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CEQA Comment Letter On Evidence of Significant Environmental Impacts

Document 3 of 4 (Main letter + 4 appendixes.)

Additional submitted attachment is included below.

U.S. Fish and Wildlife Service

Finding of No Significant Impact

for the Issuance of a Short-Term Eagle Take Permit for San José Wastewater Facility Headworks Improvements

California

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March 2021

Introduction

The U.S. Fish and Wildlife Service (Service) received an application from the City of San José (Applicant) requesting eagle take coverage under the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. §§ 668–668d and 50 Code of Federal Regulations [CFR] § 22.26) for incidental disturbance take of eagles at the San José Headworks Improvements and New Headworks Project (Project). The Applicant is currently constructing the Project at the San José-Santa Clara Regional Wastewater Facility in San José, California. The Project includes improvements to existing facilities and construction of new headworks facilities and will occur over 28 months, from approximately June 2020 through September 2022. The Applicant requested a short-term (two year) incidental eagle take permit (permit) for the disturbance and loss of breeding productivity of one golden eagle (*Aquila chrysaetos*) pair during the 2021 and 2022 eagle breeding seasons due to Project construction activities. Issuance of a permit by the Service for take that is incidental to otherwise lawful activities under the Eagle Act constitutes a discretionary Federal action that is subject to the National Environmental Policy Act (NEPA; 42 United States Code [U.S.C.] §§ 4321 et seq.).

In accordance with the NEPA, we prepared an Environmental Assessment (EA) analyzing the environmental consequences of issuing a permit for the disturbance take of golden eagles associated with the Project, as well as alternatives to this proposed action. This EA is incorporated by reference and attached (Attachment 1). The EA assists the Service in ensuring compliance with the NEPA and in making a determination as to whether any significant impacts to the environment not previously analyzed under the Service's Programmatic Environmental Impact Statement for the Eagle Rule Revision, December 2016 (PEIS; USFWS 2016) could result from the analyzed actions, which would require preparation of an Environmental Impact Statement (EIS). Determining if effects are significant under NEPA is addressed by regulation 40 CFR § 1501.3(b), and requires analysis of the degree of effects of the action, including short- and long-term considerations and beneficial and adverse effects, as well as considering the affected area and its resources.

The Service's purpose in considering the proposed action of issuing an eagle incidental take permit is to fulfill our authority under the Eagle Act (16 U.S.C. §§ 668–668e) and its regulations (50 CFR § 22). Applicants whose otherwise lawful activities may result in take of eagles can apply for incidental take permits so that their projects may proceed without potential violations of the Eagle Act. The Service may issue permits for eagle take that is associated with, but not the purpose of, an activity. Such permits can be issued by the Service when the take that is authorized is compatible with the Eagle Act preservation standard; it is necessary to protect an interest in a particular locality; and it is associated with, but not the purpose of, the activity; and it cannot be practicably avoided (50 CFR § 22 and 81 Federal Register [FR] 91494).

The need for this federal action is a decision on an eagle incidental take permit application from the City of San José that is in compliance with all applicable regulatory requirements set forth under the Eagle Act in 50 CFR § 22.

Proposed Action and Alternatives Considered

In the EA, the Service fully analyzed three potential courses of action, summarized below, to respond to the Applicant's request for an incidental eagle take permit.

Proposed Action

The Service proposed to issue a two-year incidental eagle take permit, with associated conditions, to the City of San José for disturbance to, and loss of breeding productivity of, one golden eagle breeding pair in the vicinity of the San José Wastewater Facility Headworks Improvements Project during the 2021 and 2022 eagle breeding seasons ("Proposed Action"). This loss of breeding productivity is estimated to equate to 0.59 young fledged each year lost from the eagle population. The permit would require implementation of measures to avoid and minimize eagle take, monitoring of eagles, and compensatory mitigation to fully offset the estimated take.

Alternative 1: No Action

Under the No-Action Alternative, the Service would take no further action on the City of San José's eagle take permit application.

Alternative 2: Issue permit with modified compensatory mitigation

Under this alternative, the Service would issue a two-year incidental eagle take permit for disturbance to, and loss of breeding productivity of, one golden eagle breeding pair during the 2021 and 2022 eagle breeding seasons, just as in the Proposed Action. The permit would be as described in the Proposed Action, with the same take authorization, avoidance and minimization measures, and monitoring. However, under this alternative compensatory mitigation would differ. Under Alternative 2, any and all loss of eagle productivity would be fully offset with required compensatory mitigation annually at a ratio of 1:1, by retrofits of power poles. In addition, the Applicant would be required to provide compensatory mitigation for an experimental mitigation effort, at a ratio of 0.2:1. Experimental mitigation efforts designed to increase eagle breeding productivity or decrease eagle mortality could include experimental treatment of nestling parasites while the young eagles are in a nest and are not capable of flight to increase nesting productivity, experimental removal of carcasses along roadways to reduce eagle vehicle collisions, or experimental lead abatement measures to reduce eagle lead poisoning. The Applicant would contribute funds directly to an ongoing study addressing one of these experimental mitigation efforts.

Public Scoping and Tribal Coordination

Scoping regarding issuance of eagle take permits was performed for the PEIS (USFWS 2016). This Finding of No Significant Impact and attached EA will be made public on the Service's regional webpage.[1]

To notify Tribes regarding potential issuance of an eagle take permit, the Service sent letters to 17 federally-recognized tribal governments located within 109 miles (the natal dispersal distance of golden eagles thought to adequately define the local area population of the eagles) of the Project informing them of the received permit application and preparation of the EA. The Service received no response from any of the Tribes contacted.

Selected Alternative

Based on review of the analyses detailed in the EA, the Service selected the Proposed Action of issuing a two-year incidental eagle take permit to the City of San José for disturbance and loss of productivity of one golden eagle pair during the 2021 and 2022 eagle breeding seasons, with the requirement to implement avoidance and minimization measures, conduct eagle monitoring, and provide compensatory mitigation to fully offset the estimated take.

Take of golden eagles is predicted to occur under all alternatives, however the Proposed Action incorporates additional measures to avoid and minimize take of eagles, fully offsets the take with required compensatory mitigation, and includes eagle productivity monitoring, which would not occur under the No-Action Alternative. Furthermore, in the available timeframe, the Service and the Applicant agreed compensatory mitigation required under the Proposed Action was more reasonable for completion than compensatory mitigation proposed under Alternative 2.

The Proposed Action is consistent with the purpose and need for this Federal action and is in compliance with all statutory (16 U.S.C. §§ 668) and regulatory requirements (50 CFR § 22.26 and 50 CFR § 13.21), including the criteria codified for permit issuance (50 CFR § 22.26(f)).

Determining Significance

When considering whether the effects of the Proposed Action are significant, regulations of the NEPA require agencies to "analyze the potentially affected environment and degree of the effects of the action" (40 CFR § 1501.3(b)). This includes considering the extent of the potentially affected area (national, regional, or local) and its resources, as appropriate to the specific action. Further considerations for the degree of the effects include both short- and long-term effects, both beneficial and adverse effects, effects on public health and safety, and effects

[1] https://www.fws.gov/cno/conservation/MigratoryBirds/EaglePermits.html

that would violate Federal, State, Tribal, or local law protecting the environment (40 CFR § 1501.3(b)). Below we examine these considerations for the selected Proposed Action.

Potentially Affected Environment

For purposes of analyzing the selected Proposed Action, the appropriate affected environment associated with the Proposed Action is local and regional, because the Proposed Action does not affect statewide or national resource values. Analyses of effects at the local and regional scale are provided in the EA.

Golden eagles are the resource in the affected area most likely to be affected by the Proposed Action of issuance of the requested eagle take permit. One golden eagle pair nests in the vicinity of the Project activities. However, as discussed in the EA and below, the Applicant will implement conservation measures to minimize the risk to eagles and will offset golden eagle take through compensatory mitigation.

Bald eagles (*Haliaeetus leucocephalus*) are known to occur in the region, but are not expected to be affected by Project construction activities as no bald eagle nests have been identified in the vicinity of the Project. Bald eagles may benefit from reduced electrocution risk due to the power pole retrofitting to be done as offsetting compensatory mitigation for the authorized golden eagle take.

Migratory birds are not expected to be negatively affected by the Proposed Action of issuing an eagle take permit to the Applicant, however migratory birds may incidentally benefit from reduced electrocution risk due to the power pole retrofitting to be done for the eagle take permit.

