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

November 15, 2022

Robert Zadnik, City Manager
City of Belvedere
450 San Rafael Avenue
Belvedere, CA 94920
EIRcomments@cityofbelvedere.org

Dear Mr. Zadnik:

Belvedere Seismic Upgrade Project (Project)
Draft Environmental Impact Report (DEIR)
SCH# 2022010159

The California Department of Fish and Wildlife (Department) received a DEIR from the City of Belvedere for the Project pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that the Department, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

DEPARTMENT ROLE

The Department is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the state. (Fish & G. Code, Section 711.7, subd. (a) & 1802; Pub. Resources Code, Section 21070; CEQA Guidelines Section 15386, subd. (a).) The Department, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, Section 1802.) Similarly for purposes of CEQA, the Department is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources. The Department is also responsible for marine biodiversity protection under the Marine Life Protection Act in coastal marine waters of California, and ensuring fisheries are sustainably managed under the Marline Life Management Act.

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

The Department is also submitting comments as a Responsible Agency under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) The Department expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, implementation of the Project may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

Proponent: City of Belvedere

Objective: The objective of the Project is to stabilize levees and critical infrastructure near San Rafael and Beach Road to provide protection against deformation during an earthquake. Levee stabilization will be achieved using steel sheet piles.

Location: The Project is located within the City of Belvedere along San Rafael Avenue and Beach Road.

Timeframe: Project construction is expected to take approximately 8 months and may begin as early as 2023.

MARINE 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. This ecologically significant ecosystem supports both state and federally threatened and endangered species and sustains important commercial and recreational fisheries.

STATE AND FEDERALLY LISTED, COMMERCIALLY/RECREATIONALLY IMPORTANT, AND RARE SPECIES

Protected species under the State and Federal Endangered Species Acts that could potentially be present near Project activities include:

- Chinook salmon (*Oncorhynchus tshawytscha*), state and federally threatened (Spring-run), state and federally endangered (Winter-run)
- Longfin smelt (*Spirinchus thaleichthys*), state-threatened
- Steelhead (*Oncorhynchus mykiss*), federally threatened (Central California Coast and Central Valley ESUs)
- Green sturgeon (*Acipenser medirostris*), federally threatened (southern DPS)
- White sturgeon (*A. transmontanus*), state species of special concern
- Brown pelican (*Pelecanus occidentalis californicus*), state fully protected

- White-tailed kite (*Elanus leucurus*), state fully protected
- Coastal triquetrella (Triquetrella californica), California Rare Plant Rank (CRPR) 1B.2.

Several species with important commercial/recreational fisheries value and habitat value for spawning and rearing could potentially be present near Program activities; these include:

- Dungeness crab (*Cancer magister*)
- Pacific herring (*Clupea pallasii*)
- Surfperches (*Embiotocidae*)
- California halibut (*Paralichthys californicus*)
- Eelgrass (*Zostera marina*)

COMMENTS AND RECOMMENDATIONS

The Department offers the comments and recommendations below to assist the City of Belvedere in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document.

I. Project Level Impacts and Other Considerations

Pile Driving

Comment: The DEIR describes the installation of the sheet pile system potentially disturbing approximately 1200 feet of shoreline within Belvedere Lagoon. Piles would be installed with a vibratory or impact hammer. Driving piles with an impact hammer has shown the potential to exceed hydroacoustic thresholds which can injure or kill fish as described in the Interim Criteria for Injury to Fish from Pile Driving Activities (attachment 1). There does not appear to be an analysis of hydroacoustic noise levels from in-water pile driving activities. The noise estimates for pile driving presented in section 4.11 – Noise, are all above the water. If the City of Belvedere determines that any of the hydroacoustic thresholds may be exceeded, there is potential for state listed fish species to be impacted by the installation of the sheet pile system.

Recommendation: The Department recommends that the City of Belvedere consult with the Department regarding the potential need for a 2081(b) Incidental Take Permit if any of the estimated hydroacoustic impacts from pile driving exceed the hydroacoustic thresholds outlined in attachment 2.

Recommendation: The Department recommends that the final EIR include modeled estimates for underwater sound generated by the installation of the sheet pile system. Estimates should be included for both vibratory and impacts hammers.

