



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



September 24, 2020

Governor's Office of Planning & Research

Sep 24 2020

STATE CLEARINGHOUSE

Ms. Sherie George
San Francisco Planning Department
49 South Van Ness Avenue, Suite 1400
San Francisco, CA 94103
CPC.WaterfrontEIR@sfgov.org

Subject: Waterfront Plan Project, Notice of Preparation, SCH No. 2020080458,
City and County of San Francisco

Dear Ms. George:

The California Department of Fish and Wildlife (CDFW) has reviewed the Notice of Preparation (NOP) prepared by the City and County of San Francisco for the Waterfront Plan Project (Project), located in the City and County of San Francisco. CDFW is submitting comments on the NOP regarding potentially significant impacts to biological resources associated with the Project.

CDFW ROLE

CDFW is a Trustee Agency with responsibility under the California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources (e.g., biological resources). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Program, and other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION

The Port of San Francisco proposes to update and amend the 1997 Waterfront Land Use Plan to develop long-term goals and policies to guide the use, management, and improvement of 7.5 miles of property along the coastline, from Fisherman's Wharf to India Basin.

The update will propose nine goals, attendant policies, and land use objectives to guide waterfront management, development, and improvement of the waterfront. The goals and policies include but are not limited to preservation and enhancement of maritime port facilities, diversification of land uses and waterfront activities, increasing intensity of industrial and maritime uses, open space improvement, public access expansion, climate resiliency, and public transit and alternative transportation access.

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The developed Environmental Impact Report (EIR) will be a programmatic analysis of policies and land use objectives to plan for future growth.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist the City and County of San Francisco in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on biological resources.

COMMENT 1: Artificial Lighting

Issue: The Project could increase artificial lighting. Artificial lighting often results in light pollution, which has the potential to significantly and adversely affect biological resources.

Evidence the impact would be significant: Night lighting can disrupt the circadian rhythms of many species. Many wildlife species use photoperiod cues for communication (e.g., bird song; Miller 2006), determining when to begin foraging (Stone et al. 2009), behavior thermoregulation (Beiswenger 1977), and migration (Longcore and Rich 2004).

Recommendations to minimize significant impacts: CDFW recommends eliminating all non-essential artificial lighting. If artificial lighting is necessary, CDFW recommends avoiding or limiting the use of artificial lights during the hours of dawn and dusk, when many wildlife species are most active. CDFW also recommends that outdoor lighting be shielded, cast downward, and does not spill over onto other properties or upwards into the night sky (see the International Dark-Sky Association standards at <http://darksky.org/>).

COMMENT 2: Exterior Windows

Issue: The glass used for exterior building windows could result in bird collisions, which can cause bird injury and mortality.

Evidence the impact would be significant: Birds, typically, do not see clear or reflective glass, and can collide with glass (e.g., windows) that reflect surrounding landscape and/or habitat features (Klem and Saenger 2013, Sheppard 2019). When birds collide with glass, they can be injured or killed. In the United States, the estimated annual bird mortality is between 365-988 million birds (Loss et al. 2014).

Recommendations to minimize significant impacts: CDFW recommends incorporating visual signals or cues to exterior windows to prevent bird collisions. Visual signals or cues include, but are not limited to, patterns to break up reflective areas, external window films and coverings, ultraviolet patterned glass, and screens. For best practices on how to reduce bird collisions with windows, please go to the United States

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Fish and Wildlife Service's website for Buildings and Glass (<https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds/collisions/buildings-and-glass.php>).

COMMENT 3: Nesting Birds

Issue: Project construction could result in disturbance of nesting birds.

Evidence the impact would be significant: Noise can impact bird behavior by masking signals used for bird communication, mating, and hunting (Bottalico et al. 2015). Birds hearing can also be damaged from noise and impair the ability of birds to find or attract a mate and prevent parents from hearing calling young (Ortega 2012).

Recommendations to minimize significant impacts: If ground-disturbing or vegetation-disturbing activities occur during the bird breeding season (February through early-September), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of Fish and Game Codes.