Authorizing incidental eagle take is not expected to have effects to species protected by the Endangered Species Act (ESA) at the Project facility. As described in the EA, the Service will evaluate the proposed mitigation site once the location is selected. The Service anticipates that adverse effects to species listed under the ESA would be avoidable, however if there is potential for impacts to species listed under the ESA, we would conduct an additional NEPA analysis.

Eagles and their feathers are revered and considered sacred in many Native American traditions. Issuing a permit for disturbance take of eagles, is not expected to interfere with cultural practices and ceremonies related to eagles or to affect Native Americans' ability to obtain or use eagle feathers. Moreover, the Service requests any eagle feathers that are found be sent to our repository and, if in good condition, will be made available for these practices. Therefore, we do not anticipate any adverse effect on cultural resources from the Proposed Action.

Degree of the Effects

1) Both short- and long-term effects.

Issuance of an eagle take permit for the Project does not set precedent for, or automatically apply, to other eagle take permit applications the Service is reviewing or could review in the future. Each permit request will be evaluated on a case-by-case basis. Therefore, the Proposed Action does not establish precedents for future actions or represent a decision in principle about a future action. Moreover, this Project will not limit the Service's discretion when processing future eagle take permit applications under the Eagle Act's permitting regulations.

The analyses in the EA considered effects to golden eagles at varying temporal scales. Effects to the golden eagle pair that would be permitted for disturbance take under the Proposed Action include immediate disturbance from Project construction activities, immediate and long-term effects to the eagle habitat, long-term viability of the eagle territory, and short- and long-term effects to local and regional golden eagle populations.

Short-Term Effects. Under the Proposed Action, issuance of an eagle take permit would authorize disturbance take and loss of productivity of one golden eagle pair for two years. However, the Applicant will implement measures to minimize disturbance to the eagles and decrease the chance of take and will fully offset the estimated take with compensatory mitigation. Analyses provided in the EA indicate the authorized take will have no significant effect on the local population, and as the take will be fully offset with compensatory mitigation, the take will also have no significant effect on regional eagle populations.

Long-Term Effects. Despite short-term disturbance to the eagle pair and short- and long-term effects to eagle habitat from the Project construction, the territory of the golden eagle pair authorized for disturbance take is expected to remain viable. The Service expects eagles will continue to occupy and produce young at the territory in the future with no significant long-term effects on the eagle pair, the territory, or the local or regional eagle populations.

The analyses in the Service's PEIS on issuing incidental eagle take permits provides information and greater certainty in understanding the risks and effects to eagles of issuing these incidental eagle take permits now and into the future. Furthermore, surveying and monitoring of the golden eagle pair that would be required under the Proposed Action provides information and increased certainty in our future assessments of the risk to eagles from construction.

2) Both beneficial and adverse effects.

Beneficial Effects. As described in the EA, the Proposed Action includes power pole retrofitting as mitigation for take of eagles. Such retrofits are anticipated to protect eagles from electrocution. As the number of retrofits to be done for mitigation is

calculated at a 1.2 to 1 ratio, these avoided eagle electrocutions will more than offset Project-related take of eagles, thereby benefiting the eagle population as a whole. Pole retrofits are also expected to benefit bald eagles and other raptors that may be susceptible to electrocution. Required monitoring of the eagle nest productivity will also be beneficial as it will support the Service's understanding of impacts from construction in the vicinity of nesting golden eagles. Furthermore, issuance of an incidental eagle take permit will allow the Applicant to operate in compliance with the Eagle Act.

Adverse Effects. As described in the EA, under the Proposed Action the Applicant would implement conservation measures to minimize the risk to eagles. However, loss of breeding productivity of one golden eagle pair in the vicinity of Project may occur due to disturbance from Project construction activities over two years. The Applicant will offset this golden eagle take through compensatory mitigation. This will ensure that the impacts of issuing an eagle take permit on the local and regional golden eagle populations will not be significant.

3) Effects on public health or safety.

The Proposed Action would include mitigating eagle take by retrofitting power poles to prevent eagle electrocutions. As eagle and other raptor electrocutions on power poles can start fires, decreasing eagle and other raptor electrocutions could benefit human safety by reducing fire risk.

4) Effects that would violate Federal, State, Tribal, or local law protecting the environment.

The Proposed Action, issuance of an incidental take permit under the Eagle Act, will not violate any federal, state, tribal, or local law.

Finding of No Significant Impact

The Service's Migratory Bird Program concludes from the analysis conducted in the EA and the information provided above that the Proposed Action would not trigger significant impacts on the environment based on considerations and criteria established by regulations, policy, and analysis. Analyses of impacts were conducted at the Project, local, and regional scales, and the degree of effects were assessed. The selected Proposed Action is unlikely to have significant impacts on eagles because all reasonably foreseeable take of eagles is mitigated and the Proposed Action meets the Eagle Act's preservation standard (16 U.S.C. §§ 668a, 50 CFR § 22.3) and all regulatory requirements (50 CFR § 22.26). Based on the findings discussed herein, we conclude that the Proposed Action will have no significant impact on the environment and is not a major Federal action significantly affecting the quality of the human environment pursuant to Section 102(2)(C) of NEPA (42 U.S.C. 4332(2)(C)). Therefore, we are not required to prepare an EIS to further analyze possible effects, and our environmental review under NEPA is concluded with this finding of no significant impact (40 CFR 1501.3, 43 CFR 46.325).

_____

Acting Chief, Migratory Bird Program
California-Great Basin Region
U.S. Fish and Wildlife Service

References

16 United States Code (U.S.C.) § 668. Title 16 - Conservation; Chapter 5a - Protection and Conservation of Wildlife; Subchapter II - Protection of Bald and Golden Eagles; Section (§) 668 - Bald and Golden Eagles. Available online: http://uscode.house.gov

40 Code of Federal Regulations (CFR) § 1501.3. Title 40 - Protection of Environment; Chapter V - Council on Environmental Quality; Subchapter A – National Environmental Policy Act Emplementing Regulations; Part 1501 – NEPA and Agency Planning; Section (§) 1501.3 – Determine the appropriate level of NEPA review. Available online: https://www.ecfr.gov

42 United States Code (U.S.C.) §§ 4321 et seq. Title 42 - the Public Health and Welfare; Chapter 55 - National Environmental Policy; Subchapters I (Policies and Goals) and II (Council on Environmental Quality); Sections (§§) 4321 et seq. Available online: http://uscode.house.gov

43 Code of Federal Regulations (CFR) § 46.325. Title 43 – Public Lands: Interior; Subtitle A – Office of the Secretary of the Interior; Part 46 – Implementation of the National Environmental Policy Act of 1969; Section (§) 46.325 – Conclusion of the environmental assessment process. Available online: http://uscode.house.gov

50 Code of Federal Regulations (CFR) § 13.21. Title 50 - Wildlife and Fisheries; Chapter I - United States Fish and Wildlife Service, Department of the Interior; Subchapter B - Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants; Part 13 - General Permit Procedures; Section (§) 13.21 – Issuance of permits. Available online: https://www.ecfr.gov

50 Code of Federal Regulations (CFR) § 22. Title 50 - Wildlife and Fisheries; Chapter I - United States Fish and Wildlife Service, Department of the Interior; Subchapter B - Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants; Part 22 - Eagle Permits. Available online: https://www.ecfr.gov

81 Federal Register (FR) 91494. 2016. Eagle Permits; Revisions to Regulations for Eagle Incidental Take and Take of Eagle Nests. Vol. 81, No. 242. December 16, 2016. pp 91494-91554. Available online: https://www.federalregister.gov/

US Fish and Wildlife Service (USFWS). 2016. Programmatic Environmental Impact Statement for the Eagle Rule Revision. December 2016. Available online: https://www.fws.gov/migratorybirds/pdf/management/FINAL-PEIS-Permits-to-Incidentally-Take-Eagles.pdf

Attachment 1. Final Environmental Assessment for the Issuance of a Short-Term Eagle Take Permit for San José Wastewater Facility Headworks Improvements

U.S. Fish and Wildlife Service

Final Environmental Assessment

for the Issuance of a Short-Term Eagle Take Permit for San José Wastewater Facility Headworks Improvements

California

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Cost Estimate of Completion: $4200

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Appendix A. Results of the golden eagle local area population (LAP) analysis for the San José Wastewater Facility Headworks Improvements Project