Eelgrass

Comment: California Public Resources Code (PRC Section 35630) outlines the importance of eelgrass protection and restoration in California and other West Coast states. Eelgrass has numerous benefits, as outlined within PRC 35630, such as habitat for listed and commercially valuable species, water quality, carbon sequestration, and shoreline protection.

Belvedere Cove contains numerous eelgrass beds with the largest along the northeastern corner of the cove. The DEIR does not describe potential impacts to eelgrass from Project activities such as elevated turbidity or direct impact from pile installation within eelgrass habitat. Given the proximity of eelgrass to pile driving activities below mean high water, it is reasonable to expect that impacts to eelgrass within Belvedere Cove could occur. The California Eelgrass Mitigation Policy (attachment 3) contains recommendations for avoidance and minimization measures, and recommendations for surveying eelgrass within, and adjacent to, the Project footprint.

Recommendation: The Department recommends that the final EIR include discussion on the potential impacts from Project activities to eelgrass within and adjacent to the Project footprint.

Recommendation: The Department recommends that an additional mitigation measure (MM), BIO-4 (attachment 2), be included for eelgrass and include the following.

Mitigation Measure BIO-4 – Eelgrass. Eelgrass surveys, pre- and post-construction, will be conducted in accordance with the conditions and recommendations contained with the California Eelgrass Mitigation Policy. If it is determined, from the results of the pre-construction eelgrass survey, that potential impacts to eelgrass will occur from Project activities, an eelgrass monitoring and mitigation plan will be prepared. All surveys and plans will be provided to CDFW and NMFS, along with the other authorizing agencies, prior to and following the start of construction.

Compensatory Mitigation

Comment: The DEIR describes potential compensatory mitigation for the impacts to approximately 0.03 acres of habitat for state and federally listed species. As described in the DEIR, removal of marine debris such as piles and decking are being considered to offset the Projects impacts. If the Department needs to exercise its regulatory authority under CESA, the Department's approval will require that the

Project's impacts be fully mitigated. In addition to the mitigation options considered in the DEIR, the final EIR should consider additional options such as abandoned vessel removal and/or purchase of habitat credits at a Department approved mitigation bank to meet the full mitigation requirement in Fish and Game Code Section 2081(b).

Recommendation: The Department recommends early consultation on determining appropriate mitigation to offset the impacts from the loss of aquatic habitat. If the Department issues a CESA authorization of the Project, it would require that the Project's impacts are fully mitigated. Proposed mitigation will need to be accepted prior to finalizing a Department authorization.

White-tailed kite (*Elanus leucurus*), California Fully Protected Species.

Comment: Page 4.3-15 states that the white-tailed kite, a California Fully Protected Species, has "some potential for nesting in the site vicinity" in "mature trees along the perimeter of the site", while the species table on page 4.3-11 states that the "potential for occurrence in site vicinity" is "none – no suitable habitat present." White-tailed kites are known to nest in ornamental trees in urban and suburban areas and may nest in close proximity to the Project site.

White-tailed kites, once threatened with extinction in California primarily due to habitat loss, shooting, and egg collection, recovered substantially in the mid 1900's (Dunk 1995). The current population size in California is unknown, but the population is known to fluctuate relative to vole populations (their primary prey). Their threats include habitat loss from conversion and vegetation clearing, drought, and disturbance at nest sites (Dunk 1995).

Noise from pile drivers, generators, and other equipment may cause nest abandonment, may be disruptive to hunting white-tailed kites, and exposure to vehicle noise has been shown to increase stress hormone levels in some raptor species (Hayward et al. 2011). Artificial light may attract or disorient white-tailed kites (Ogden 1996, Longcore and Rich 2004, 2016). It can also suppress the immune system of birds (Moore and Siopes 2000).

Based on the foregoing, Project impacts could result in a substantial adverse effect on white-tailed kites. Therefore, if a white-tailed kite nests where it may be disturbed by the Project, then Project impacts on white-tailed kite would be potentially significant.

Recommendation: MM BIO-2 in the DEIR, includes a nesting bird survey prior to construction and no-disturbance zones around active nests. For an adequate environmental setting and to reduce impacts to white-tailed kite to less than significant, the Department recommends including in MM BIO-2 that the survey and no-disturbance zone distance for white tailed kite shall be a minimum of 500 feet, or

a greater distance if deemed necessary to avoid impacts by a qualified biologist, that the survey take place within seven days of the start of vegetation clearing or construction instead of 14 days, and the survey be repeated if seven or more days elapse without construction or vegetation removal activity at the Project site.