To evaluate and avoid for potential impacts to nesting bird species, CDFW recommends incorporating the following mitigation measures into the Project's draft EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: Nesting Bird Surveys

If ground-disturbing or vegetation-disturbing activities occur during the bird breeding season, CDFW recommends that a qualified avian biologist conduct pre-Project activity nesting bird surveys no more than seven (7) days prior to the start of ground or vegetation disturbance and if there is a four day or more lapse in ground or vegetation disturbance. CDFW recommends that nesting bird surveys cover a sufficient area around the Project area to identify nests and determine their status. A sufficient area means any area potentially affected by the Project.

During nesting bird surveys, CDFW recommends that a qualified avian biologist establish behavioral baseline of all identified nests. During Project activities, CDFW recommends having the qualified avian biologist continuously monitor nests to detect behavioral changes resulting from Project activities. If behavioral changes occur, CDFW recommends stopping the activity, that is causing the behavioral change, and consulting with a qualified avian biologist on additional avoidance and minimization measures.

Recommended Mitigation Measure 2: Nesting Bird Buffers

During Project activities, if continuous monitoring of nests by a qualified avian biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 1,000-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place

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until the breeding season has ended or until a qualified avian biologist has determined that the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the Project area would be concealed from a nest site by topography. CDFW recommends that a qualified avian biologist advise and support any variance from these buffers.

General Comments

In-Water Work Windows:

For all in-water construction, CDFW recommends that work take place during the approved work window of June 1 through November 30 to protect sensitive life stages of commercially and recreationally important species as well as state listed species. CDFW recommends discussion of project timing and work windows within the draft EIR.

Eelgrass:

If in-water construction activities take place within 45 meters of documented eelgrass habitat, a pre-construction eelgrass survey should be conducted and work should not start earlier than July 1 to protect sensitive habitat for juvenile Dungeness crab. CDFW recommends avoiding and minimizing impacts to eelgrass. If impacts to eelgrass is determined to be unavoidable, CDFW recommends the draft EIR reference the avoidance and minimization measures outlined within the California Eelgrass Mitigation Policy (NOAA 2014). Should eelgrass mitigation be required for impacts to eelgrass, a Scientific Collecting Permit will be required to take and transplant eelgrass. Additionally, if new or existing structures are overwater, the draft EIR should analyze shading impacts and how the structure may be able to incorporate light penetrating materials to minimize impacts to eelgrass habitat.

Pile Driving, Repair, and Replacement:

If pile driving is proposed, a vibratory hammer should be used to the maximum extent feasible. In the event that an impact hammer is required, a hydroacoustic analysis should be conducted to determine if potential under water noise impacts may occur to fish and other wildlife species. CDFW is a signatory to the multi-agency and state Interim Criteria for Injury to Fish Memorandum (Memo) (attached) which outlines hydroacoustic thresholds in which take of state listed species may occur. In the event that one of these thresholds is determined to be exceeded, CDFW recommends consultation regarding a 2081(b) Incidental Take Permit. The draft EIR should include analysis of any potential pile driving in which the hydroacoustic thresholds may be exceeded as outlined within the Memo. The draft EIR should also discuss minimization measures and best management practices such as silt curtains, bubble curtains, wood cushion blocks, and soft starts, that will or could be used during pile driving activities.

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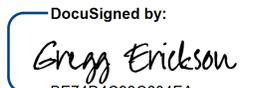
Additionally, the draft EIR should fully analyze the size and type of piles being used to replace existing piles or used to support new overwater structures. The use of treated wood piles should be avoided if there are other suitable options available. In addition, pile materials such as steel and concrete with diameters greater than 18 inches should be discussed within the draft EIR in further detail to determine the potential for under water noise impacts.

FILING FEES

CDFW anticipates that the Project will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, section 711.4; Pub. Resources Code, section 21089). Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW.

Thank you for the opportunity to comment on the Project's NOP. If you have any questions regarding this letter or for further coordination with CDFW Bay Delta Region (Region 3), please contact Ms. Monica Oey, Environmental Scientist, at (707) 428-2088 or by email to monica.oey@wildlife.ca.gov. If you have any questions regarding this letter or for future coordination with CDFW Marine Region (Region 7), please contact Mr. Arn Aarreberg, Environmental Scientist, at (707) 791-4195 or by email to arn.aarreberg@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Gregg Erickson
Regional Manager
Bay Delta Region

Attachment

REFERENCES

Beiswenger, R. E. 1977. Diet patterns of aggregative behavior in tadpoles of *Bufo americanus*, in relation to light and temperature. *Ecology* 58:98–108.