Abbreviations

Applicant	City of San José
bufferlands	open ruderal grasslands immediately south of the San José-Santa Clara Regional Wastewater Facility
CFR	Code of Federal Regulations
EA	Environmental Assessment
Eagle Act	Bald and Golden Eagle Protection Act
EMU	Eagle Management Unit
ESA	Endangered Species Act
Facility	San José-Santa Clara Regional Wastewater Facility
FR	Federal Register
LAP	Local Area Population
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PEIS	Programmatic Environmental Impact Statement for the Eagle Rule Revision
Permit	Applicant requested incidental eagle take permit
Project	San José Wastewater Facility Headworks Improvements Project
REA	Resource Equivalency Analysis
Service	United States Fish and Wildlife Service
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service

Introduction

This Environmental Assessment (EA) analyzes the environmental consequences, pursuant to the National Environmental Policy Act (NEPA; 42 United States Code [U.S.C.] §§ 4321 et seq.), of the U.S. Fish and Wildlife Service (Service) issuing an incidental eagle take permit (Permit) for the take of golden eagles (*Aquila chrysaetos*) associated with the San José Headworks Improvements and New Headworks Project (Project). The applicant for the Permit, the City of San José (Applicant), is requesting eagle take coverage under the Bald and Golden Eagle Protection Act (Eagle Act) (16 U.S.C. §§ 668–668d and 50 Code of Federal Regulations [CFR] § 22.26) for take by disturbance of a breeding golden eagle pair during the 2021 and 2022 eagle breeding seasons from construction activities related to the Project. Issuance of an eagle incidental take permit by the Service for take that is incidental to otherwise lawful activities under the Eagle Act constitutes a discretionary Federal action that is subject to the NEPA. This EA assists the Service in ensuring compliance with the NEPA and in making a determination as to whether any "significant" impacts to the environment not previously analyzed under the Service's Programmatic Environmental Impact Statement for the Eagle Rule Revision, December 2016 (PEIS; USFWS 2016a) could result from the analyzed actions, which would require preparation of an Environmental Impact Statement. This EA evaluates the effects of the Service's proposed action to issue an eagle incidental take permit to the Applicant, as well as alternatives to this action.

The Eagle Act authorizes the Service to issue eagle take permits only when the take is compatible with the preservation of each eagle species (known as the Eagle Act's "preservation standard"), which is defined in regulations as "consistent with the goals of maintaining stable or increasing breeding populations in all eagle management units and the persistence of local populations throughout the geographic range of each species" (50 CFR § 22.3).

The Applicant has applied for a short-term (two year) incidental eagle take permit for take by disturbance and loss of breeding productivity of a golden eagle breeding pair during the 2021 and 2022 eagle breeding seasons resulting from Project construction activities.

This EA evaluates whether issuance of the Permit will have significant impacts on the potentially affected environment, beyond those previously analyzed in the PEIS. Determining if effects are significant under NEPA is addressed by regulation 40 CFR § 1501.3(b), and requires analysis of the degree of effects of the action, including short- and long-term considerations and beneficial and adverse effects, as well as considering the affected area and its resources.

This proposal conforms with, and carries out, the management approach analyzed in, and adopted subsequent to, the Service's PEIS. Accordingly, this EA tiers from the PEIS. Project-specific information not considered in the PEIS will be considered in this EA as described below.

Purpose and Need

The Service's purpose in considering the proposed action is to fulfill our authority under the Eagle Act (16 U.S.C. §§ 668–668e) and its regulations (50 CFR § 22). Applicants whose otherwise lawful activities may result in take of eagles can apply for eagle incidental take permits so that their projects may proceed without potential violations of the Eagle Act. The Service may issue eagle take permits for eagle take that is associated with, but not the purpose of, an activity. Such permits can be issued by the Service when the take that is authorized is compatible with the Eagle Act preservation standard; it is necessary to protect an interest in a particular locality; and it is associated with, but not the purpose of, the activity; and it cannot be practicably avoided (50 CFR § 22 and 81 Federal Register [FR] 91494).

The need for this federal action is a decision on an eagle incidental take permit application submitted by the City of San José that is in compliance with all applicable regulatory requirements set forth under the Eagle Act in 50 CFR § 22.

Authorities

Service authorities are codified under multiple statutes that address management and conservation of natural resources from many perspectives, including, but not limited to the effects of land, water, and energy development on fish, wildlife, plants, and their habitats. This analysis is based on the Eagle Act (16 U.S.C. §§ 668–668e) and its regulations (50 CFR § 22). The PEIS has a full list of authorities that apply to this action (USFWS 2016a: Section 1.6, pages 7-12), which are incorporated by reference here.

Background

The Applicant is currently constructing the Project at the San José-Santa Clara Regional Wastewater Facility (Facility) in San José, California. The Project is located within the boundaries of the Facility at 700 Los Esteros Road in San José at the very southern tip of South San Francisco Bay and is surrounded by a highly urbanized area including the cities of Milpitas, Santa Clara, and Sunnyvale (Figure 1). The Project is bordered to the north and east by operational areas of the Facility. An approximately 375-acre undeveloped non-native ruderal grassland, referred to as "the bufferlands" lies immediately south and west of the Project.

The Project includes construction of new headworks facilities within a newly paved area (called Headworks 3), improvements to existing facilities within the Facility paved operational area, paving of the existing Emergency Basin, and installation of new pipelines connecting Headworks 3 to the Facility operational area (Figure 2). A total of approximately 13.5 acres of previously disturbed land will again be disturbed during construction of all Headworks 3 facilities and lining of the Emergency Basin. Non-hazardous soil excavated as part of Headworks 3 construction will be placed within a soil disposal area encompassing about 15 acres. This soil disposal area, along with an associated access road encompassing about 0.5 acres, will be newly disturbed ground.

Project construction will occur over 28 months, from approximately June 2020 through September 2022.

The presence of an active golden eagle nest in a row of palm trees within the bufferlands was confirmed by the Project's consulting biologist, Environmental Science Associates, in April of 2020 (Figures 1 and 2). The nest is located within one mile of the scheduled Project activities where the likelihood of disturbance from construction activities is increased. Further information on the golden eagle nest is provided in the "Affected Environment" section below. The Applicant worked with the Service and with the California Department of Fish and Wildlife to avoid disturbance to the nesting golden eagles during the 2020 eagle breeding season.