Coastal triquetrella (*Triquetrella californica*), California Rare Plant Rank (CRPR) 1B.2.

Comment: The species table on page 4.3-9 states that that coastal triquetrella "Grows within 30 miles from the coast in coastal scrub, grasslands, and in open gravels on roadsides, hillsides, rocky slopes." Bryophytes including mosses are less affected by urbanization and habitat degradation than vascular plants (McCune et al. 2020), and locally and regionally uncommon bryophytes may be found in areas highly disturbed by human activity, including urban centers (Sabovljevic and Grdovic 2009, Zarnowiec 1996). There is one CNDDB occurrence of coastal triquetrella approximately two miles north of the project site. Based on the presence of coastal triquetrella nearby and the ability of related species to persist in urban environments, this species of moss may be present in the seawall, in portions of the landscaped trail on San Rafael Avenue, or in the landscaped median of Beach Road.

Special status plants including coastal triquetrella may be impacted by ground-disturbing activities and vegetation removal. For example, vehicle, equipment, and foot traffic may bury, excavate, crush, trample, or disturb special status plants. Soil disturbance may result in permanent loss of special status plants.

Plants with a CRPR of 1B are rare throughout their range, endemic to California, and are seriously or fairly threatened. Most of the plants that are ranked 1B have declined significantly over the last century (CNPS 2021). Coastal triquetrella's additional threat rank of 0.2 indicates that 20 to 80 percent of its occurrences are threatened (CNPS 2021). Impacts to CRPR 1B plant species and their habitat must be analyzed during preparation of environmental documents relating to CEQA as they meet the definition of endangered, rare, or threatened species (CEQA Guidelines, section 15380).

Impacts to special status plants including coastal triquetrella may result in local population declines or extirpation of a species. Insufficient mitigation may result in prolonged temporal or permanent impacts to a special status plant species' range, distribution, and population in the State.

Recommendation: For an adequate environmental setting and to reduce impacts to special status plants such as coastal triquetrella to less than significant, the Department recommends including the below mitigation measure.

Mitigation Measure BIO-5: Pre-Project Special-Status Plant Surveys. Prior to the start of Project activities, a Qualified Biologist shall conduct a habitat assessment for

special-status plants including but not limited to coastal triquetrella. If suitable habitat for special-status plants is present, botanical surveys shall be conducted during the appropriate blooming period and conditions for all special-status plants that have the potential to occur within or near the Project where they may be directly or indirectly impacted by for example, modifications to hydrological conditions More than one year of surveys during appropriate conditions may be necessary. Surveys and associated reporting shall be conducted according to the Department's Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities[2]. The survey reports shall be submitted to the Department prior to the start of construction. Project activities shall not proceed until the Department has provided written approval of the survey reports. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and prepare and implement a Department-approved avoidance plan prior to Project activities. If impacts to special status plants cannot be avoided, the Project shall provide habitat compensation at a 3:1 mitigation to impact ratio including permanent protection of habitat through a conservation easement and funding and implementing a long term management plan, prior to Project activities, unless otherwise approved in writing by the Department.

II. Editorial Comments and/or Suggestions

Comment: The Department recommends that all species referenced in the DEIR, including common species, include the scientific name in parentheses after the first use of the common name for clarity as different species can have the same common name. In addition, the Department recommends correcting typos in the common names of species: "Bottae pocket gopher" should be Botta's pocket gopher, "brown towhee" should be California towhee (The species formerly considered brown towhee (*Pipilo fuscus*) has been split into the California towhee (*Melozone fusca*) and the Canyon towhee (*M. crissalis*)), and "bush tit" should be bushtit. Additionally, the correct scientific name for white-tailed kite is *Elanus leucurus*, not *Elanus caeruleus*. *Elanus caeruleus* is the scientific name of the related black-winged kite found in Europe, Africa, and Asia.

