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July 13, 2021

Mr. Adam Noelting
Metropolitan Transportation Commission
375 Beale Street, Suite 800
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Subject: Plan Bay Area 2050 (Regional Transportation Plan/Sustainable Communities Strategy), Draft Environmental Impact Report, SCH No. 2020090519, Nine Counties of the San Francisco Bay Area

Dear Mr. Noelting:

In a letter dated October 30, 2020, the California Department of Fish and Wildlife (CDFW) provided comments on the Notice of Preparation (NOP) of a draft Environmental Impact Report (Draft EIR) for Plan Bay Area 2050 (Regional Transportation Plan/Sustainable Communities Strategy) (Plan). Plan implementation is the "Project" for purposes of California Environmental Quality Act (CEQA) review (Cal. Code Regs., tit. 14, §15378). CDFW has reviewed the Draft EIR for the Project, which encompasses all San Francisco Bay Area counties, and is submitting comments on the Draft EIR to inform the Metropolitan Transportation Commission, as Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed Plan.

CDFW is a Trustee Agency pursuant to CEQA and is responsible for the conservation, protection, and management of the State's biological resources (Pub. Resources Code, § 21000 et seq.; Cal. Code Regs., tit. 14, § 15386). CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Permit, a Native Plant Protection Act Permit, or a Lake and Streambed Alteration (LSA) Agreement, and other provisions of the Fish and Game Code that afford protection to the State's fish and wildlife trust resources.

PROJECT LOCATION AND ENVIRONMENTAL SETTING

The San Francisco Bay Area (Bay Area) includes nine counties aggregated geographically into four subareas: North Bay (i.e., Marin, Napa, Solano, and Sonoma counties), East Bay (Alameda and Contra Costa counties), South Bay (Santa Clara County), and the West Bay (San Francisco and San Mateo counties). There are 101 cities spread throughout the nine counties covering a total area of approximately 4.4 million acres, of which approximately 20 percent is developed (as of 2018). The Bay Area is bordered by Mendocino, Lake, and Yolo counties to the north; Sacramento, San

Joaquin, Stanislaus, and Merced counties to the east; San Benito, Monterey, and Santa Cruz counties to the south; and the Pacific Ocean to the west.

Natural communities that occur within the Bay Area include: native perennial grasslands and non-native annual grasslands, costal scrub and chaparral, woodlands and forests, riparian areas, aquatic habitat (including the San Francisco Bay and Delta), wetlands, and ruderal and agricultural areas, all of which support an abundance of native plant, fish, and wildlife species, including special-status species (i.e., species that are legally protected or are otherwise considered sensitive by Federal, State, or local resource agencies).

PROJECT DESCRIPTION

The proposed Plan is a long-range regional plan for the Bay Area that encompasses housing, economic, transportation, and environmental strategies designed to make the Bay Area more equitable for all residents and more resilient in the face of unexpected challenges. The Plan serves as the third Regional Transportation Plan/Sustainable Communities Strategy for the Bay Area and is a major update to Plan Bay Area 2040. The Plan details economic strategies (i.e., land use) to invest $702 billion in expected revenues to accommodate 2.7 million new persons, 1.4 million new households, new forecasted housing units, and 1.4 million new jobs between 2015 and 2050; details transportation strategies to invest $579 billion in expected revenues from Federal, State, regional, and local sources over the next 30 years; details environmental strategies to invest $102 billion in expected revenues to protect the Bay Area from at least two feet of future permanent sea level rise inundation, reduce climate emissions, and maintain and expand the region's parks and open space system; and complies with Senate Bill 357, which requires integration of land use and transportation planning to reduce per-capita passenger vehicle Green House Gas emissions by 2035 and provide adequate housing for the region's forecasted persons and households.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations below to assist the Metropolitan Transportation Commission in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Several of the topics and comments below are similar to those in CDFW's letter responding to the NOP. CDFW appreciates that the Draft EIR incorporated several of our comments on the NOP, however we recommend the additional detail identified below, as applicable.