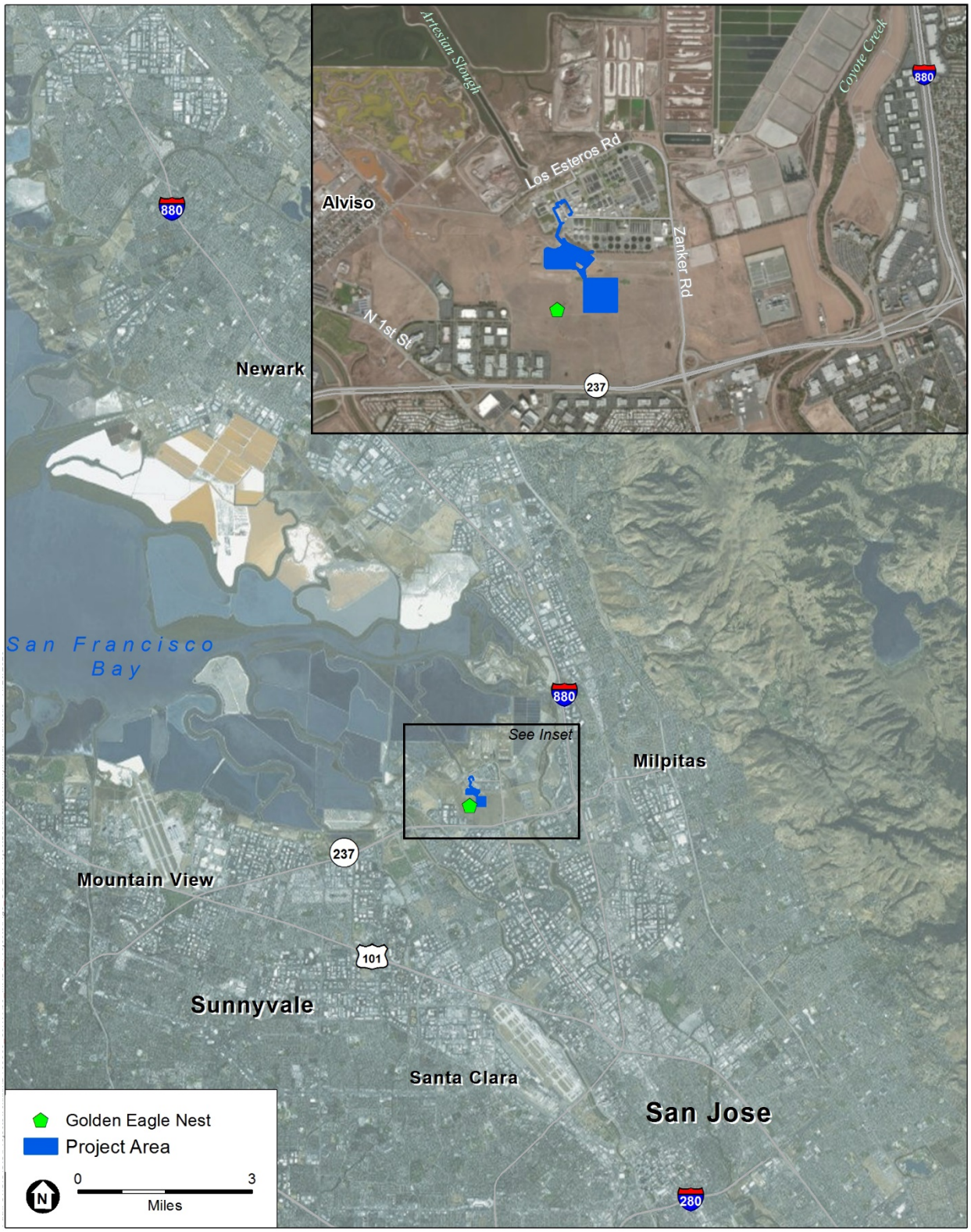

Figure 1. Location and vicinity map of the San José Headworks Improvements and New Headworks Project (Source: City of San José/ Environmental Science Associates)

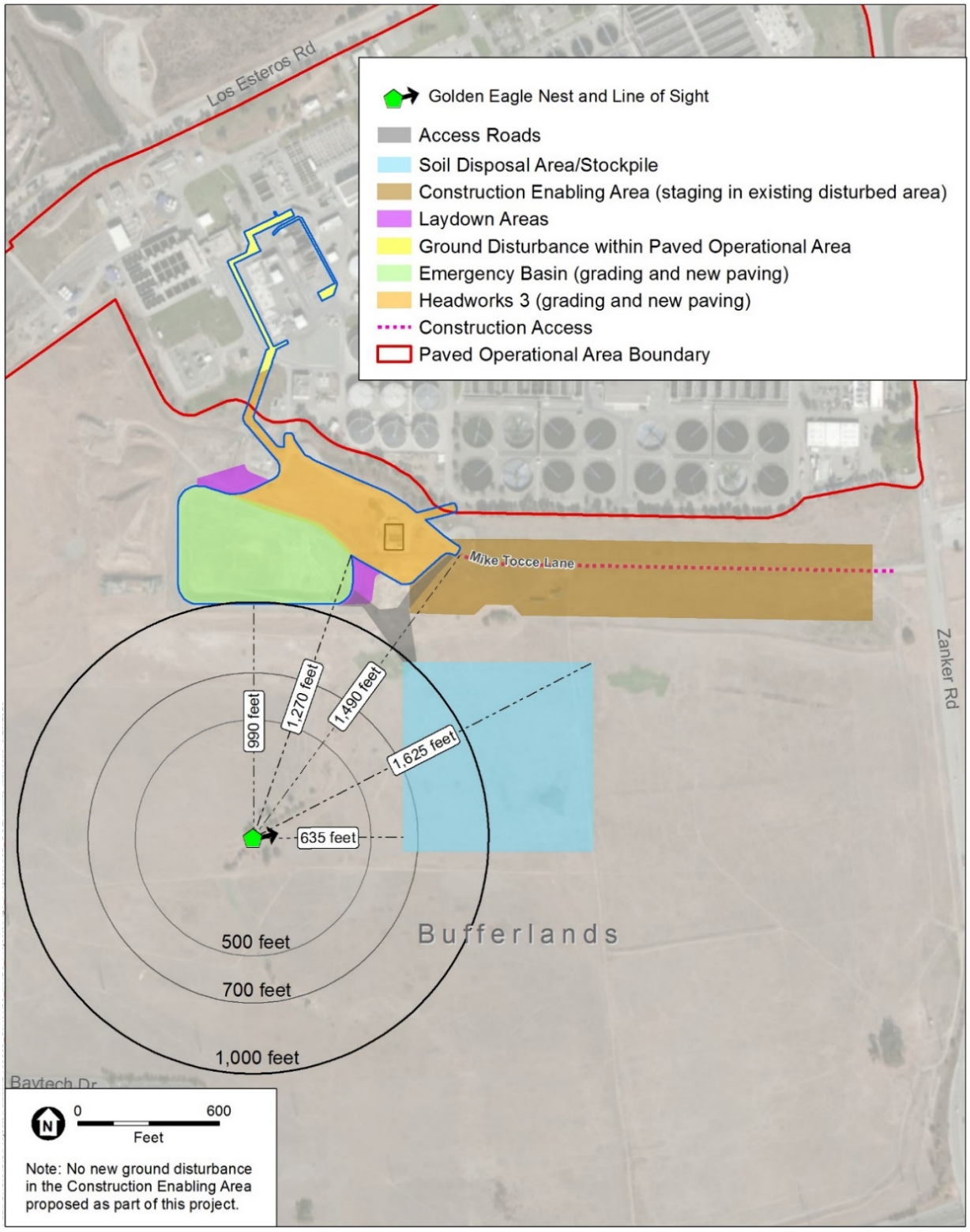

Figure 2. San José Headworks Improvements and New Headworks Project areas and golden eagle nest location and distance from project areas (Source: City of San José/ Environmental Science Associates)

Scoping, Consultation and Coordination

This EA incorporates by reference the scoping performed for the PEIS (USFWS 2016a: Chapter 6, page 175). This EA will be made public on the Service's regional webpage.[1]

Coordination with Tribal Governments

Tribal participation is an integral part of the NEPA and the National Historic Preservation Act (NHPA) process, as well as a key component of the Service's decision whether to issue an eagle take permit. Cultural and religious concerns regarding eagles were analyzed in the PEIS, and tribal consultation already conducted for the PEIS is incorporated by reference into this EA. The PEIS identified tribal coordination as an important issue for subsequent analysis, given the cultural importance of eagles to the tribes. In accordance with Executive Order 13175, Consultation and Coordination with Tribal Governments (65 FR 67249), the NHPA Section 106 (36 CFR § 800) and the Service's Native American Policy, the Service consults with Native American tribal governments whenever our actions taken under the authority of the Eagle Act may affect tribal lands, resources, or the ability to self-govern. This coordination process is also intended to ensure compliance the American Indian Religious Freedom Act.

To notify Tribes regarding potential issuance of the requested Permit, the Service sent letters to 17 federally-recognized tribal governments located within 109 miles (the natal dispersal distance of golden eagles, thought to adequately define the local area population of the eagles) of the Project informing them of the received Permit application and preparation of this EA and offering the opportunity for formal consultation regarding potential issuance of the permit. The Service received no response from any of the Tribes contacted.

Proposed Action and Alternatives

Proposed Action

We propose to issue a two-year incidental eagle take permit, with associated conditions, to the City of San José for disturbance to, and loss of breeding productivity of, one golden eagle breeding pair in the vicinity of the San José Wastewater Facility Headworks Improvements Project during the 2021 and 2022 eagle breeding seasons ("Proposed Action").

Disturbance to breeding eagles is assumed to prevent eagles from successfully nesting and raising young. To estimate this loss of breeding productivity, the Service uses an estimate of 0.59 young fledged per each golden eagle breeding pair occupying a nesting territory each year

[1] https://www.fws.gov/cno/conservation/MigratoryBirds/EaglePermits.html

(USFWS 2016b). Therefore, for disturbance over two eagle breeding seasons to one golden eagle breeding pair occupying one nesting territory, 0.59 young fledged each year would be assumed to be lost from the golden eagle population.

The Proposed Action would require measures to avoid and minimize eagle take to the maximum extent practicable, monitoring of the golden eagle breeding pair authorized for take, and compensatory mitigation to offset estimated take of golden eagles.

