



State of California – Natural Resources Agency  
 DEPARTMENT OF FISH AND WILDLIFE  
 Marine Region  
 1933 Cliff Drive, Suite 9  
 Santa Barbara, CA 93109  
 www.wildlife.ca.gov

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



December 4, 2020

Mark Andre  
 Environmental Services Director  
 City of Arcata, Environmental Services Department  
 736 F Street, Arcata, CA 95521  
[eservices@cityofarcata.org](mailto:eservices@cityofarcata.org)

**ARCATA WASTEWATER TREATMENT FACILITY UPGRADE PROJECT  
 DRAFT MITIGATED NEGATIVE DECLARATION  
 SCH# 2020100483**

Dear Mr. Andre:

The California Department of Fish and Wildlife (Department) received a Draft Mitigated Negative Declaration (DMND) from the City of Arcata for the Arcata Wastewater Treatment Facility Upgrade Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife resources. 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

---

<sup>1</sup> 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.

waters of California and ensuring fisheries are sustainably managed under the Marine Life Management Act.

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** City of Arcata (City)

**Objective:** The objective of the Project is to make improvements to the Arcata Wastewater Treatment Facility (AWTF) that will address existing National Pollutant Discharge Elimination System (NPDES) violations and result in a higher quality discharge that can be beneficially reused. Improvements to the AWTF include installation of a 9.8 million gallons per day (mgd) ultra-violet (UV) light disinfection system and redirecting up to 6 mgd of treated wastewater to the “Brackish Marsh” through construction of a new wastewater outfall pipe (Outfall 003). The “Brackish Marsh” was constructed as part of the McDaniel Slough Wetland Enhancement Project (City and CDFG 2006) and has direct connection to McDaniel Slough and eventually Humboldt Bay via an adjustable tide gate. The existing wastewater outfall (Outfall 001), located in Butcher Slough, will continue to be used when effluent volumes are greater than 6.0 mgd.

**Location:** Northeastern edge of Humboldt Bay.

**Timeline:** The project is proposed to begin in 2021 and be completed in 2025.

## **BIOLOGICAL SIGNIFICANCE**

Humboldt Bay is California’s second largest Bay, and the largest estuary on the Pacific coast between San Francisco Bay and Oregon’s Coos Bay. The marine and estuarine habitats of Humboldt Bay provide refuge and nursery habitat for more than 300 fish and invertebrate species, many with important commercial and recreational fisheries, and aquaculture value. Humboldt Bay and its wetlands and dunes are habitat for at least 20 State- and federally-listed species and numerous California Species of Special Concern (SSC). Habitat for special status plant species occur within saltmarshes, freshwater wetlands, and adjacent areas within the Project.

## **COMMENTS AND RECOMMENDATIONS**

Pursuant to our jurisdiction, the Department offers the following comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project’s significant, or potentially significant, direct and indirect impacts on fish, wildlife, and plant resources.

## I. Special Status Species

Special status species that are listed under the State and Federal Endangered Species Acts, California Species of Special Concern (SSC), or the California Rare Plant Ranking (CRPR) System that may be impacted by direct and/or indirect project effects include:

### Fish

- Coho salmon (*Oncorhynchus kisutch*), State- and federally-threatened (Southern Oregon/ Northern California (SONCC) Evolutionarily Significant Unit (ESU));
- Chinook salmon (*Oncorhynchus tshawytscha*), federally-threatened (California Coastal ESU);
- Coastal cutthroat trout (*Oncorhynchus clarki clarki*), State SSC;
- Steelhead (*Oncorhynchus mykiss*), federally-threatened (Northern California ESU);
- Longfin smelt (*Spirinchus thaleichthys*), State-threatened;
- Eulachon (*Thaleichthys pacificus*), federally-threatened (southern Distinct Population Segment (DPS));
- Green sturgeon (*Acipenser medirostris*), federally-threatened (southern DPS), State SCC (northern and southern DPS); and
- Pacific lamprey (*Entosphenus tridentatus*), State SSC.

### Plants

- Humboldt Bay owl's clover (*Castilleja ambigua* ssp. *humboldtiensis*), CRPR 1B.2;
- Point Reyes bird's beak (*Cordylanthus maritimus* ssp. *palustris*), CRPR 1B.2;
- Lyngbye's sedge (*Carex lyngbyei*), CRPR 2.2;
- Western sand spurrey (*Spergularia canadensis* var. *occidentalis*), CRPR 2B.1; and
- Eelgrass (*Zostera marina*), designated essential fish habitat under the Magnuson-Stevens Act.

