

**San Francisco Bay Regional Water Quality Control
Board**

**U.S. Army Corps of Engineers, San
Francisco District San Francisco Bay Federal
Channel Maintenance Dredging Program,
2026 Through 2029**

Response to Written Comments

STAFF RESPONSE TO WRITTEN COMMENTS ON THE USACE MAINTENANCE DREDGING PROGRAM 2026-2029 TENTATIVE ORDER

The Regional Water Board received one comment letter during the public comment period on the Tentative Order, which began on August 29 and closed on September 29, 2025. The one comment letter received was from San Francisco Baykeeper (Nicole C. Sasaki).

The comments from the letter and our responses are presented here. For the full content and context of the comments, please refer to the comment letter. To request a copy of the letter, please contact Jazzy Graham-Davis at (510) 622-2509, or by email at Jazzy.Graham-Davis@waterboards.ca.gov.

1. Comment Letter 1: San Francisco Baykeeper

- 1.1. “First, Table 1. 2025 San Francisco Bay Dredging Project Summary of the Certification summarizes USACE’s in-Bay dredging activities. Certification at 6-7. Table 1 includes a column for the “Average Volume Per Episode (cy).” It is unclear how the Regional Board calculated these averages. In the case of Richmond Outer Harbor and Pinole Shoal Channel, USACE has recently been dredging these channels in alternating years. If the Regional Board calculated the average volumes for these channels by dividing the total amount dredged by the total number of years between 2000 and 2022, then the average volumes for Richmond Outer Harbor and Pinole Shoal Channel may be misrepresented. The Regional Board must review its calculations and confirm the years in which these two channels were not dredged were excluded from calculating the average volumes dredged.”**

We thank Baykeeper for their comments. The average volume per episode included in Table 1 of the Tentative Order represents the average when dredging is conducted annually. This was calculated by dividing the total volume dredged in each channel from 2000 to 2022 by the number of dredge episodes that occurred over those years. As such, this calculation excluded the years in which dredging was deferred from the average and does not divide the total volume dredged in each channel by the total number of years.

- 1.2. “Second, the Certification appears to mischaracterize the entrainment monitoring conducted aboard the Essayons. Table 3-12. Monitoring Data Showing Recent Key Fish Species Entrained from the Essayons Hopper Dredge on pages 3.43-3.45 of the Final EA/EIR contradicts several assertions made in the Certification. First, the Certification states the entrainment monitoring aboard the Essayons occurred in June, September, and October 2016; June and November 2017; June and October 2018; August 2019; July 2023; and in June and July 2024. Certification at 18. In comparison, Table 3-12 in the Final EA/EIR indicates entrainment monitoring**

occurred only in July 2017 and not in November 2017, and in August 2019 as well as July 2019. Second, the Certification states: “[t]he monitoring documented entrainment of longfin smelt in some years but not in others.” Certification at 18. However, according to Table 3-12 in the Final EA/EIR, entrainment of longfin smelt was documented in all years between 2016 and 2024 during which monitoring occurred. USACE did not conduct any entrainment monitoring in 2020, 2021 or 2022. As written, the Certification suggests that entrainment of longfin smelt was not observed in some years when entrainment monitoring was conducted, downplaying the risk of entrainment to longfin smelt. The Regional Board must revise the Certification to correct the contradictions with Table 3-12 and to clarify that the entrainment of longfin smelt was documented during every year that monitoring was conducted.”

November 2017 Entrainment Monitoring

The EA/EIR mistakenly omitted the November 2017 entrainment monitoring. During November 2017 monitoring the most commonly entrained fish included Shokihaze Goby (n=170), Northern Anchovy (n=159), Yellowfin Goby (n=82), and Sand Sole (n=80). Three longfin smelt and no delta smelt were observed in monitoring. The observed number of fish entrained for all species, including longfin smelt, is consistent with the range observed during entrainment monitoring on other dates disclosed in the EA/EIR and does not change the analysis or anticipated impacts in the EA/EIR, as explained below. The pre-existing November 2017 entrainment monitoring has been added to the EA/EIR through an Errata Sheet.