***Avoidance and Minimization Measures*:** The Applicant would implement the following avoidance and minimization measures: to the maximum extent practicable, conducting construction activities outside of the eagle breeding season (1 January through 31 August); placing material in the soil disposal/stockpile area at the greatest distance from the nest possible during the eagle breeding season; initiating a noise abatement program for construction personnel within one mile of nesting eagles; avoiding conducting construction activities during severe weather such as heavy rain, severe thunderstorms, high winds, and/or extreme temperatures (high or low); to the maximum extent practicable, conducting construction activities within one-mile of nesting eagles during daylight hours; assuring lighting for any unavoidable nighttime work is oriented towards the ground and shining away from the nest and is shielded to the maximum extent practicable; and training work crews about nesting eagles and eagle protection measures.

Compensatory Mitigation: The Applicant would fully offset loss of productivity of one golden eagle pair over two eagle breeding seasons (0.59 young fledged each year) with compensatory mitigation at a 1.2 to 1 ratio, as required in the Eagle Act regulations (81 FR 91494).

Surveying and Monitoring: During the 2021 and 2022 eagle breeding seasons, the Applicant would be required to monitor the golden eagle nest to determine nesting status and nest fate each year.

Criteria for issuance of an eagle take permit are codified in 50 CFR § 22.26(f). The City of San José's application for an incidental eagle take permit meets all the regulatory issuance criteria and required determinations (50 CFR § 13.21 and 50 CFR § 22.26) for eagle take permits.

Alternative 1: No Action

Under the No-Action Alternative, the Service would take no further action on the City of San José's eagle take permit application. However, per regulations (50 CFR § 13.21), the Service must take action on the Permit application, determining whether to deny or issue the Permit. We consider this alternative because Service policy requires evaluation of a No-Action Alternative and it provides a clear comparison of any potential effects to the human environment from the Proposed Action.

The No-Action Alternative in this context analyzes predictable outcomes of the Service not issuing the requested Permit. Under the No-Action Alternative, the Project would likely be constructed without an eagle take permit being issued. Thus, for purposes of analyzing the No-

Action Alternative, we assume that the Applicant will implement all measures required by other agencies and jurisdictions to conduct the activity at this site, but the conservation measures proposed under this requested Permit would not be required. The Project proponent may choose to implement some, none, or all of those conservation measures. Under this alternative, we assume that the Applicant will take some reasonable steps to avoid taking eagles, but the Project proponent will not be protected from enforcement for violating the Eagle Act should take of an eagle occur, and any eagle take that occurs would not be offset by compensatory mitigation.

Alternative 2: Issue permit with modified compensatory mitigation

Under this alternative, the Service would issue a two-year incidental eagle take permit for disturbance to, and loss of breeding productivity of, one golden eagle breeding pair during the 2021 and 2022 eagle breeding seasons, just as in the Proposed Action. The permit would be as described in the Proposed Action, with the same take authorization, avoidance and minimization measures, and monitoring. However, under this alternative compensatory mitigation would differ. Under Alternative 2, any and all loss of eagle productivity would be fully offset with required compensatory mitigation annually at a ratio of 1:1, by retrofits of power poles at high risk for electrocution of eagles within the Eagle Management Unit (EMU). In addition, the Applicant would be required to provide compensatory mitigation for an experimental mitigation effort, at a ratio of 0.2:1. Experimental mitigation efforts designed to increase eagle breeding productivity or decrease eagle mortality could include experimental treatment of nestling parasites while the young eagles are in a nest and are not capable of flight to increase nesting productivity, experimental removal of carcasses along roadways to reduce eagle vehicle collisions, or experimental lead abatement measures to reduce eagle lead poisoning. The Applicant would contribute funds directly to an ongoing study addressing one of these experimental mitigation efforts.

Other Alternatives Considered but Not Evaluated in this Environmental Assessment

The Service considered other alternatives based on communication with the Applicant but concluded that these alternatives did not meet the purpose and need underlying the action because they were not consistent with the Eagle Act and its regulations or did not adequately address the risk of take at the Project. Therefore, the Service did not assess the potential environmental impacts of those alternatives. Below is a summary of the alternatives considered but eliminated from further review.

Alternative 3: Deny Permit

Under this alternative, the Service would deny the Permit application because the Applicant falls under one of the disqualifying factors and circumstances denoted in 50 CFR § 13.21, the application fails to meet all regulatory permit issuance criteria and required determinations listed in 50 CFR § 22.26.

Our permit issuance regulations at 50 CFR § 13.21(b) set forth a variety of circumstances that disqualify an applicant from obtaining a permit. None of the disqualifying factors or circumstances denoted in 50 CFR § 13.21 apply to the Applicant. We next considered whether the Applicant meets all issuance criteria for the type of permit being issued. For eagle incidental take permits, those issuance criteria are found in 50 CFR § 22.26(f). The Applicant's application meets all the regulatory issuance criteria and required determinations (50 CFR § 22.26) for eagle take permits.

When an applicant for an eagle incidental take permit is not disqualified under 50 CFR 13.21 and meets all the issuance criteria of 50 CFR § 22.26, denial of the permit is not a reasonable option. Therefore, this alternative—denial of the Permit—was eliminated from further consideration.

Affected Environment

This section describes the current status of the environmental resources and values that may be affected by the Proposed Action and alternatives.

Golden Eagle

Golden eagle habitat in central California consists mainly of open grasslands and oak savanna interspersed with oak and shrub woodlands. The eagles in this area predominately nest in trees, utilizing nearby open areas for foraging on ground squirrels and jackrabbits. The Diablo Mountain Range, east of the Project, supports a robust population of nesting golden eagles. Golden eagles are generally not found nesting in urban areas, however biologists have noted observations of golden eagles, with some evidence of nesting, in the bufferlands immediately south of the Facility since 2016 (City of San José 2020). Biologists confirmed the presence of an active golden eagle nest in the bufferlands to the south of the Project in 2019 and 2020. The nest is in a row of approximately five tall date palms with an understory including short date palms, small trees, and shrubs surrounded by grasslands. The eagle pair is believed to have no other nests as the surrounding area does not have any other suitable eagle nesting habitat. Two chicks in 2019, and one chick in 2020, successfully fledged from the nest. A pair of adult golden eagles have been observed in the territory during fall months and are believed to occupy the territory most, if not all, year.

Bald Eagles

Bald eagles (*Haliaeetus leucocephalus*) are known to occur in the region, but are not expected to be affected by Project construction activities. No bald eagle nests have been identified within 660 feet of the Project, therefore bald eagle disturbance is not expected to result from Project construction activities.

Migratory Birds

Effects to migratory birds of issuing eagle take permits have been analyzed in the PEIS, and those analyses are incorporated by reference here.

Species Listed under the Endangered Species Act

Section 7 of the ESA requires Federal agencies to consult to "insure that any action authorized, funded, or carried out" by them "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat" (16 U.S.C. § 1536(a)(2)). The Service's decision regarding the requested Permit will not alter the physical footprint of the Project and therefore will not alter the Project impacts to federally threatened and endangered species in the Project area.

However, under the Proposed Action, required compensatory mitigation in the form of retrofitting electric power poles to offset authorized take of golden eagles under an eagle take permit has the potential to cause effects to ESA-listed species in the area where retrofitting is completed. The compensatory mitigation sites for retrofitting of power poles to offset any authorized eagle take under an eagle take permit have not yet been identified. Once the compensatory mitigation sites are selected, the Service will conduct an internal Section 7 Consultation and further analyze and address potential effects to ESA-listed species at the location of the power poles that would be retrofitted. The Service anticipates that adverse effects to listed species would be avoidable by timing retrofits to avoid sensitive seasons, and/or through the use of other species-specific avoidance measures. However, if the determination of the Section 7 Consultation was that adverse effects were likely to occur to listed species, the Service would prepare additional NEPA documentation to supplement this EA.

Cultural and Socio-economic Interests

Bald and golden eagles are important symbols of U.S. history and sacred to many Native American cultures. Some Native American cultures utilize eagles, eagle feathers, and other eagle parts for religious practices and cultural ceremonies. Outside of rituals and practices, wild eagles as live beings are deeply important to many tribes (Lawrence 1990, as cited by USFWS 2016a). Numerous tribes confirmed the importance of wild eagles during scoping and tribal consultation for the PEIS. The Proposed Action or considered alternatives would not impact cultural or socioeconomic interests beyond the impacts already discussed in the PEIS. Therefore, cultural and socioeconomic interests will not be further analyzed in the EA.

Climate Change

Climate change was considered in the PEIS and is incorporated by reference here.

Environmental Consequences

This section summarizes the effects on the environment of implementing the Proposed Action or alternatives to the action. The discussion of overall effects to the environment of the eagle incidental take permit program is provided in the PEIS and is incorporated by reference here. This section of this EA analyzes only the effects that were not analyzed in the PEIS that may result from the issuance of an eagle incidental take permit for this specific project.

Proposed Action

Golden Eagles

Effects

In determining the significance of effects of the Project on eagles, we confirmed that the Proposed Action does not deviate from the analysis provided in the PEIS and the Service's 2016 report, *Bald and Golden Eagles: Population demographics and estimation of sustainable take in the United States, 2016 update* (USFWS 2016b). We also assessed Project-specific effects to eagles that were not covered in the PEIS analyses. These effects may occur at the project scale, at the local-area eagle population scale, and at the regional EMU scale.

The golden eagle nest in the vicinity of the Facility is located within one mile of Project activity areas, where the likelihood of disturbance from construction activities is increased. Project activity areas are as close as 635 feet from the nest (Figure 2). Although the area around the nest is largely grassland with minimal vegetation, three palm trees north of the nest tree provide a partial screen blocking visibility of some Project activity occurring north of the nest tree. However, much of the Project construction activity will be visible and audible to the eagles. Human activity and noise near an eagle nest may decrease foraging opportunities and efficiency, decrease the potential for territory occupancy, result in nest abandonment, or affect the likelihood of the eagles to successfully incubate or fledge young (Rosenfield et al. 2007, Scott 1985).

The bufferlands in which the golden eagle nest is located are surrounded by urban development, including: the Facility, which is adjacent to and north of the bufferlands; Zanker Road Landfill 0.5 miles to the north; Los Esteros Road/Disk Drive 0.5 miles to the northwest; a 175-acre business park 0.2 miles to the southwest; Highway 237 0.35 miles to the south; and, Zanker Road 0.55 miles to the east. The City of Alviso is 0.9 miles from the nest. Ongoing operations, construction, and maintenance work that generate noise and activity at the Facility include soils stockpiling, equipment staging, and vehicle traffic in the Construction Enabling Area (associated with other construction projects at the Facility). In addition, monthly surveys of burrowing owls that also occupy the bufferlands to the north and west of the eagle nest are conducted by biologists on foot during the owl breeding season. With high levels of human activity in the vicinity of the nest, we would expect the golden eagle pair to have at least some tolerance to

human activity, however the extent of this tolerance is unknown, and Project activities will be closer to the nest than other ongoing human activities.

As golden eagles have been observed foraging in the bufferlands and Project areas (City of San José 2020), project construction activities will also reduce available foraging habitat in those areas for the eagles. The soil disposal area (Figure 2) and portions of an associated access road totaling about 15.5 acres would be newly disturbed by Project activities. The Emergency Basin and Headworks 3 areas (Figure 2), constituting about 13.5 acres, were previously disturbed, but were not fully developed and still could be used by eagles for foraging. These two areas will now be more extensively developed. Changes in the landscape and human activity in all these Project areas will limit or preclude their availability as foraging grounds for eagles. The loss of foraging habit in the soil disposal area and associated access road would be temporary as, once construction is completed, the remaining soil in the soil disposal area would be graded to approximately 1 foot above prior contour and allowed to revegetate. The access road area would be allowed to revegetate as well. However, as the Emergency Basin and Headworks 3 will be paved and fully developed, this area will be permanently lost to the golden eagles as a foraging area. Despite these losses of foraging habitat, there are other areas within the bufferlands available as foraging habitat for the eagle pair, and golden eagles have also been seen foraging in areas north and northeast of the Facility. There is also potential foraging habitat in the Diablo Mountains to the east.

Disturbance and habitat alteration from Project activities could cause the golden eagle pair to attempt to move away from these human activities, which could cause increased antagonistic interactions with territorial eagle pairs in the surrounding area, potentially creating a ripple-effect of impacts to eagles in areas surrounding the Project. As human activity levels would return to pre-construction levels after construction is completed, nesting substrate would still be available, and much of the foraging habitat in the vicinity would still be available or would be restored, it is likely eagles would resume breeding at this nesting site in subsequent years post-construction. The golden eagle pair could also adapt to the construction activities and successfully reproduce at the current nest during construction activities, however with the increase in human activity due to construction, as well as the close proximity of construction activities to the eagle nest, disturbance to the eagle pair and loss of productivity during construction activities is likely.

To estimate potential loss of breeding productivity during Project activities, the Service uses an estimate of 0.59 young fledged per each golden eagle breeding pair occupying a nesting territory each year (USFWS 2016b). When a golden eagle breeding pair is disturbed, the Service assumes this 0.59 annual nesting-territory productivity is lost. Therefore, for disturbance over two eagle breeding seasons to one golden eagle breeding pair occupying one nesting territory, 0.59 young fledged each year would be assumed to be lost from the golden eagle population.

The Proposed Action incorporates measures to minimize and avoid eagle take to the maximum degree practicable, as required by regulation. The Applicant would implement the following avoidance and minimization measures: to the maximum extent practicable, conducting construction activities outside of the eagle breeding season (1 January through 31 August); placing material in the soil disposal/stockpile area at the greatest distance from the nest possible during the eagle breeding season; initiating a noise abatement program for construction

personnel within one mile of nesting eagles; avoiding conducting construction activities during severe weather such as heavy rain, severe thunderstorms, high winds, and/or extreme temperatures (high or low); to the maximum extent practicable, conducting construction activities within one-mile of nesting eagles during daylight hours; assuring lighting for any unavoidable nighttime work is oriented towards the ground and shining away from the nest and is shielded to the maximum extent practicable; and training work crews about nesting eagles and eagle protection measures.

Along with implementing these minimization and avoidance measures, the Applicant would provide compensatory mitigation to offset the estimated take at a 1.2 to 1 ratio, as required in the Eagle Act regulations (81 FR 91494), by paying for retrofitting of electric power poles that are an electrocution risk to eagles. The 1.2 to 1 ratio for compensatory mitigation achieves a net benefit to golden eagle populations, ensuring that regional eagle populations are maintained consistent with the preservation standard of the Eagle Act despite indications of declines in golden eagle populations (USFWS 2016a).

Mitigation will be paid on an annual basis, with mitigation for the first year's loss of productivity paid shortly after permit issuance and subsequent years paid before each eagle breeding season. If mitigation is paid but the Service determines that eagles successfully breed that year and productivity is not lost, the unneeded mitigation paid to offset take that did not occur will be applied to future years of estimated take authorized to the Applicant under this or future permits.

The retrofitting of electric utility power poles can be used to offset authorized take of golden eagles, as electrocution from power poles is known to be a major cause of eagle mortality. Power poles can be retrofitted by verified methods (such as insulating or covering electrical components or modifying pole elements to increase the distance between electrical components) to reduce the risk of electrocution to eagles, with the maintenance and efficacy of retrofits confirmed through post-installation inspections and monitoring. The effects of retrofitting power poles has been quantified "per eagle", allowing use of a Resource Equivalency Analysis (REA) to calculate the number of power pole retrofits needed to offset the authorized take of golden eagles (USFWS 2013).

The Service ran the REA to determine the number of power poles that would need to be retrofit to offset the disturbance take and loss of productivity to the golden eagle breeding pair. Incorporating the 1.2 to 1 compensatory mitigation ratio required under the Eagle Act regulations, the Applicant would need to retrofit 10-24 power poles to offset the take of 0.71 golden eagles (a 1.2 to 1 ratio of the estimated take of 0.59 golden eagles) each year at the Project. The final number of poles retrofitted will depend on several factors, including the type and expected longevity of each retrofit once the actual poles have been identified. To complete the required compensatory mitigation, the Applicant would either work directly with a utility company to complete the required power pole retrofits, with Service approval of the developed plan, or would work with an in-lieu fee program to purchase credits to fulfill the required retrofits to be completed.

Along with the benefit to eagles of reducing mortalities by electrocution, retrofitting of power poles to prevent bird electrocutions also increases public safety by reducing the risk of wildfires.

Bird electrocution events may ignite fires in the vegetation surrounding and below the site of electrocution, so decreasing electrocution risk also reduces the risk of fire.