Bottalico, Pasquale & Spoglianti, Dorina & Bertetti, Carlo & Falossi, Marco. 2015. Effect of noise generated by construction sites on birds, paper presented at Internoise 2015, International Congress and Exposition on Noise Control Engineering.

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Klem, D. and P. G. Saenger. 2013. Evaluating the Effectiveness of Select Visual Signals to Prevent Bird-window Collisions. *The Wilson Journal of Ornithology* 125(2):406-411.

Longcore, T., and C. Rich. 2004. Ecological light pollution - Review. *Frontiers in Ecology and the Environment* 2:191–198.

Loss, S.R., T. Will, S.S. Loss, and P.P. Marra. 2014. Bird-building collisions in the United States: estimates of annual mortality and species vulnerability. *Condor* 116: 8-23.

Miller, M. W. 2006. Apparent effects of light pollution on singing behavior of American robins. *The Condor* 108:130–139.

NOAA (National Oceanic and Atmospheric Administration) Fisheries, West Coast Region. 2014. California Eelgrass Mitigation Policy and Implementing Guidelines.

Ortega, C. P. 2012. Chapter 2: Effects of noise pollution on birds: A brief review of our knowledge. *Ornithological Monographs* 47: 6-22.

Sheppard, C. D. 2019. Evaluating the relative effectiveness of patterns on glass as deterrents of bird collisions with glass. *Global Ecology and Conservation* 20:e00795.

Stone, E. L., G. Jones, and S. Harris. 2009. Street lighting disturbs commuting bats. *Current Biology* 19:1123–1127. Elsevier Ltd.

NOAA's Fisheries Northwest and Southwest Regions *U.S. Fish and Wildlife Service Regions 1 & 8* *California/Washington/Oregon Departments of Transportation* *California Department of Fish and Game* *U.S. Federal Highway Administration*

MEMORANDUM

June 12, 2008

From: Fisheries Hydroacoustic Working Group

Subject: Agreement in Principle for Interim Criteria for Injury to Fish from Pile Driving Activities

To: Applicable Agency Staff

The signatory agencies, identified below, have agreed in principle to use the attached Interim Criteria for Injury to Fish from Pile Driving Activities. The agreement was concluded at a meeting in Vancouver, Washington on June 10-11, 2008 with key technical and policy staff from the Federal Highway Administration, NOAA Fisheries, U.S. Fish and Wildlife Service, the Departments of Transportation from California, Oregon, and Washington; and national experts on sound propagation activities that affect fish and wildlife species of concern. The agreed upon criteria identify sound pressure levels of 206 dB peak and 187 dB accumulated sound exposure level(SEL) for all listed fish except those that are less than 2 grams. In that case, the criteria for the accumulated SEL will be 183 dB.

These criteria will apply to all new projects beginning no later than 60 days from the date of this memorandum. During the interim 60 day period, the Transportation Agencies will work with the Services to identify projects currently in the consultation process and reach agreement on which criteria will be used to assess project effects.

The agencies agree to review the science periodically and revise the threshold and cumulative levels as needed to reflect current information. Behavioral impacts to fish and impacts to marine mammals are not addressed in this agreement. Sub-injurious effects will continue to be discussed in future meetings.

The respective agencies also agree to develop appropriate training for staff on these revised criteria, as well as a process to review and possibly refine the criteria, when appropriate.

For questions or concerns about the revised criteria, we recommend staff contact their agency environmental coordinator or agency expert on pile driving issues.

Carol G. Adkins



Federal Highway Administration*

*FHWA supports the use of these interim criteria in the states signing this agreement in principle. FHWA leaves the schedule for implementation to the discretion of the state DOTs in cooperation with their respective FHWA Division Offices and the Services.

Michael Jehan



NOAA Fisheries – NWR

Russell M. Struck



NOAA Fisheries – SWR

Ken S. Berg



US Fish and Wildlife Service Region 1

Michael E. Dagensh



US Fish and Wildlife Service Region 8

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California Department of Transportation

Caltrans

[Signature]



California Department of Fish and Game

A. G. [Signature]



Oregon Department of Transportation

Meghan L. Latta
Washington State Department of Transportation