Location in Document: Common and Scientific Names, Section 4.3, Page 4.3-1 and 4.3-15

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a data base which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity

[2] CDFW, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

Database (CNDDB). The CNNDB field survey form can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/SubmittingData#44524420-pdf-field-survey-form. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. 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 the Department. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

The Department appreciates the opportunity to comment on the DEIR to assist San Francisco Planning in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination for Marine Region should be directed to Arn Aarreberg, Environmental Scientist, at (707) 791-4195 or Arn.Aarreberg@wildlife.ca.gov. Coordination for the Bay-Delta Region should be directed to Alex Single, Environmental Scientist, at (707) 799-4210 or Alex.Single@wildlife.ca.gov.

Sincerely,

Craig Shuman, D. Env
Marine Regional Manager

Attachment 1 – Agreement in Principle for Interim Criteria for Injury to Fish from Pile Driving Activities
Attachment 2 – California Eelgrass Mitigation Policy
Attachment 3 – Draft Mitigation and Monitoring Reporting Plan, Additional Proposed Mitigation Measures

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Attachment 3

Draft Mitigation and Monitoring Reporting Plan, Additional Proposed Mitigation Measures

Biological Resources (BIO)			
Mitigation Measure (MM)	**Description**	**Timing**	**Responsible Party**
MM-BIO-2	*Mitigation Measure BIO-2:* Adequate measures shall be taken to avoid inadvertent take of raptor nests and other nesting birds protected under the Migratory Bird Treaty Act and California Fish and Game Code when nests are in active use. This shall be accomplished by taking the following steps. • If construction is proposed during the nesting season (February through August), a focused survey for nesting raptors and other migratory birds shall be conducted by a qualified biologist within seven days prior to the onset of vegetation removal or construction, in order to identify any active nests on the project site and in the vicinity of proposed construction. The survey shall be repeated if seven or more days elapse without construction or vegetation removal activity at the Project site. • If no active nests are identified during the survey period, or if development is initiated during the non-breeding season (September through January), construction may proceed with no restrictions. • If active nests are found, an adequate setback shall be established around the nest location and construction activities restricted within this no-disturbance zone until the qualified biologist has confirmed that any young birds have fledged and are able to function outside the nest location. Required setback distances for the no-disturbance zone shall be based on input received from the California Department	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant

	of Fish and Wildlife (CDFW) and may vary depending on species and sensitivity to disturbance. The no-disturbance zone shall be fenced with temporary orange construction fencing or other conspicuous demarcation such as signage and flagging if construction is to be initiated on the remainder of the development site. • A report of findings shall be prepared by the qualified biologist and submitted to the City of Belvedere for review and approval prior to initiation of construction within the no-disturbance zone during the nesting season (February through August). The report shall either confirm absence of any active nests or confirm that any young birds have fledged within a designated no-disturbance zone and construction can proceed.		
MM-BIO-4	*Mitigation Measure BIO-4 – Eelgrass.* Eelgrass surveys, both pre and post-construction, will be conducted in accordance with the conditions and recommendations contained with the California Eelgrass Mitigation Policy. If it is determined, from the results of the pre-construction eelgrass survey, that potential impacts to eelgrass will occur from Project activities, an eelgrass monitoring and mitigation plan will be prepared. All surveys and plans will be provided to CDFW and NMFS, along with the other authorizing agencies, prior to and following the start of construction.	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant
MM-BIO-5	*Mitigation Measure BIO-5: Pre-Project Special-Status Plant Surveys.* Prior to the start of Project activities, a Qualified Biologist shall conduct botanical surveys during the appropriate blooming period and conditions for all special-status plants that have the potential to occur within or near the Project, unless otherwise approved in writing by CDFW. More than one year of surveys may be necessary. Surveys shall be conducted according to CDFW's Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities[3]. The survey reports shall be submitted to CDFW prior to the start	Prior to Ground Disturbance and continuing over the course of the Project	Project Applicant

[3] CDFW, 2018. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

	of construction. Project activities shall not proceed until CDFW has provided written approval of the survey reports. If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and prepare and implement a CDFW-approved avoidance plan prior to Project activities. If impacts to special status plants cannot be avoided, the Project shall provide habitat compensation at a 3:1 mitigation to impact ratio including permanent protection of habitat through a conservation easement and funding and implementing a long term management plan, prior to Project activities, unless otherwise approved in writing by CDFW.		