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Governor's Office of Planning & Research

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STATE CLEARINGHOUSE

Mr. Adam Nazaroff
Orange County Sanitation District
10844 Ellis Avenue
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CEQA@ocsd.com

Subject: Comments on the Notice of Preparation of a Draft Program Environmental Impact Report for the Facilities Master Plan/SCH2019070998/Project# PS17-08

Dear Mr. Nazaroff:

The California Department of Fish and Wildlife (Department) has reviewed the above-referenced Notice of Preparation (NOP) for the Facilities Master Plan Draft Program Environmental Impact Report (PEIR). The following statements and comments have been prepared pursuant to the Department's authority as Trustee Agency with jurisdiction over natural resources affected by the project (California Environmental Quality Act [CEQA] Guidelines § 15386) and pursuant to our authority as a Responsible Agency under CEQA Guidelines section 15381 over those aspects of the proposed project that come under the purview of the California Endangered Species Act (CESA; Fish and Game Code § 2050 *et seq.*) and Fish and Game Code section 1600 *et seq.* The Department also administers the Natural Community Conservation Planning (NCCP) program.

The project will implement the updated Facilities Master Plan, in order to ensure that Orange County Sanitation District (OCSD) infrastructure will be able to continue to support both existing wastewater collection and treatment processes and expanded operations at the Groundwater Replenishment System facilities. Projects covered in the PEIR have been separated into three categories: facility improvements at Reclamation Plant No. 1 in the City of Fountain Valley, facility improvements at Treatment Plant No. 2 in Huntington Beach, and pipeline and pump station improvements within the service area.

The Department offers the following comments and recommendations to assist the Orange County Sanitation District in avoiding or minimizing potential project impacts on biological resources.

Specific Comments

1. The NOP describes the use of trenchless technology to implement pipeline improvements (page 7). While trenchless technologies generally create fewer impacts than traditional trenching, the use of a clay lubricant, specifically bentonite slurry, can have permanent and lasting impacts on amphibians, aquatic reptiles, fish, other aquatic species and their habitats when hydrofractures (commonly referred to as "frac-outs") occur. Bentonite is often considered non-toxic; however, invertebrates, aquatic plants, fish, and their eggs can be smothered by fine particles of bentonite if it is discharged into waterways.

The Department recommends that the PEIR include a discussion as to the potential of hydrofractures to impact sensitive species and habitats within the project area, specifically with regard to conveyance system improvement projects. This discussion should include a mitigation measure that focuses on the minimization of impacts that may occur from hydrofractures associated with directional drilling and/or 'cure-in-place pipe technology. This mitigation measure should include the following techniques to reduce potential for hydrofracture and inadvertent returns:

- a. drilling shall halt immediately when a hydrofracture is detected, and hydrofractures shall be cleaned immediately after they occur, if feasible. Necessary response equipment shall be readily accessible and in good working order;
 - b. borehole pressures should be monitored during all drilling, boring, and reaming activities. The monitor should be independent of and work closely with the drill operator during operations. The drill operator and/or monitors shall have the authority to halt drilling activities without reprisal;
 - c. all field personnel shall understand their responsibility for timely reporting of hydrofractures; and,
 - d. techniques to reduce potential for hydrofracture and inadvertent returns, such as:
 - i. sufficient earth cover for the given substrate should be used to increase resistance to hydrofracture;
 - ii. an adequately dense drilling fluid should be used to avoid travel of drilling fluid in porous sands;
 - iii. the bore should be conducted in a manner that avoids collapse;
 - iv. borehole pressure should be maintained low enough to avoid hydrofracture;
 - v. reaming and pullback rates should be maintained at rates slow enough to avoid over-pressurization of the bore;
 - vi. the surface above the vicinity of the drill head should be visually monitored for surface evidence of hydrofracture; and,
 - vii. drilling methods should be modified to suit site conditions such that hydrofracture does not occur.
2. In the Biological Resources section, the NOP states that, "[t]he PEIR will analyze the potential for impacts to the sensitive habitats and species associated with the surrounding area. Such analysis will incorporate updated spatial data from the California Natural Diversity Database [CNDDDB] and will address recent changes of federal- and state-listed species" (page 21). The CNDDDB is a statewide inventory, managed by the Department, and is routinely updated with the location and condition of the state's rare and declining species and habitats. Although the CNDDDB is the most current and reliable tool for tracking occurrences of special status species, it contains only those records that have been reported to the Department, and does not replace the need for timely physical surveys. While the Department agrees that preconstruction surveys are appropriate to supplement data collected through surveys whose results are adequately disclosed, we consider the reliance upon future biological surveys inadequate to determine whether or not project impacts on CESA- listed species will be less than significant with mitigation. We therefore request that data from on-the-ground biological assessments and surveys be included and discussed in the PEIR.

