhood if more cargo can arrive on bigger ships?

A: Truck volume is driven by regional demand for goods that are shipped in containers – i.e., the volume of consumers served by the Port and the amount of goods that people buy and consume. So, whether those containers arrive or depart the Port on fewer, bigger ships; or more, smaller ships; or are trucked in from a different port altogether, the demand remains independent of the vessel size. Widening the turning basins enables fewer, larger ships to carry the same number of containers, potentially reducing environmental impacts from those vessel operations. Truck traffic is managed by hours of operation and appointment systems of marine terminal operators and is outside the scope of this effort.

37. How long would construction take?

A: Construction is anticipated to be completed in approximately 2 years 10 months, barring unforeseen delays. This is an estimate pending final design and construction bids.