### Reptiles and Amphibians

- Western pond turtle (*Emys marmorata*), State SSC; and
- Northern red-legged frog (*Rana aurora*), State SSC.

### Birds

- Short-eared owl (*Asio flammeus*), State SSC;
- Northern harrier (*Circus hudsonius*), State SSC;
- Yellow billed cuckoo (*Coccyzus americanus*), State-threatened;
- White-tailed kite (*Elanus leucurus*), State Fully Protected;
- Willow flycatcher (*Empidonax traillii*), State-endangered;
- American peregrine falcon (*Falco peregrinus anatum*), State Fully Protected;
- Bald eagle (*Haliaeetus leucocephalus*), State Endangered, State Fully Protected;
- Yellow-breasted Chat (*Icteria virens*), State SSC; and
- Bryant's savannah sparrow (*Passerculus sandwichensis alaudinus*), State SSC.

## II. Project Impacts

### Construction of Outfall 003

**Comment:** The Department appreciates that the City plans to consult with and follow recommendations from the Department and other resource and permitting agencies regarding construction activities for Outfall 003. To lessen in-water construction impacts to a level less than significant, the DMND proposes to isolate the work area during construction, conduct all in-water work during low tides between June 15 – September 15, have a qualified biologist onsite to survey and relocate fish, and follow stormwater best management practices to avoid sedimentation and turbidity impacts. However, the Department is unable to fully analyze potential project impacts to sensitive species or habitat due to a lack of construction related information provided in the DMND.

**Recommendations:** The Department recommends the City include additional information in the Final Mitigated Negative Declaration (FMND) related to the construction of Outfall 003, including:

- Proposed equipment to be used within the watercourse and on land;
- Footprint of construction activity within the “Brackish Pond”, including estimated area to be dewatered; and
- Methods for fish collection and relocation during dewatering activities.

### Fish Passage

**Comment:** The “Brackish Marsh” is controlled with a tidal inlet/outlet structure that provides for a muted tidal exchange. Fish monitoring surveys that were conducted bimonthly from 2014-2017 throughout the AWTF did not document any special status fish species within the “Brackish Pond” and captured one Coho salmon smolt within the nearby “Freshwater Pond”. The DMND states that providing a freshwater input to the “Brackish Pond” via Outfall 003 may result in increased food sources and attractive estuarine habitat for anadromous species. While providing additional estuarine habitat may benefit fish in the Project area, there is concern regarding fish passage through the tide gate structure that connects the “Brackish Pond” to McDaniel Slough. The DMND and McDaniel Slough Wetland Enhancement Project Environmental Impact Report (EIR) do not provide sufficient detail regarding how the tide gate is operated to prevent fish entrapment and allow safe passage.

**Recommendations:** The Department recommends the City include information in the FMND regarding fish passage through the tide gate that connects the “Brackish Pond” to McDaniel Slough, including flow velocities, percentage of time the tide gate remains open, risk of fish entrapment or impingement, and turbidity levels through the tide gate during different tidal cycles. The Department recommends the FMND assess how often

and when fish might be trapped within the “Brackish Pond” due to tide gate obstruction. The Department also recommends the City develop a post-project fish monitoring and adaptive management plan that includes surveys within the “Brackish Marsh” and McDaniel Slough to determine fish passage and usage following implementation of the Project. The Department recommends the monitoring plan include an adaptive management component should fish be trapped in “Brackish Pond”.

## **Wetlands**

**Comment:** Any projects that plan to modify existing wetland or bay habitats should include proper avoidance, minimization, and mitigation measures. In addition to non-tidal wetlands, all areas of the Bay subject to the tides, and above the lowest spring tide, are considered wetlands. These areas are covered under the Fish and Game Commission’s policy to ensure that projects result in “no net loss” of wetland habitat, which includes both marsh and mudflat habitat. Any loss of wetland habitat needs to be fully mitigated.

The MND does not include estimates or ranges of potential temporary or permanent wetland impacts, but instead states wetland impacts will be quantified during preparation of construction bid documents and states wetland mitigation will occur at a ratio of no less than 1:1.