Tiering and Subsequent Project Checklist

The Draft EIR is identified as a Program EIR, which presents a programmatic assessment of the potential impacts of the proposed Project, focusing on the entire set

of projects, programs, and strategies contained in the proposed Project. Individual transportation, sea level rise adaptation, and development project impacts are not addressed in detail in the Draft EIR. The Draft EIR will be used to evaluate subsequent projects and activities under the proposed Project. While Program EIRs have a necessarily broad scope, CDFW recommends providing as much additional information related to anticipated types of residential and non-residential development as possible, particularly that may occur in the marine environment near the waterfront. Depending on the type of development proposed and the impact to specific habitat, CDFW may have further comments on the broad elements of proposed development to avoid and minimize potential impacts to marine species and habitat.

In addition, as subsequent projects will have site-specific impacts and require site-specific mitigation measures, CDFW strongly recommends creating a procedure for evaluating these subsequent projects. CEQA Guidelines section 15168, subdivision (c)(4) states, "Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR." CDFW recommends developing the checklist with this Draft EIR to guide the appropriate CEQA review level for future projects as an attachment to the Draft EIR. A procedure or checklist will be critical to ensuring adequate analysis of Project effects on biological resources. CDFW recommends using the procedure and checklist developed for infill projects as a model; it can be found in CEQA Guidelines section 15183.3 and Appendix N. The checklist should also outline how habitat will be analyzed per species or habitat type, how impacts will be assessed, and whether any mitigation is necessary.

When used appropriately, the checklist should be accompanied by enough relevant information and reasonable inferences to support a "within the scope" of the Draft EIR conclusion. For subsequent Project activities that may affect sensitive biological resources, a site-specific analysis should be prepared by a qualified biologist to provide the necessary supporting information. In addition, the checklist should cite the specific portions of the Draft EIR, including page and section references, containing the analysis of the subsequent Project activities' significant effects and indicate whether it incorporates all applicable mitigation measures from the Draft EIR.

Identifying Responsible Agencies

CDFW recommends that the Draft EIR clearly identify the Responsible Agencies expected to use the Draft EIR in their decision making, provide a list of permits and other approvals required to implement the project, and provide a list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies [Cal. Code Regs., tit. 14, § 15124, subd. (d)(1)(A)-(C)].

Advance Mitigation Considerations

CDFW recommends that the Draft EIR incorporate advance mitigation considerations. The Legislative Report from Assembly Bill 1282 Transportation Permitting Task Force states:

"*Historically, transportation agencies have implemented mitigation on a project-by-project basis once funding is approved for the final stages of a project and environmental permits are obtained. Advance mitigation presents an innovative opportunity for many transportation projects, with potentially significant reductions of time and costs associated with providing necessary mitigation. It can be applied in highway, rail, and transit projects in both urban and rural areas.*"

In addition, in a 2016 Memorandum of Understanding between the California Department of Transportation (Caltrans), CDFW, the State Water Resources Control Board, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency EPA, the U.S. Fish and Wildlife Service, and National Oceanic and Atmospheric Administration through a Statewide Advanced Mitigation Initiative states the following:

- Considering biological conservation and mitigation needs early in a project's timeline, prior to project design and development, can reduce costs and allow natural resources conservation and mitigation to enhance the sustainability of those natural resource systems.

- Long-range advance mitigation and conservation planning would allow transportation agencies to anticipate potential mitigation and conservation needs for planned transportation projects and to meet those needs in a more timely and cost-efficient way.

- Advance mitigation and conservation planning would allow mitigation funding for transportation projects to be directed to agreed-upon conservation priorities and would allow for the establishment, enhancement, preservation, and/or restoration, as appropriate, of habitat that enhance the sustainability of natural systems by protecting or restoring connectivity of natural communities consistent with, but not limited to the Endangered Species Act section 7(a)(l), California Fish and Game Code section 2055, Rivers and Harbors Act section 10, and Clean Water Act sections 401 and 404.