The November 2017 monitoring data does not affect the analysis or conclusions of the EA/EIR, particularly with respect to longfin smelt¹, a special status species. The EA/EIR uses a multiple lines of evidence approach to assess whether longfin smelt entrainment effects occur and are significant because no single line of evidence is determinative by itself. In this approach, the EA/EIR uses entrainment monitoring data to indicate and document that fish entrainment occurs during hopper dredging by the U.S. Army Corps of Engineers (USACE)-owned *Essayons* ship, but uses the percent of longfin smelt habitat affected and duration of

¹ The entrainment analysis focused on special-status fish species because while non-listed species would be entrained, the number of individuals entrained is not expected to have an impact on their population because their population sizes are not restricted like the listed species, and implementation of the Standard Practices in Section 2.3.1.5 and measures that protect special-status fish species would also protect other species, including commercially important species. The November 2017 data does not affect the analysis for non-listed species and is consistent with other entrainment monitoring for these species. Further, it focused particularly on longfin smelt because entrainment data shows that green and white sturgeon, Chinook salmon, and delta smelt are rarely entrained at the monitored hopper dredging sites. Longfin smelt entrainment is highly variable on an annual basis, partly depending on Delta outflow which affects their abundance and distribution, and their small size make the species susceptible to entrainment.

dredging to assess the magnitude of this effect. This approach is described in more detail below.

Entrainment monitoring for hopper dredging demonstrates that entrainment of longfin smelt occurs, but by itself is insufficient to assess the magnitude of the impact. As described in section 2.3.1.5, for many entrainment monitoring samples, often for entire hopper loads, the count of special status species collected by entrainment monitoring aboard the *Essayons* in San Francisco Bay is zero. This results in non-normal data distribution and, therefore, scaling the data using simple percentages gives questionable results. In addition, USACE's entrainment monitoring protocol is only able to inspect a subsample of the total volume of dredged sediment. Therefore, section 3.3.4 of the EA/EIR employs two lines of evidence to assess the significance of entrainment impacts to longfin smelt since it is infeasible to calculate an exact number of fish entrained. The first line of evidence uses the percent of longfin smelt habitat within the relevant San Francisco Bay segment being impacted by hopper dredging to gain an understanding of the magnitude of potential entrainment impacts in each of the segments. The percent of longfin smelt habitat where hopper dredging would occur ranges from 1.4 percent in the South San Francisco Bay to 8.2 percent in San Pablo Bay. These percentages are higher than the total fraction of the longfin smelt habitat since the information in Table 3-15 intentionally does not include large areas of longfin smelt range in the Delta and shallow water habitats because they are outside the geographic scope of the EA/EIR. If that habitat was used, the percent of longfin smelt habitat impacted by dredging would be less than 1 percent. For the second line of evidence, the EA/EIR uses the fraction of days in a year that longfin smelt habitat would be affected to gain an understanding of the duration of the potential entrainment impacts. Under all alternatives, longfin smelt habitat would only be affected for a few days of the year, ranging from 0.5 percent to 10 percent of the year depending on the specific alternative and dredging volume evaluated. Based on this, the EIR found that the exposure of longfin smelt to entrainment is expected to be relatively low, especially when factoring in a range of standard practices described in Section 2.3.1.5 of the EA/EIR. Nonetheless, impacts to longfin smelt are treated as significant because of their special status and their level of entrainment from hopper dredging. Accordingly, the proposed project incorporates into the project beneficial use of dredged material (in accordance with a formula) to reduce significant impacts to less than significant levels.

Thus, the November 2017 monitoring data does not affect the EA/EIR's analysis of the significance of the longfin smelt entrainment impact or its conclusions. Rather, it reiterates other monitoring data in the EA/EIR that demonstrates longfin smelt entrainment from hopper dredging occurs.

August 2019 Entrainment Monitoring

Entrainment monitoring did occur in August 2019 as disclosed in the EA/EIR and has been added to the revised Tentative Order. In addition, entrainment of longfin

smelt was documented in all years between 2016 and 2024 as the commenter notes. To correct this error, the statement "[t]he monitoring documented entrainment of longfin smelt in some years but not in others" has been revised to "[t]he monitoring documented entrainment of longfin smelt in all years between 2016 and 2024" in the Revised Tentative Order. These two changes were made, as requested, for consistency with the EA/EIR and entrainment monitoring data.