**Recommendations:** The FMND should estimate the spatial area (e.g. acres) of temporary and permanent wetland impacts and ensure that proposed mitigation areas are sufficient. Wetland mitigation-to-impact ratios should be greater than 1:1 if mitigation is not complete and fully functional prior to wetland impacts. If mitigation is implemented after wetland impacts, the Department recommends a 3:1 mitigation ratio.

## **Rare Plant Surveys**

**Comment:** It appears the DMND and supporting documents do not follow the Department’s *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). These protocols state botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. “Focused surveys” that are limited to habitats known to support special status plants or that are restricted to lists of likely potential special status plants are not considered floristic in nature and are not adequate to identify all plants in a project area to the level necessary to determine if they are special status plants.

Mark Andre, Environmental Services Director  
City of Arcata  
December 4, 2020  
Page 6

**Recommendation:** Conduct botanical surveys consistent with the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*.

## ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database 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 Database (CNDDDB). The CNDDDB field survey form can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf). The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link: [http://www.dfg.ca.gov/biogeodata/cnddb/plants\\_and\\_animals.asp](http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp).

## FILING FEES

The Project, as proposed, would have an impact on fish and 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 Arcata Wastewater Treatment Facility Upgrade Project to assist the City of Arcata in identifying and mitigating Project impacts on biological resources. Questions regarding this letter or further coordination should be directed to Corianna Flannery, Environmental Scientist at 707-499-0354 or [Corianna.Flannery@wildlife.ca.gov](mailto:Corianna.Flannery@wildlife.ca.gov).

Sincerely,



Craig Shuman, D. Env.  
Regional Manager  
Marine Region

Mark Andre, Environmental Services Director  
City of Arcata  
December 4, 2020  
Page 7

cc: Office of Planning and Research, State Clearinghouse  
1400 10<sup>th</sup> St. #12, Sacramento, CA 95814

ec: Becky Ota, Environmental Program Manager  
California Department of Fish and Wildlife  
[Becky.Ota@wildlife.ca.gov](mailto:Becky.Ota@wildlife.ca.gov)

Eric Wilkins, Senior Environmental Scientist Supervisor  
California Department of Fish and Wildlife  
[Eric.Wilkins@wildlife.ca.gov](mailto:Eric.Wilkins@wildlife.ca.gov)

Corianna Flannery, Environmental Scientist  
California Department of Fish and Wildlife  
[Corianna.Flannery@wildlife.ca.gov](mailto:Corianna.Flannery@wildlife.ca.gov)

Gregory O'Connell, Environmental Scientist  
California Department of Fish and Wildlife  
[Gregory.Oconnell@wildlife.ca.gov](mailto:Gregory.Oconnell@wildlife.ca.gov)

Cristin Kenyon  
California Coastal Commission  
[cristin.kenyon@coastal.ca.gov](mailto:cristin.kenyon@coastal.ca.gov)

Clint Pogue, Botanist  
U.S. Fish and Wildlife Service  
[clint\\_pogue@fws.gov](mailto:clint_pogue@fws.gov)

Justin McSmith, Water Resource Control Engineer  
North Coast Regional Water Quality Control Board  
[justin.mcsmith@waterboards.ca.gov](mailto:justin.mcsmith@waterboards.ca.gov)

Brandon Stevens, Environmental Scientist  
North Coast Regional Water Quality Control Board  
[Brandon.Stevens@Waterboards.ca.gov](mailto:Brandon.Stevens@Waterboards.ca.gov)

Kasey Sirkin, Lead Biologist  
U.S. Army Corps of Engineers  
[L.K.Sirkin@usace.army.mil](mailto:L.K.Sirkin@usace.army.mil)

Mark Andre, Environmental Services Director  
City of Arcata  
December 4, 2020  
Page 8

Matt Goldsworthy, Fisheries Biologist  
National Marine Fisheries Service  
[Matt.Goldsworthy@noaa.gov](mailto:Matt.Goldsworthy@noaa.gov)

Habitat Conservation Program Branch CEQA Program Coordinator  
California Department of Fish and Wildlife  
[ceqacommentletters@wildlife.ca.gov](mailto:ceqacommentletters@wildlife.ca.gov)

## REFERENCES

City of Arcata and California Department of Fish and Game (City, CDFG). 2006.  
McDaniel Slough Wetland Enhancement Project Draft EIR, SCH#2003022091.

CDFW. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native  
Plant Populations and Sensitive Natural Communities.  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline>