

UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE Southwest Region 501 West Ocean Boulevard, Suite 4200 Long Beach, California 90802-4213

November 19, 2010

In response refer to: 2009/06769

Lieutenant Colonel Torrey DiCiro Department of the Army San Francisco District U.S. Army Corps of Engineers 1455 Market Street San Francisco, California 94103-1398

Alexis Strauss
Director, Water Program
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 94105

Dear Colonel DiCiro and Ms. Strauss:

Thank you for your response to NOAA's National Marine Fisheries Service's (NMFS) Essential Fish Habitat (EFH) Conservation Recommendations dated October 6, 2010. The recommendations were provided on July 13, 2010, pursuant to the EFH provisions of the Magnuson Stevens Fishery Conservation and Management Act (MSA) in response to your July 21, 2009, request for programmatic EFH consultation for maintenance dredging and dredged material disposal in the San Francisco Bay area, California. While we appreciate your thorough responses regarding some of the recommendations, there are a number of items that warrant further clarification prior to implementation of the programmatic EFH consultation.

Your response included a number of general statements that NMFS does not agree with, particularly regarding the focus of the consultation and the results of our analyses of affects. First, as discussed during several planning meetings, NMFS did not consult on the Long Term Management Strategy for Placement of Dredged material in the San Francisco Bay Region (LTMS), but rather on U.S. Army Corps of Engineers (Corps) and U.S. Environmental Protection Agency (EPA) authorization and permitting of maintenance dredging in the San Francisco Bay area. Accordingly, the scope of the consultation includes maintenance dredging and disposal activities that occur in the future over the next 39 years, and not the LTMS activities that have occurred since adoption of the program in 1999, nor on the overall implementation of the LTMS as a program. We understand and appreciate the goals and achievements of the LTMS, and in fact acknowledge and credit those beneficial to EFH throughout the programmatic



EFH consultation (see pages 6-7 and 19-23). Many of the environmental achievements listed in your letter, however, primarily benefit Endangered Species Act listed species, or have not been accurately justified, *e.g.*, NMFS has repeatedly requested, yet never received, documentation of the LTMS as a net remover of contaminants. Regardless, the programmatic EFH Conservation Recommendations should be evaluated and accepted, or not accepted, based on Corps and EPA authorities, and not on appropriateness to the LTMS program.

In addition, your response letter has misrepresented what was used as the baseline for the EFH assessment. Baseline was considered as current conditions, not "undisturbed" conditions as stated in your letter, and the EFH effects analysis considered the effects of the actions (dredging, knock down, and disposal) on the current conditions. Thus, requests for compensatory mitigation are only for effects that will occur as a result of continued activities on baseline conditions, not for activities conducted in the past from "undisturbed" conditions. Moreover, some requests for mitigation are based on the outcomes of recommended studies, designed to test assumptions that had to be made in order to conduct the consultation, and thus, are scientifically justified.

With regards to implementation of the programmatic EFH consultation, any proposed projects that do not comply with appropriate EFH conservation recommendations would not be covered by the programmatic and would require separate, individual consultation. Individual consultations will need to evaluate all aspects of proposed projects, and not just those specific elements that are out of compliance with the programmatic EFH consultation. It is not appropriate to divide elements of a project between the programmatic consultation and individual consultation.

With regards to specific responses to NMFS' EFH Conservation Recommendations:

CR 1. We support the convening of a scientific working group to evaluate recovery of benthic species following disturbance from dredging activities. We do not agree that a role of this group should be to evaluate "whether the Bay's soft bottom foraging habitat is limiting for EFH-managed species." We also do not agree that compensatory mitigation should be considered only if the group determines the habitat is limiting. Pursuant to section 305(b)(4)(A) of the Magnuson-Stevens Act, if NMFS receives information that a proposed action would adversely affect EFH, NMFS must recommend measures to conserve the habitat. The term "adverse effect" is interpreted at 50 CFR 600.810(a) as "any impact that reduces quality and/or quantity of EFH and may include direct or indirect physical, chemical, or biological alterations of the water or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce quantity and/or quality of EFH." NMFS' recommendation for benthic recovery studies and compensatory mitigation (if warranted by studies) is based on our determination that dredging activities reduce the quality and/or quantity of soft bottom foraging EFH in San Francisco Bay. This determination is independent of whether this habitat type is believed to be limiting for EFH-managed species.

The literature review provided in your response to CR1 presents no new information about the recovery rate of the benthic community in soft bottom habitat, but rather further illustrates the wide range of variables that can affect this factor and provides additional justification of the need for benthic recovery studies specific to San Francisco Bay. As per our Conservation

Recommendation, the need for compensatory mitigation would be based on the outcome of such studies.

