May 7, 2021

Via Email: *WRDA2020@usace.army.mil*

Ms. Amy Franz, CEW-P 3F91
United States Army Corps of Engineers
441 G Street NW
Washington D.C., 20314

SUBJECT: Water Resources Development Act (WRDA) 2020 Implementation Guidance;
Docket ID No. COE-2021-002

Dear Ms. Franz:

Thank you for the opportunity to provide comments as part of the Water Resources Development Act 2020 (WRDA 2020) Implementation Guidance process now underway by the United States Army Corps of Engineers (USACE).

WRDA 2020 includes a number of provisions that will accrue significant benefits both regionally in the San Francisco Bay Area (Bay Area) and nationally to address the challenges associated with rising sea level due to climate change, coastal hazards, navigation, and ecosystem restoration. In the Bay Area, local, regional, state, and federal government agencies work collaboratively with industry and environmental advocates to resolve complex Bay-centric issues that challenge our economy and environment. This coalition has developed regional agreements regarding increased habitat restoration, regular dredging to support safe navigation, reusing dredged sediment for wetland restoration, the development of rising sea level adaptation strategies, and promoting green infrastructure where appropriate.

As the largest estuary on the west coasts of both North and South America, the San Francisco Bay and its shoreline is home to an incredibly diverse set of residents, billions of dollars of economic activities, and hundreds of species, including many special status species managed by federal agencies. Rising sea level threatens each. That is why the Bay Area overwhelmingly supports reusing sediment that is dredged regularly by the USACE to create and bolster our wetlands and marshes. This month, the San Francisco Estuary Institute issued "Sediment for

Survival: A Strategy for a Resilience of Bay Wetlands in the Lower San Francisco Estuary"[1] that documents the urgent need for sediment to maintain existing tidal marshes and restore subsided Baylands throughout the region. The report estimates that over 450 million cubic yards of sediment will be required during the next century for wetlands to adapt successfully to rising sea level. Bolstering those habitats will enable them to serve as a buffer against coastal flooding and storm surge resulting from climate change. Increasing the resilience of those wetlands and marshes will help protect both infrastructure and habitat. And, some 60% of those dredged sediments could be secured from local navigation channels dredged by the USACE.

Therefore, USACE's Implementation Guidance for the Water Resources Development Act (WRDA) 2020 should reflect what is written in Section 125 of WRDA, which establishes that "It is the policy of the United States for the Corps of Engineers to maximize the beneficial reuse… of suitable dredged material." To do so, USACE should create a national beneficial reuse policy that establishes a realistic economic value of clean dredged material that takes into account its use for storm or flood risk reduction and habitat restoration, and the cost of offshore disposal should include the full future economic value of that sediment that would be lost if it is deposited offshore.

In addition, USACE's Implementation Guidance should ensure that WRDA 2016 Section 1122 pilot projects are fully funded and implemented[2]. As you are aware, the Restoring San Francisco Bay's Natural Infrastructure with Dredged Sediment Project (Resilient San Francisco Bay Project) was selected as one of ten pilot projects in the nation under the Water Infrastructure Improvements for the Nation Act (WIIN 2016) and proposes to do just that – beneficially use USACE navigation dredged sediment. However, this project has not been fully funded. Annual Appropriations of $5 million would ensure that sediment would be immediately available for restoration and resiliency projects without the need for further changes to federal laws or regulations.

Dredged sediment is often the most cost-effective source of sediment overall for these purposes in the Bay Area, even when it is somewhat more expensive than the cheapest available disposal option. For USACE to routinely waste this resource though aquatic disposal is directly antithetical to the need for that sediment to be placed directly and strategically at approved Bay Area beneficial reuse sites. The Bay Area – and the Nation – simply cannot afford to continue to dispose of suitable dredged sediment as an unwanted waste product, which is reflected in WRDA 2020. And, others in the federal government would bolster this argument – the Federal Emergency Management Agency estimates that every dollar expended by the federal government to reduce risk saves six dollars of recovery costs.

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[1] https://www.sfei.org/documents/sediment-for-survival#:~:text=2021.,the%20Lower%20San%20Francisco%20Estuary.&text=They%20purify%20the%20Bay's%20water,nature%20within%20the%20urban%20environment.

[2] Water Resources Development Act of 2016, Pub. L. No. 114-322, § 1122 (2016).

USACE's greatest strength is its ability to provide "real world" solutions to complex engineering problems. Adopting these suggestions will enable the Corps to serve its partners far more successfully.

Thank you very much for considering this request. We look forward to continuing to work with the United States Army Corps of Engineers as we all move forward to protect our Nation's people, property, and habitat. Please do not hesitate to contact any of us to answer any questions or discuss any concerns.

Sincerely,

MICHAEL MONTGOMERY
Executive Officer
San Francisco Bay Regional Water Quality Control Board

LARRY GOLDZBNAD
Executive Director
San Francisco Bay Conservation
And Development Commission

SAM SCHUCHAT
Executive Officer
State Coastal Conservancy

MIKE MIELKE
Head of Public Policy + SVP for Climate
Silicon Valley Leadership Group

DAVID LEWIS
Executive Director
Save the Bay

JOHN COLEMAN
Chief Executive Officer
Bay Planning Coalition

May 5, 2021

Via Email: WRDA2020@usace.army.mil

United States Army Corps of Engineers
3F91, 441 G St. NW
Washington, DC 20314
ATTN: Ms. Amy Frantz, CEW–P

SUBJECT: *Docket ID No. COE–2021–0002 WRDA 2020 Section 113 Implementation Guidance*

Dear Ms. Frantz:

We are writing to urge the U.S. Army Corps of Engineers ("USACE" or "the Corps") to update its regulations, policies, and practices quickly to ensure that its rising sea level forecasts are based on best available science as required by Section 113 of the Water Resources Development Act of 2020.

USACE is a valuable collaborator with jurisdictions along the San Francisco Bay shoreline, which surrounds the largest estuary on the west coast. Indeed, the Corps is assisting the Port of San Francisco as it plans how to mitigate flood risks along its portion of that shoreline. However, USACE uses rising sea level change curves based on science presented in the National Research Council's (NRC) 2012 report[1]. Although NRC 2012 was the best available science at the time of its publication (IPCC 2007, NRC 2012, USACE 2019a), it is a scientific lifetime behind current best available science, and likely will even more out of date within the next couple of years.

As an alternative, we respectfully request that USACE consider adopting for use along the Bay shoreline and California's open coast the State of California's more recent rising sea level analyses and guidance, which are far more prescient. In 2018, the California Ocean Protection Council (OPC), which is nested within the California Natural Resources Agency, updated the *State of California Sea-Level Rise Guidance Document*[2] to provide guidance to state agencies and local governments for incorporating sea-level rise projections into planning, permitting, investment and other decisions.

[1] NRC (2012): nrc-sea-level-rise-2012 - Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future - GCIS (globalchange.gov).
[2] OPC Sea Level Rise Policy Guidance: https://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-A_OPC_SLR_Guidance-rd3.pdf

To inform this work, OPC partnered with the California Ocean Science Trust to lead the scientific component of the update and to convene an OPC Science Advisory Team Working Group. The Working Group compiled and reviewed the latest climate research, which included the implications of recent scientific advances on ice loss dynamics for updating sea-level rise projections. The Working Group included subject-matter experts in coastal processes, risk assessment, climatic change, ice loss and ice sheet behavior, and statistical modeling. It then integrated the latest findings from the peer-reviewed scientific literature into a science report[3] that helped inform the guidance document update.

The renowned scientists who prepared the report analyzed the rising sea level curves presented in NRC (2012) and IPCC (2014), and IPCC (2014) was adopted as best available science. IPCC (2014) presents a revised approach for estimating potential climate change, based on a set of four greenhouse gas concentration trajectories known as "Representative Concentration Pathways" (RCPs). Using these alternatives enables policy makers to have a fuller understanding of the ramifications of greenhouse gas emissions on the challenges associated with adapting to climate change.

California State guidance recommends using the rising sea level projections associated with RCPs that acknowledge that worldwide greenhouse gas emissions have continued to follow (or exceed) existing trajectories. Using RCP 8.5, OPC's likely rising sea level curve projects 3.4' of sea level rise by 2100 and up to 7' by century's end in low-probability scenarios.

USACE's greatest strength is its ability to provide "real world" solutions to complex engineering problems. To bolster its performance, it is crucial that USACE adopt the following three policies as part of its future work:

1. USACE should use the most recent scientifically-valid data to ensure that people, property, and habitat will not be flooded because it used out-of-date information that did not reflect contemporary scientific consensus;
2. USACE should include in its National Economic Development calculations all forms of flooding caused by the new data on rising sea levels, including loss of habitat, economic and social damages and/or disruptions to infrastructure and buildings from daily and periodic tidal flooding, and groundwater rise; and,
3. USACE should continue its collaborations with local, regional, and state governments using such data, which will help lead national efforts to adapt to rising sea level by providing "real world" solutions at appropriate scales.

[3] OPC Sea Level Rise Science: https://opc.ca.gov/webmaster/ftp/pdf/docs/rising-seas-in-california-an-update-on-sea-level-rise-science.pdf

Ms. Amy Frantz, CEW–P
United States Army Corps of Engineers
Docket ID No. COE–2021–0002 WRDA 2020 Section 113 Implementation Guidance
May 5, 2021

Thank you very much for considering this request. We look forward to continuing to work with the United States Army Corps of Engineers as we all move forward to protect our Nation's people, property, and habitat. Please do not hesitate to contact any of us to answer any questions or discuss any concerns.

Sincerely,

LAWRENCE J. GOLDZBAND
Executive Director
San Francisco Bay Conservation and
Development Commission

ELAINE FORBES
Executive Director
Port of San Francisco

MARK GOLD, D. ENV.
Deputy Secretary for Ocean and Coastal Policy, California Natural Resources Agency
Executive Director, California Ocean Protection Council