General Comments

3. The Department has responsibility for wetland and riparian habitats. It is the policy of the Department to strongly discourage development in wetlands or conversion of wetlands to uplands. We oppose any development or conversion that would result in a reduction of wetland acreage or wetland habitat values, unless, at a minimum, project mitigation assures there will be "no net loss" of either wetland habitat values or acreage. Development and conversion include but are not limited to conversion to subsurface drains, placement of fill or building of structures within the wetland, and channelization or removal of materials from the streambed. All wetlands and watercourses, whether ephemeral, intermittent, or perennial, should be retained and provided with substantial setbacks that preserve the riparian and aquatic values and maintain their value to on-site and off-site wildlife populations. Mitigation measures to compensate for impacts to mature riparian corridors must be included in the PEIR and must compensate for the loss of function and value of a wildlife corridor.
 - a. The project area supports aquatic, riparian, and wetland habitats; therefore, a jurisdictional delineation of the creeks and their associated riparian habitats should be included in the PEIR. The delineation should be conducted pursuant to the U. S. Fish and Wildlife Service wetland definition adopted by the Department.¹ Please note that some wetland and riparian habitats subject to the Department's authority may extend beyond the jurisdictional limits of the U.S. Army Corps of Engineers.
 - b. The Department also has regulatory authority over activities in streams and/or lakes that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of any river, stream, or lake or use material from a river, stream, or lake. For any such activities, the project applicant (or "entity") must provide written notification to the Department pursuant to section 1600 *et seq.* of the Fish and Game Code. Based on this notification and other information, the Department determines whether a Lake and Streambed Alteration Agreement (LSAA) with the applicant is required prior to conducting the proposed activities. The Department's issuance of a LSAA for a project that is subject to CEQA will require CEQA compliance actions by the Department as a Responsible Agency. The Department as a Responsible Agency under CEQA may consider the local jurisdiction's (Lead Agency) PEIR for the project. To minimize additional requirements by the Department pursuant to section 1600 *et seq.* and/or under CEQA, the document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for issuance of the LSAA.²

¹ Cowardin, Lewis M., et al. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service.

² A notification package may be obtained by accessing the Department's web site at <http://www.wildlife.ca.gov/Conservation/LSA>

4. The Department considers adverse impacts to a species protected by the CESA, for the purposes of CEQA, to be significant without mitigation. As to CESA, take of any endangered, threatened, or candidate species that results from the project is prohibited, except as authorized by state law (Fish and Game Code, §§ 2080, 2085). Consequently, if the Project, Project construction, or any Project-related activity during the life of the Project will result in take of a species designated as endangered or threatened, or a candidate for listing under CESA, the Department recommends that the project proponent seek appropriate take authorization under CESA prior to implementing the project. Appropriate authorization from the Department may include an incidental take permit (ITP) or a consistency determination in certain circumstances, among other options (Fish and Game Code §§ 2080.1, 2081, subs. (b),(c)). Early consultation is encouraged, as significant modification to a project and mitigation measures may be required in order to obtain a CESA Permit. Revisions to the Fish and Game Code, effective January 1998, may require that the Department issue a separate CEQA document for the issuance of an ITP unless the project CEQA document addresses all project impacts to CESA-listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of an ITP. For these reasons, biological mitigation monitoring and reporting proposals should be of sufficient detail and resolution to satisfy the requirements for a CESA ITP.
5. To enable the Department to adequately review and comment on the proposed project from the standpoint of the protection of plants, fish, and wildlife, we recommend the following information be included in the PEIR.
 - a. The document should contain a complete discussion of the purpose and need for, and description of, the proposed project, including all staging areas and access routes to the construction and staging areas.
 - b. A range of feasible alternatives should be included to ensure that alternatives to the proposed project are fully considered and evaluated; the alternatives should avoid or otherwise minimize impacts to sensitive biological resources. Specific alternative locations should be evaluated in areas with lower resource sensitivity where appropriate.