CR 3, 9, 11. Staff resources for Dredged Material Management Office (DMMO) and LTMS participation: Your letter states "completion of this programmatic EFH consultation should free resources sufficiently to allow NMFS to dedicate staff to participate more fully if NMFS so chooses (completion of the pending, separate programmatic ESA consultation for LTMS will further free overall NMFS staff resources)." Despite your opinion as stated, NMFS will continue to lack sufficient staff resources needed to attend the various LTMS and DMMO meetings convened on a regular basis.

CR 4.b. Minimization of indirect effects of turbidity to eelgrass: Your letter states that in some cases the use of a turbidity curtain is "limited or inappropriate." The programmatic consultation recognizes this fact and proposes implementation of light monitoring for those cases, when appropriate. We agree with the described approach for determining the need for light monitoring and assessment of the 250 m buffer. The buffer may be expanded or contracted based on the evaluation of compiled data.

CR 7. Bioaccumulation testing: We appreciate the Corps' and EPA's willingness to require upfront bioaccumulation testing starting in 2011, but need to jointly develop an acceptable protocol for generating information with predictable regularity. Also, we maintain our position that bay ambient levels should be defined using best available information, which is being generated by the San Francisco Estuary Institute (SFEI) through the Regional Monitoring Program (RMP; SFEI 2009). In contrast to ambient levels presented in the frequently utilized 1998 San Francisco Bay Regional Water Quality Control Board Draft document (SFBRWQCB 1998), the 2009 RMP data documents lower concentrations of contaminants in the sediments throughout the bay and different concentrations of contaminants in different parts of the bay (Table 1; SFEI 2009). We understand using the more up-to-date RMP data is likely to trigger more bioaccumulation testing, but believe this is necessary to protect EFH.

The existence of the 1998 draft document (SFBRWCB 1998) and the Total Maximum Daily Load (TMDL) plans for mercury and PCBs (SFBRWQCB 2008, 2006) do not preclude the Federal action agency from acting in a more protective manner than required by the State and does not alleviate the Corps of their responsibilities under the MSA. We do recognize the mass loading component of the dredging activities is small compared to the overall bay loading as expressed in the TMDLs, but we are not evaluating the TMDL loading allocations here and EPA did not consult with us before approving the TMDLs. The allowance in the TMDLs to dispose of any materials not exceeding the 99th percentile of total PCB or mercury concentrations in ambient surface materials in the bay, potentially without bioaccumulation testing, is not protective of EFH and will serve to exacerbate impacts to aquatic habitat function and fisheries through bioaccumulation related effects.

Consistent with our July 13, 2010, recommendation, bioaccumulation testing should be required for in-Bay disposal when dredged material contains PCBs, PAHs, or mercury above Bay ambient levels as currently demonstrated by the RMP (SFEI 2009). If bioaccumulation is confirmed, the dredged material must be declared unsuitable for in-bay disposal. Proposed dredging projects that do not implement this recommendation cannot be covered with this programmatic consultation and will require individual consultation.

CR 8. Residuals: We appreciate the Corps' and EPA's willingness to require z-layer testing, but need to jointly develop an acceptable protocol for generating information with predictable regularity. Also, we maintain our position that ambient levels should be defined using best available information, which is being generated through the RMP (SFEI 2009). If z-layer testing reveals that dredging will result in the exposure of new surface material having higher chemical concentrations than the sediment that was dredged then the parcel must be managed to prevent exposure to the contamination and further degradation of EFH.

We also maintain that Corps/EPA has authority to require remediation separate from LTMS and would like to discuss the process for when remediation actions would be triggered.

Consistent with our July 13, 2010, recommendation, bioaccumulation testing should be required if z-layer testing demonstrates that newly exposed sediments contain PCBs, PAHs, or mercury above Bay ambient levels as demonstrated by the RMP (SFEI 2009). If bioaccumulation is confirmed, the parcel must be managed to prevent exposure to the contamination and further degradation of EFH. Proposed dredging projects that do not implement this recommendation cannot be covered with this programmatic consultation and will require individual consultation.

CR10. Invasive species: There is a clear connection between dredging and invasive species (see EFH Programmatic Consultation section V.B.8). Your response letter states that Corps and EPA disagree with NMFS conclusions regarding adverse effects on EFH related to invasive species and the need for compensatory mitigation as reflected in Conservation Recommendation 10. Pursuant to 50 CFR 600.920 (j)(1) of the EFH regulations, the Federal agency response to NMFS EFH Conservation Recommendations must include "scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects." Scientific justification to support Corps and EPA response was not included in your October 6, 2010, response letter. Without the required scientific justification, the Corps and EPA should implement the Conservation Recommendation or provide an alternative measure to avoid, minimize, or mitigate for the adverse effects of ongoing maintenance dredging relative to invasive species.