CDFW currently has three programs that can accommodate advance mitigation planning: Conservation and Mitigation Banking, Natural Community Conservation Planning (NCCP), and Regional Conservation Investment Strategies (RCIS). For banking, proponents can create a bank or credits to meet future mitigation needs, and as of 2021, they now have the ability to purchase multiple credits from existing banks in

advance of using them for future permits. Participation in NCCPs can provide streamlined permitting coverage and required mitigation for covered activities under the plan, which can have terms of 20-50 years. Finally, the RCIS program, created in 2017, can provide advance mitigation for CEQA, LSA, and CESA impacts through the creation of Mitigation Credit Agreements for focal species and habitats covered in the strategy. Three Bay Area counties are part of two approved RCISs: Santa Clara (Santa Clara County RCIS) and Alameda and Contra Costa (East Bay RCIS). Additionally, a Wildlife Conservation Board grant was recently approved for a North Bay Baylands RCIS, which will cover portions of Marin, Napa, Solano, and Sonoma counties along the Bay.

Fish Passage Analysis – Senate Bill 857

Senate Bill 857 (SB-857), which amended Fish and Game Code section 5901 and added section 156 to the Streets and Highways Code states in section 156.3, “For any project using state or federal transportation funds programmed after January 1, 2006, the department [Caltrans] shall insure that, if the project affects a stream crossing on a stream where anadromous fish are, or historically were, found, an assessment of potential barriers to fish passage is done prior to commencing project design. The department [Caltrans] shall submit the assessment to the Department of Fish and Game [Wildlife] and add it to the CALFISH database [California Fish Passage Assessment Database]. If any structural barrier to passage exists, remediation of the problem shall be designed into the project by the implementing agency. New projects shall be constructed so that they do not present a barrier to fish passage. When barriers to fish passage are being addressed, plans and projects shall be developed in consultation with the Department of Fish and Game [Wildlife].

To adequately describe the environmental setting and reduce impacts to less-than-significant, CDFW recommends discussing in the Draft EIR potential fish barrier locations noted in the CALFISH Database that occur within the Project limits as it pertains to SB-857. The fish passage section should discuss the current status of the crossing locations noted in the CALFISH Database, conduct first pass and or second pass fish assessments, as necessary, and provide images of the upstream and downstream ends of water conveyance structures.

Light Pollution Analysis, Avoidance and Minimization

Light pollution has the potential to significantly and adversely affect biological resources because unlike the natural brightness created by the monthly cycle of the moon, permanent and continuously powered lighting fixtures create an unnatural light regime producing a constant light output. Continuous light output for 365 days a year can have a cumulatively significant impact on fish and wildlife populations. CDFW strongly recommends reducing artificial light outputs within the Project limits to avoid potentially significant impacts from light pollution.

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). Artificial night lighting has also been found to impact juvenile salmonid overwintering success by delaying the emergence of salmonids from benthic refugia and reducing their ability to feed during the winter (Contor and Griffith 1995).

To adequately describe the project and reduce impacts to less-than-significant, CDFW recommends that the Draft EIR include the analysis and Mitigation Measures 1-5 below.

Analyze currently existing light sources output within proposed Project limits. Reduce or remove the number of light sources proposed within Project corridors such as informational signs, bicycle/pedestrian access light sources and overhead light poles. Reduction in the number of light output sources can be accomplished by increasing the standard spacing from light pole source to light pole source within the Project limits and by avoiding light source installation in highly sensitive resource locations. In addition, utilizing light shielding, light output restrictions and measures discussed in detail below may reduce the potentially significant impacts created by artificial lighting sources.

1. The lead agency shall provide Isolux Diagrams that analyze current light levels present during pre-Project conditions and provide the predicted Project light levels that will be created upon completion of the Project. The analysis shall include an analysis of all potential light sources proposed for new install or replacement. Upon Project completion the lead agency shall conduct a ground survey that compares current and predicated light levels with actual light levels achieved upon completion of the Project through comparison of Isolux diagrams. If an increase from the projected levels to the actual levels is discovered additional avoidance, minimization or mitigation measures may be required and shall be implemented in coordination with CDFW.

2. All LEDs or bulbs installed as a result of the Project shall be rated to emit or produce light at or under 2700 kelvin that results in the output of a warm white color spectrum.

3. Solid concrete barriers at a minimum height of 3.5 feet should be installed in areas where they have the potential to reduce illumination from overhead lights and from vehicle lights into areas outside of the roadway. Barriers should only be utilized as a light pollution minimization measure if they do not create a significant barrier to wildlife movement. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.

