

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION**

**STAFF SUMMARY REPORT: Jazzy Graham-Davis
MEETING DATE: December 10, 2025**

ITEM: 5A

**U.S. Army Corps of Engineers, San Francisco District, San Francisco Bay Federal
Channel Maintenance Dredging, 2026 through 2029 – Reissuance of Waste
Discharge Requirements and Clean Water Act Section 401 Water Quality
Certification and Certification of Final Environmental Impact Report**

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DISCUSSION:

The Revised Tentative Order (Appendix A) before the California Regional Water Quality Control Board, San Francisco Bay Region (Water Board), would reissue Waste Discharge Requirements (WDRs) and Clean Water Act Section 401 Water Quality Certification (401 Certification) for the U.S. Army Corps of Engineers, San Francisco District's (USACE's) maintenance dredging program for the federal navigation channels in San Francisco Bay for years 2026 through 2029 (Project). It would also certify the Final Environmental Impact Report (EIR) for the Army Corps' Maintenance Dredging Program in San Francisco Bay for dredging years 2025 through 2034 (Appendix B).

The USACE's maintenance dredging program involves several federal navigation channels within and at the entrance to the San Francisco Bay, including the dredging activity itself, disposal of dredged material in the Bay at four designated disposal sites, and beneficial reuse of dredged material for beach nourishment offshore of San Francisco's Ocean Beach and for tidal wetland restoration projects within the Bay. The San Francisco Main Ship Channel into the San Francisco Bay (MSC), Richmond Outer Harbor, Richmond Inner Harbor, Oakland Inner and Outer Harbor, Pinole Shoal (San Pablo Bay), Suisun Bay Channel and New York Slough, and Redwood City Harbor (not including the San Bruno Channel) navigation channels are expected to be dredged annually or biennially. The San Rafael Creek, Napa River, Petaluma River (upper portion and across the flats) and San Bruno navigation channels are expected to be dredged once or not at all during the Revised Tentative Order. Beneficial reuse projects that use USACE's dredged material are regulated under separate Board-adopted orders issued to each project site.

The Project authorized by the Revised Tentative Order would be implemented in phases to increase beneficial reuse of dredged sediment over time. In 2026, USACE will either implement Phase 1 as it did in 2025 or Phase 2. Phase 1 consists of using the government hopper dredge *Essayons*, or a similarly sized hopper dredge, to dredge the MSC and Richmond Outer Harbor. At Pinole Shoal, dredging would be deferred until 2027. All other channels would be dredged mechanically or with a cutterhead dredge.

Phase 1 represents the current, ongoing dredging operation as implemented over the last 9 years. Phase 2 consists of using the *Essayons*, or similarly sized hopper dredge, to dredge the MSC, the Richmond Outer Harbor and the Pinole Shoal channels. Either Richmond Inner Harbor or Oakland Harbor channels slated for ocean disposal at the San Francisco Deep Ocean Disposal Site (SF-DODS) would be split between placement in-Bay and beneficial reuse at a tidal marsh restoration site. This will achieve additional beneficial reuse of dredged sediment while maintaining the same cost as ocean disposal. The decision on whether Phase 1 or Phase 2 will be implemented by USACE in 2026 will depend on logistics and cost. Logistical and cost considerations that will affect whether Phase 2 can be implemented include, but are not limited to, equipment availability, contracting requirements, and implementation schedule.

For dredging years 2027 through 2029, USACE will either implement Phase 2 as described above, or Phase 3. Phase 3 consists of using the *Essayons*, or similarly sized hopper dredge, to dredge as described in Phase 2, and add additional hopper dredging in Richmond Inner Harbor and/or part of Oakland Harbor. USACE would utilize cost savings from additional hopper dredging at those channels to beneficially reuse additional sediment from other channels at tidal marsh restoration site, while maintaining the same overall cost for the annual dredging program. USACE's decision on whether Phase 2 or Phase 3 will be implemented will depend on whether Phase 3 is feasible after considering logistics and cost. Logistical and cost considerations that will affect whether Phase 3 is feasible include, but are not limited to, equipment availability, contracting requirements, and implementation schedule. When implementing Phase 2 or 3, USACE will minimize in-Bay hopper dredging entrainment impacts by placing dredged sediment at a non-aquatic tidal wetland restoration site to benefit longfin smelt and other Bay species.

To protect water quality, the Revised Tentative Order requires:

1. Evaluation of sediment suitability for the proposed placement sites for each proposed dredging episode.
2. Analysis of alternatives to aquatic disposal of dredged sediments pursuant to section 404(b)(1) of the Clean Water Act prior to approval of dredging and disposal episodes.
3. Beneficial reuse of dredged material for tidal wetland restoration as minimization or compensatory mitigation for entrainment impacts from hopper dredging.
4. Phased implementation to increase the minimum volume of beneficial reuse of dredged material.
5. Entrainment monitoring during hopper dredging by the *Essayons*.

The Water Board has issued WDRs to USACE for its maintenance dredging program since 1990 and adopted the most recent WDRs in 2020. Due to the listings of longfin smelt and delta smelt as threatened and endangered species in 2009 and 2010, respectively, and additional information from monitoring and modeling that identified a

potential for fish entrainment impacts from hopper dredge equipment, the Water Board prepared EIRs for WDRs and water quality certifications for the Corps' maintenance dredging. In 2015 the Water Board certified the first and most recent EIR for 2015 through 2024 maintenance dredging. Since then, longfin smelt became federally listed as endangered and U.S. Fish and Wildlife Service issued a biological opinion for the Corps' maintenance dredging in 2024. The current proposed EIR takes the previous EIR, U.S. Fish and Wildlife Service's biological opinion, and the latest science into consideration for its analysis of environmental impacts of USACE's maintenance dredging through 2034. A one-year water quality certification was issued in 2025 as a stopgap for the maintenance dredging program before certification of the Final EIR pursuant to California Water Code section 13160(b)(2), which allows the Water Board to issue a certification before the completion of environmental review if the Water Board determines that waiting until completion of that review poses a substantial risk of waiver of the Water Board's certification authority under the Clean Water Act.

A draft of the EIR (Draft EIR) evaluating the environmental impacts of USACE's maintenance dredging was circulated for a 60-day public review period beginning October 31, 2024. Comments received on the Draft EIR and responses to these comments are included in an appendix to the Final EIR. The Final EIR concludes that the Project would be less than significant with standard practices and mitigation measures that avoid and minimize entrainment impacts and the incorporation of beneficial reuse of sediment and cultural resource and archaeological protocols as part of the Project (see Revised Tentative Order Findings 17 and 18). The Final EIR (Appendix B) and the accompanying Errata Sheet (Appendix C) reflect modifications made in response to comments received during and after the public review period.

The Tentative Order was circulated for a 30-day public comment period on August 29, 2025. We received comments (Appendix D) from San Francisco Baykeeper (Baykeeper). All of the comments are addressed in the Response to Comments (Appendix E).

In its comments, Baykeeper asked how dredging volumes per episode were calculated for two channels that have been alternating dredge years, noted inconsistencies in entrainment monitoring dates between the Tentative Order and the EIR, and a misrepresentative sentence about entrainment monitoring data results in the Tentative Order. The Responses to Comments clarified how dredging volumes were calculated and identified that the inconsistencies in monitoring dates between the Tentative Order and EIR were because each was missing an entrainment monitoring date. To correct this, the Tentative Order has been revised to add July 2019 as an entrainment monitoring date. The missing entrainment monitoring date in the EIR is addressed through the Errata Sheet (Appendix C) which adds the inadvertently omitted November 2017 entrainment monitoring to the EIR. Entrainment monitoring included in the EIR already indicated that entrainment occurred; therefore, this correction is not significant and recirculation of the EIR is not required.

APPENDICES:

A. Revised Tentative Order

- B. Final Environmental Impact Report including Responses to Comments
- C. Errata Sheet for the Environmental Impact Report
- D. Comments on Tentative Order
- E. Response to Comments on Tentative Order

Appendix A

Revised Tentative Order

Appendix B

Final Environmental Impact Report

Appendix C

Errata Sheet for the Environmental Impact Report

Appendix D

Comments on Tentative Order

For an electronic copy of the comments, please contact Jazzy Graham-Davis via email to Jazzy.Graham-Davis@waterboards.ca.gov or at (510) 622-2509.

Appendix E

Response to Comments on Tentative Order