While we appreciate your statement that "a scientific working group within the LTMS Program should be convened to discuss invasive benthic species in the Bay as associated with dredging projects," the convening of such a group does not fulfill Conservation Recommendation 10 unless the group assesses and implements enhancement of native benthic invertebrate species as described in our recommendation.

CR12. Other submerged vegetation: We disagree with your response that Conservation Recommendaton 12 "appears to be infeasible" without further knowledge of locations and extent of the species. We also disagree that it the responsibility of NMFS to "provide sufficient mapping of known existing native submerged aquatic vegetation beds" before the Corps and EPA "will discuss potential next steps in avoiding or minimizing impacts to this group of species." Submerged aquatic vegetation is designated as EFH Habitat Area of Particular Concern in the Pacific Groundfish Fishery Management Plan and likely has similar habitat function to eelgrass. The Corps and EPA have a responsibility as the lead federal agencies and as "stewards of the environment" to assess effects of proposed projects on EFH and EFH-HAPC.

We would like to inform you that NMFS has contracted with Dr. Kathryn Boyer of San Francisco State University to complete a one-time qualitative survey of sago pondweed and widgeon grass in San Francisco Bay. This information will be made available as soon as possible after data is collected (likely summer 2011), and can be used to assist the Corps and EPA in their project assessments.

CR13. Reporting requirements: The Corps and EPA response to Conservation Recommendation 13 is inconsistent between the summary response in your letter (page 3) that says "DMMO correspondence and annual reports (provided to NMFS) already provide the requested information" and the specific, individual response in your letter (page 17) that says "The DMMO will provide this information to NMFS as soon as the information is compiled and available for distribution." Please clarify what is being agreed to, specifically when and in what form the requested information will be provided.

NMFS appreciates the Corps and EPA efforts to conclude this programmatic EFH consultation, and looks forward to full implementation of the consultation as quickly as possible. However, further discussions are needed to resolve the issues stated above or to clarify implementation of the programmatic EFH consultation given areas of disagreement. Please contact my staff to arrange for a meeting date and time.

If you have any questions regarding this letter, please contact Korie Schaeffer (707 575-6087) or Laura Hoberecht (707 575-6056) of my staff.

Sincerely,

Robert S. Hoffman

Assistant Regional Administrator

for Habitat Conservation

cc: Chris Yates, NMFS, Sacramento

Bryant Chesney, NMFS, Long Beach

Dick Butler, NMFS, Santa Rosa

Brian Ross, EPA, San Francisco

Tom Kendall, Corps, San Francisco

Fari Tabatabai, Corps, San Francisco

Laurie Suda, Corps, San Francisco

Rob Lawrence, Corps, San Francisco

Beth Christian, Regional Water Quality Control Board, San Francisco

Brenda Goeden, SF Bay Conservation and Development Commission, San Francisco

Vicki Frey, California Department of Fish and Game, Arcata

Ryan Olah, US Fish and Wildlife Service, Sacramento

Donn Oetzel, State Lands Commission, Sacramento

Copy to File Administrative Record # 150316SWR2009SR00591

Literature Cited

- SFBRWQCB 2008. Total Maximum Daily Load for PCBs in San Francisco Bay, Final Staff Report for Proposed Basin Plan Amendment. California Regional Water Quality Control Board, San Francisco Bay Region, February 13, 2008. 135 pages. Available at: http://www.swrcb.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaypcbs/Staff Report.pdf
- SFRWQCB 2006.Mercury in san Francisco Bay, Proposed Basin Plan amendment and Staff Report for Revised Total maximum Daily Load (TMDL) and Proposed Mercury Water Quality Objectives. California Regional Water Quality Control Board, San Francisco Bay Region, Agust 1, 2006. 116 pages. Available at:

 http://www.swrcb.ca.gov/sanfranciscobay/water_issues/programs/TMDLs/sfbaymercury/sr080906.pdf
- SFBRWQCB 1998. Ambient Concentrations of Toxic Chemicals in San Francisco Bay Sediments: Draft Staff Report. San Francisco Regional Water Quality Lab Control Board, Oakland, CA.
- San Francisco Estuary Institute (SFEI). 2009. The Pulse of the Estuary: Monitoring and Managing Water Quality in the San Francisco Estuary. SFEI Contribution 583. San Francisco Estuary Institute, Oakland, CA.

Table 1. Contaminant levels currently referenced by NMFS as San Francisco Bay Ambient (SFEI 2009).

Bay Region	Constituent of Concern		
	Mercury (ppm)	PCBs (ppb)	PAHs (ppm)
Suisun	0.16	2.3	0.5
San Pablo	0.27	4.4	1.0
Central	0.24	8.0	3.6
South	0.23	7.9	2.2
Lower South	0.27	8.6	1.7

¹ The 2010 report of the RMP has been recently issued and will be referenced for San Francisco Bay Ambient values pending NMFS' review.