4. Retro-reflectivity of signs and road stripping shall be implemented throughout the Project to increase visibility of roads to drivers and reduce the need for electrical lighting. Reflective highway markers have also been proven effective to reduce raptor collisions on highways in California's central valley if installed along highway verges and medians.

5. All light poles or sources of illumination that are new or replacement installations shall be installed with the appropriate shielding to avoid excessive light pollution into natural landscapes or aquatic habitat with the Project corridor in coordination with the natural resource agencies. In addition, the light pole arm length and mast heights should be modified to site specific conditions to reduce excessive light spillage into natural landscapes or aquatic habitat within the Project corridor. In areas with sensitive natural landscapes or aquatic habitat, placing light poles at non-standard intervals shall occur to further reduce the potential for excessive light pollution by decreasing the number of light output sources.

Marine Environment Biological Significance

The San Francisco Bay-Delta is the second largest estuary in the United States and supports numerous aquatic habitats and biological communities. It encompasses 479 square miles, including shallow mudflats. The outer coast of Sonoma, Marin, San Francisco, and San Mateo Counties hosts diverse habitats, including sandy beaches, kelp forests, and rocky reefs, and is considered one of the most biologically productive marine systems in the world. This ecologically significant ecosystem supports both State and federally threatened and endangered species, such as Sacramento River spring- and winter-run Chinook salmon (*Oncorhynchus tshawytscha*), steelhead (*Oncorhynchus mykiss*) - Central California Coast and Central Valley evolutionarily significant units, green sturgeon (*Acipenser mediostris*) - southern Distinct Population Segment, longfin smelt (*Spirinchus thaleichthys*), Delta smelt (*Hypomesus transpacificus*), tidewater goby (*Eucyclogobius newberryi*), and California Ridgway's rail (*Rallus obsoletus obsoletus*); and State fully protected species such as brown pelican (*Pelecanus occidentalis californicus*) and American peregrine falcon (*Falco peregrinus anatum*).

The marine environment also sustains important commercial and recreational fisheries, such as dungeness crab (*Cancer magister*), Pacific herring (*Culpea pallasii*), rockfish (*Sebastes* spp.), California halibut (*Paralichthys californicus*), surfperches (*Embiotocidae*), and California grunion (*Leuresthes tenuis*).

For an adequate environmental setting and to reduce impacts to less-than-significant, CDFW recommends that the Draft EIR include: 1) the above information in Section 3.5, Biological Resources, under the heading *San Francisco Bay Aquatic Resources*, on page 3.5-17, and 2) both runs of listed Sacramento River Chinook salmon in Appendix

C, Table C-1, titled *Special-Status Species Evaluated for Plan Bay Area 2050*. Additionally, potential impacts on these runs of Chinook salmon and mitigation should be included.

Wildlife Connectivity

To adequately describe the environmental setting and reduce impacts to less-than-significant, CDFW recommends that Mitigation Measure BIO-3(a) include reference to CDFW's *California Wildlife Barriers 2020* and Caltrans *Wildlife Crossings Guidance Manual* (2009) as documents that will be consulted when designing projects under the Plan to minimize impacts on wildlife movement and habitat connectivity.

FILING FEES

CDFW anticipates that the Plan will have an impact on fish and/or wildlife, and assessment of filing fees is necessary (Fish and Game Code, § 711.4; Pub. Resources Code, § 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.

CONCLUSION

CDFW appreciates the opportunity to comment on the Draft EIR to assist the Metropolitan Transportation Commission in identifying and mitigating Plan impacts on biological resources.

For questions regarding this letter or for further coordination, please contact Mr. Garrett Allen, Environmental Scientist – Bay Delta Region, at Garrett.Allen@wildlife.ca.gov; Mr. Arn Aarreberg, Environmental Scientist – Marine Region, at Arn.Aareberg@wildlife.ca.gov, or Ms. Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov.

Sincerely,

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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.

Contor R., Craig, Griffith, J.S. 1995. Nocturnal emergence of juvenile rainbow trout from winter concealment relative to light intensity. Hydrobiologia Vol. 299: 179-18.

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

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

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