Biological Resources within the Project's Area of Potential Effect

6. The document should provide a complete assessment of the flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened, sensitive, and locally unique species and sensitive habitats. This should include a complete floral and faunal species compendium of the entire project site, undertaken at the appropriate time of year. The PEIR should include the following information.
 - a. CEQA Guidelines, section 15125(c), specifies that knowledge on the regional setting is critical to an assessment of environmental impacts and that special emphasis should be placed on resources that are rare or unique to the region.
 - b. A thorough, recent floristic-based assessment of special status plants and natural communities, following the Department's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (see

<https://www.wildlife.ca.gov/Conservation/Plants/Info>). The Department recommends that floristic, alliance-based and/or association-based mapping and vegetation impact assessments be conducted at the Project site and neighboring vicinity. The Manual of California Vegetation, second edition, should also be used to inform this mapping and assessment (Sawyer et al. 2008³). Adjoining habitat areas should be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

- c. A current inventory of the biological resources associated with each habitat type on site and within the area of potential effect. The Department's California Natural Diversity Data Base in Sacramento should be contacted at www.wildlife.ca.gov/biogeodata/ to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code.
- d. An inventory of rare, threatened, endangered and other sensitive species on site and within the area of potential effect. Species to be addressed should include all those which meet the CEQA definition (see CEQA Guidelines, § 15380). This should include sensitive fish, wildlife, reptile, and amphibian species. Seasonal variations in use of the project area should also be addressed. Focused species-specific surveys, conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service.

Analyses of the Potential Project-Related Impacts on the Biological Resources

7. To provide a thorough discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts, the following should be addressed in the PEIR.
 - a. A discussion of potential adverse impacts from lighting, noise, human activity, exotic species, and drainage should also be included. The latter subject should address: project-related changes on drainage patterns on and downstream of the project site; the volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site. The discussions should also address the proximity of the extraction activities to the water table, whether dewatering would be necessary, and the potential resulting impacts on the habitat, if any, supported by the groundwater. Mitigation measures proposed to alleviate such impacts should be included.

3 Sawyer, J. O., T. Keeler-Wolf and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society Press, Sacramento.

- b. Discussions regarding indirect project impacts on biological resources, including resources in nearby public lands, open space, adjacent natural habitats, riparian ecosystems, and any designated and/or proposed or existing reserve lands (e.g., preserve lands associated with a NCCP). Impacts on, and maintenance of, wildlife corridor/movement areas, including access to undisturbed habitats in adjacent areas, should be fully evaluated in the PEIR.
- c. The zoning of areas for development projects or other uses that are nearby or adjacent to natural areas may inadvertently contribute to wildlife-human interactions. A discussion of possible conflicts and mitigation measures to reduce these conflicts should be included in the environmental document.
- d. A cumulative effects analysis should be developed as described under CEQA Guidelines, section 15130. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

Mitigation for the Project-related Biological Impacts

8. The PEIR should include measures to fully avoid and otherwise protect Rare Natural Communities from project-related impacts. The Department considers these communities as threatened habitats having both regional and local significance.
9. The PEIR should include mitigation measures for adverse project-related impacts to sensitive plants, animals, and habitats. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, on-site habitat restoration or enhancement should be discussed in detail. If on-site mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, off-site mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.
10. For proposed preservation and/or restoration, the PEIR should include measures to perpetually protect the targeted habitat values from direct and indirect negative impacts. The objective should be to offset the project-induced qualitative and quantitative losses of wildlife habitat values. Issues that should be addressed include restrictions on access, proposed land dedications, monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.
11. The Department recommends that measures be taken to avoid project impacts to nesting birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Title 50, § 10.13, Code of Federal Regulations). Sections 3503.5 and 3513 of the California Fish and Game Code prohibit take of all raptors and other migratory nongame birds and section 3503 prohibits take of the nests and eggs of all birds. Proposed project activities (including, but not limited to, staging and disturbances to native and nonnative vegetation, structures, and substrates) should occur outside of the avian breeding season which generally runs from February 1- September 1 (as early as January 1 for some raptors) to avoid take of birds or their eggs. If avoidance of the avian breeding season is not feasible, the Department recommends surveys by a qualified biologist with

experience in conducting breeding bird surveys to detect protected native birds occurring in suitable nesting habitat that is to be disturbed and (as access to adjacent areas allows) any other such habitat within 300 feet of the disturbance area (within 500 feet for raptors). Project personnel, including all contractors working on site, should be instructed on the sensitivity of the area. Reductions in the nest buffer distance may be appropriate depending on the avian species involved, ambient levels of human activity, screening vegetation, or possibly other factors.

12. The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species. Studies have shown that these efforts are experimental in nature and largely unsuccessful.
13. Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant revegetation techniques. Each plan should include, at a minimum: (a) the location of the mitigation site; (b) the plant species to be used, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity.
14. The Polyphagous and Kuroshio shot hole borers (ISHBs) are invasive ambrosia beetles that introduce fungi and other pathogens into host trees. The adult female (1.8-2.5 mm long) tunnels galleries into the cambium of a wide variety of host trees, where it lays its eggs and propagates the *Fusarium* fungi species for the express purpose of feeding its young. These fungi cause *Fusarium* dieback disease, which interrupts the transport of water and nutrients in at least 58 reproductive host tree species, with impacts to other host tree species as well. With documented occurrences throughout Orange County, the spread of invasive shot hole borers (ISHBs) could have significant impacts in local ecosystems. Therefore, with regard to ISHBs, we recommend the EIR include the following:
 - a. a thorough discussion of the direct, indirect, and cumulative impacts that could occur from the potential spread of ISHBs as a result of proposed activities in the EIR;
 - b. an analysis of the likelihood of the spread of ISHBs as a result of the invasive species' proximity to above referenced activities;
 - c. figures that depict potentially sensitive or susceptible vegetation communities within the project area, the known occurrences of ISHB within the project area (if any), and ISHB's proximity to above referenced activities; and
 - d. a mitigation measure or measure(s) within the EIR that describe Best Management Practices (BMPs) that bring impacts of the project on the spread of ISHB below a level of significance. Examples of such BMPs include:
 - i. education of on-site workers regarding ISHB and its spread;

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- ii. reporting sign of ISHB infestation, including sugary exudate ("weeping") on trunks or branches and ISHB entry/exit-holes (about the size of the tip of a ballpoint pen), to the Department and UCR's Eskalen Lab;
- iii. equipment disinfection;
- iv. pruning infected limbs in infested areas where project activities may occur;
- v. avoidance and minimization of transport of potential host tree materials;
- vi. chipping potential host materials to less than 1 inch and solarization, prior to delivering to a landfill;
- vii. chipping potential host materials to less than 1 inch, and solarization, prior to composting on-site;
- viii. solarization of cut logs; and/or
- ix. burning of potential host tree materials.

Please refer to UCR's Eskalen lab website for more information regarding ISHBs:
<http://eskalenlab.ucr.edu/pshb.html>.

We appreciate the opportunity to comment on the referenced NOP. Questions regarding this letter and further coordination on these issues should be directed to Jennifer Turner at (858) 467-2717 or jennifer.turner@wildlife.ca.gov.

Sincerely,



Gail K. Sevens
Environmental Program Manager
South Coast Region

ec: Christine Medak at FWS (U.S. Fish and Wildlife Service)
Scott Morgan (State Clearinghouse)