Eagle Act regulations require compensatory mitigation to be sited in the same EMU in which the take occurs (50 CFR § 22.26(c)(1)(iii)(B)). The Project is located in the Pacific Flyway EMU for golden eagles. The Applicant or the in-lieu fee program manager would coordinate with electric utility companies within the Pacific Flyway to determine locations of power poles that are appropriate for retrofitting to prevent eagle electrocutions. The retrofits conducted as compensatory mitigation for this Permit would not be duplicative of the utility company's other obligations to retrofit power poles, including addressing their own responsibilities to rectify eagle take caused by electrocutions and line collisions from their infrastructure.

Under the Proposed Action, the Applicant would provide compensatory mitigation to fully offset the loss of breeding productivity of one golden eagle pair over two eagle breeding seasons at a 1.2 to 1 ratio. In addition, the 1.2 to 1 ratio also provides an additional net benefit to golden eagle populations. As the estimated take of golden eagles by Project activities would be fully offset by compensatory mitigation provided by the Applicant, project scale effects of issuance of the requested incidental eagle take Permit on golden eagle populations would not be significant and are therefore compatible with the preservation of golden eagles.

The Service also assessed situations where the golden eagle take proposed under the Proposed Action combined with take from other present or foreseeable future actions and sources may be approaching levels that are biologically problematic. Along with effects to eagles at the Project scale described in the preceding paragraphs, to ensure that eagle populations at the local scale are not depleted by combined take in the local area, the Service analyzed the amount of annual eagle take that can be authorized while still maintaining local area populations of eagles (USFWS 2016a). The local-area population (LAP) scale is defined for eagles as the median natal dispersal distance for the given species, which for golden eagles is a 109-mile radius (USFWS 2016a). The Service's analysis found that to maintain local area eagle populations, all annual authorized take within a LAP must not exceed five percent of the LAP unless the Service can demonstrate why allowing take to exceed that limit is still compatible with the preservation of eagles. The Service must also assess any available data to determine if there is any indication that unauthorized take (take that has not been permitted by the Service) in the LAP may exceed ten percent, as this is roughly the average background level of unpermitted take in local area populations of golden eagles (USFWS 2016a). The eagle incidental take permit regulations require the Service to conduct an individual LAP analysis for each permit application as part of our application review (50 CFR § 22.26(e)). We, therefore, considered effects to the eagle LAP surrounding the Project to evaluate whether the take to be authorized under this Permit, together with other sources of permitted take and unpermitted eagle mortality, may be incompatible with the persistence of this LAP. We incorporated data provided by the Applicant, our data on other eagle take authorized and permitted by the Service, and other reliably documented unauthorized eagle mortalities to estimate impacts to the LAP. We conducted our LAP effects analysis as described in the Service's *Eagle Conservation Plan Guidance* (USFWS 2013).

Results from our LAP effects analysis for the Proposed Action are summarized in Appendix A. The LAP is estimated to be 190 golden eagles. The five percent benchmark for sustainable

authorized take of the LAP is 10 golden eagles per year. Current authorized take in the LAP, which includes permitted take at two other projects and the take proposed for authorization under this Permit, is 2.5 golden eagles or 1.32% per year. This is well below the five percent sustainable take benchmark determined by the Service to maintain the local area population of golden eagles. The Service also does not have any indication that unauthorized take may exceed ten percent of the LAP. A summary of available data of unauthorized take is provided in Appendix A and suggests that unauthorized take of eagles in the LAP may be around 9.01% per year. Therefore, effects of take at the local scale would not be significant and would therefore be compatible with the preservation of golden eagles.

Among other sources of unauthorized take, the Service is aware of several wind facilities in the vicinity of the LAP that are operational and likely to take eagles, but are not yet permitted for eagle take. Past take of eagles at these facilities is known to the Service and is included in the information analyzed as unauthorized eagle take. While additional future wind energy development and other activities may further increase eagle take in the LAP during the lifespan of this Permit, the Service cannot reasonably predict the resulting impacts to eagles of such projects when important aspects, such as their size, location, configuration, and lifespan, are currently unknown. There is no reasonable basis to consider such speculative impacts in this EA.

Finally, take of eagles also has the potential to affect the larger eagle population. Therefore, the Service defined regional EMUs and analyzed the effects of permitting take of golden eagles in combination with ongoing unauthorized sources of human-caused eagle mortality and other present or foreseeable future actions affecting golden eagle populations (USFWS 2016a). As part of the analysis, the Service determined sustainable limits to permitted take within each EMU. The take limit for all golden eagle EMUs was set to zero as golden eagle populations throughout the United States may be declining (USFWS 2016a). Therefore, any authorized take of golden eagles must be offset with compensatory mitigation at a mitigation ratio of 1.2 to 1 (81 FR 91494). The take that would be authorized under the Proposed Action would be offset by the compensatory mitigation that will be provided by the Applicant, as described above, so will not significantly impact the EMU eagle population. The avoidance and minimization measures that would be required under the Permit, along with monitoring, are designed to further ensure that the Permit is compatible with the preservation of the golden eagle at the regional EMU population scale.

As the estimated take of golden eagles by this Project, and the potential for the take to compound with other sources of eagle take and affect larger eagle populations, is either below Service-determined sustainable benchmarks or will be addressed by mitigation measures provided by the Applicant such as fully-offsetting compensatory mitigation, the Proposed Action of issuance of the requested incidental eagle take Permit would cause no significant adverse effects on golden eagle populations and is compatible with the preservation of golden eagles.

Monitoring

Under the Proposed Action, the Applicant would be required to monitor the golden eagle nest during the 2021 and 2022 eagle breeding seasons to determine nesting status and success each year.

Bald Eagles

Although take of bald eagles is not expected to occur from Project construction activities and take of bald eagles would not be authorized under the Proposed Action, bald eagles in the region may benefit from avoidance and minimization measures established to reduce the risk to golden eagles, as well as from compensatory mitigation actions provided to offset the take of golden eagles. No significant adverse effects are foreseen to bald eagles.

Migratory Birds

Issuance of the eagle take Permit to the Project may provide benefits to migratory birds. Power pole retrofits done as compensatory mitigation for the eagle take Permit may minimize electrocution risk for raptors and other migratory birds, just as with eagles.

Impacts to migratory birds from the issuance of incidental eagle take permits were fully analyzed in the PEIS (USFWS 2016a); no further adverse effects to migratory birds are anticipated from issuance of the eagle take Permit to the Project.

Species Listed under the Endangered Species Act

Section 7 of the ESA requires Federal agencies to consult to "insure that any action authorized, funded, or carried out" by them "is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of [critical] habitat" (16 U.S.C. § 1536(a)(2)). The Service's decision regarding the requested Permit will not alter the physical footprint of the Project and therefore will not alter the Project impacts to federally threatened and endangered species in the Project area.

However, under the Proposed Action, required compensatory mitigation in the form of retrofitting electric power poles to offset authorized take of golden eagles under an eagle take permit has the potential to cause effects to ESA-listed species in the area where retrofitting is completed. The compensatory mitigation sites for retrofitting of power poles to offset any authorized eagle take under an eagle take permit have not yet been identified. Once the compensatory mitigation sites are selected, the Service will conduct an internal Section 7 Consultation and further analyze and address potential effects to ESA-listed species at the location of the power poles that would be retrofitted. The Service anticipates that adverse effects to listed species would be avoidable by timing retrofits to avoid sensitive seasons, and/or through the use of other species-specific avoidance measures. However, if the determination of the

Section 7 Consultation was that adverse effects were likely to occur to listed species, the Service would prepare additional NEPA documentation to supplement this EA.

Alternative 1: No Action

Golden Eagles

If, under the No-Action Alternative, the Service took no action on the Applicant's eagle take Permit application, should take of eagles occur, the Applicant would be in violation of the Eagle Act. Under this No-Action Alternative, although all eagle conservation measures required by other agencies and jurisdictions should be implemented at the Project, additional measures required under the Permit would not be implemented to avoid or minimize risk to eagles of the Project activities. Therefore, the risk to eagles is expected to be higher under this alternative as compared to the Proposed Action. Furthermore, none of the impacts to golden eagles described above under the Proposed Action would be offset by compensatory mitigation if no action was taken on the application and an eagle take permit was not issued. Under this No-Action Alternative, impacts of the Project on the eagle population are anticipated to be unmitigated loss of productivity from one golden eagle pair (0.59 young fledged) over two eagle breeding seasons equating to 1.18 young fledged assumed to be lost from the golden eagle population.

This alternative does not meet the purpose and need for the action because, by regulation (50 CFR § 13.21), when in receipt of a completed application, the Service must either issue or deny a permit to the applicant. The No-Action Alternative also does not meet the purpose of and need for the action because it would result in the adverse, unmitigated effects to golden eagles described above, effects that are not compatible with the preservation of golden eagles.

Bald Eagles

The Applicant did not apply for take authorization for bald eagles, nor is take of bald eagles expected to occur from Project construction activities. However, the No-Action Alternative would mean benefits that bald eagles might also incur from avoidance and minimization measures established to reduce the risk to golden eagles and compensatory mitigation actions provided to offset the take of golden eagles, would not occur.

Migratory Birds

Any incidental benefits to migratory birds from avoidance, minimization, and mitigations required under the eagle take Permit would not be realized under the No-Action Alternative.

Species Listed under the Endangered Species Act

As the Service would be taking no action under this alternative, and therefore there would be no requirement to provide compensatory mitigation to offset eagle take, there is no potential for effects to ESA-listed species from retrofitting of power poles. Therefore there would be no effects to ESA-listed species under this No-Action alternative.

Alternative 2: Issue permit with modified compensatory mitigation

As with the Proposed Action, we screened this alternative against the analysis provided in the PEIS and the Service's 2016 report, *Bald and Golden Eagles: Population demographics and estimation of sustainable take in the United States, 2016 update* (USFWS 2016b). We assessed Project effects to eagles at the project, local, and regional scales.

Golden Eagles

Effects

Environmental consequences to golden eagles of Alternative 2 would be similar to those of the Proposed Action. Alternative 2 would have the same golden eagle take estimate and authorization as the Proposed Action, the same analyses to assess take, and the same measures to avoid and minimize take of golden eagles that are required under the Proposed Action. However, in this alternative the mitigation to address golden eagle take would be implemented differently.

As with the Proposed Action, under Alternative 2 the Applicant would provide compensatory mitigation to fully offset the estimated take by paying for retrofitting of electric power poles. However, under this alternative, this power pole retrofitting mitigation would be required at a 1:1 ratio. Utilizing the REA described for the Proposed Action, the Service calculated the number of power poles that would need to be retrofit to offset the disturbance take and loss of productivity to the golden eagle breeding pair at a 1:1 ratio. At the 1:1 ratio, the Applicant would need to retrofit 9-20 power poles to offset the take of 0.59 golden eagles each year at the Project. The final number of poles retrofitted will depend on several factors, including the type and expected longevity of each retrofit once the actual poles have been identified. To complete the required compensatory mitigation, the Applicant would either work directly with a utility company to complete the required power pole retrofits, with Service approval of the developed plan, or would work with an in-lieu fee program to purchase credits to fulfill the required retrofits to be completed.

To provide an additional net benefit to eagle populations, as required in Eagle Act regulations (81 FR 91494), the Applicant would also implement additional experimental mitigation efforts at a ratio of 0.2 to 1. Experimental mitigation efforts designed to increase eagle breeding productivity or decrease eagle mortality could include, but are not limited to, experimental treatment of nestling parasites while the young eagles are in a nest and are not capable of flight

to increase nesting productivity, experimental removal of carcasses along roadways to reduce eagle vehicle collisions, or experimental lead abatement measures to reduce eagle lead poisoning. The Applicant would contribute funds directly to an ongoing study addressing one of these experimental mitigation efforts. The Applicant would work with the Service to determine the most appropriate experimental mitigation effort taking into account leading factors constraining local and regional golden eagle populations and current ongoing studies.

As the compensatory mitigation required under this alternative would fully offset the estimated take, as well as provide an additional net benefit to eagle populations, there would be no significant negative effects to eagle populations from issuing an eagle take permit under this alternative.

Monitoring

Monitoring requirements under Alternative 2 would be the same as those for the Proposed Action.

Bald Eagles

Just as in the Proposed Action, under Alternative 2, bald eagles in the region may benefit from avoidance and minimization measures established to reduce the risk to golden eagles, as well as from compensatory mitigation actions provided to offset the take of golden eagles. No significant adverse effects of Alternative 2 are foreseen to bald eagles.

Migratory Birds

Environmental consequences of this alternative would be the same as the Proposed Action.

Species Listed under the Endangered Species Act

Environmental consequences of this alternative would be the same as the Proposed Action, with the addition of any effects to ESA-listed species from conducting experimental mitigation efforts described above to offset the estimated golden eagle take. The Service anticipates that adverse effects to listed species would be avoidable by timing mitigation efforts to avoid sensitive seasons, and/or through the use of other species-specific avoidance measures. Once the most appropriate experimental mitigation effort is identified, the Service would conduct an internal Section 7 Consultation and analyze and address potential effects to ESA-listed species at the location of the experimental mitigation effort. Although thought to be unlikely, if the determination of the Section 7 Consultation was that adverse effects were likely to occur to listed species, the Service would prepare additional NEPA documentation to supplement this EA.

Comparison of Alternatives

The following table compares the effects of the Proposed Action and alternatives (Table 1).

Table 1. Comparison of the Proposed Action and other alternatives

	Proposed Action: Issue permit for disturbance take of one golden eagle breeding pair over two breeding seasons	**Alternative 1: No Action**	**Alternative 2: Issue permit with modified compensatory mitigation**
Eagle Take Levels	Disturbance take and loss of productivity of one golden eagle breeding pair over two breeding seasons	Disturbance take and loss of productivity of one golden eagle breeding pair over two breeding seasons	Disturbance take and loss of productivity of one golden eagle breeding pair over two breeding seasons
Avoidance and Minimization	The Applicant will implement measures required under the Permit	There would be no requirement to implement Service suggested measures	The Applicant will implement measures required under the Permit
Compensatory Mitigation	Retrofit power poles to offset the loss of 0.59 golden eagles each year at a 1.2:1 ratio	None	Retrofit power poles to offset the loss of 0.59 golden eagles each year at a 1:1 ratio, and support an experimental mitigation effort, at a ratio of 0.2:1.
Unmitigated Eagle Take/Effects	None	Loss of productivity from one golden eagle breeding pair (0.59 young fledged) over two breeding seasons, equating to 1.18 young fledged estimated lost from the eagle population	None

	Proposed Action: Issue permit for disturbance take of one golden eagle breeding pair over two breeding seasons	Alternative 1: No Action	Alternative 2: Issue permit with modified compensatory mitigation
Data Collection /Monitoring	Monitoring of the golden eagle nest to determine nesting status and success during the 2021 and 2022 eagle breeding seasons	There would be no requirement to implement Service suggested monitoring	Monitoring of the golden eagle nest to determine nesting status and success during the 2021 and 2022 eagle breeding seasons
Company Liability for Eagle Take	No (if in compliance with Permit)	Yes	No (if in compliance with Permit)
Meets Eagle Act Statutory and Regulatory Requirements	Yes	No	Yes

List of Preparers

Tracy Borneman, Migratory Bird Biologist

References

16 United States Code (U.S.C.) § 668. Title 16 - Conservation; Chapter 5a - Protection and Conservation of Wildlife; Subchapter II - Protection of Bald and Golden Eagles; Section (§) 668 - Bald and Golden Eagles. Available online: http://uscode.house.gov

16 United States Code (U.S.C.) § 1536. Title 16 – Conservation; Chapter 35 – Endangered Species; Section (§) 1536 – Interagency Cooperation. Available online: http://uscode.house.gov

36 Code of Federal Regulations (CFR) § 800. Title 36 – Parks, Forests, and Public Property; Chapter VIII – Advisory Council on Historic Preservation; Part 800 – Protection of Historic Properties. Available online: https://www.ecfr.gov

40 Code of Federal Regulations (CFR) § 1501.3. Title 40 - Protection of Environment; Chapter V - Council on Environmental Quality; Subchapter A – National Environmental Policy Act Emplementing Regulations; Part 1501 – NEPA and Agency Planning; Section (§) 1501.3 – Determine the appropriate level of NEPA review. Available online: https://www.ecfr.gov

42 United States Code (U.S.C.) §§ 4321 et seq. Title 42 - the Public Health and Welfare; Chapter 55 - National Environmental Policy; Subchapters I (Policies and Goals) and II (Council on Environmental Quality); Sections (§§) 4321 et seq. Available online: http://uscode.house.gov

50 Code of Federal Regulations (CFR) § 13.21. Title 50 - Wildlife and Fisheries; Chapter I - United States Fish and Wildlife Service, Department of the Interior; Subchapter B - Taking, Possession, Transportation, Sale, Purchase, Barter, Exportation, and Importation of Wildlife and Plants; Part 13 - General Permit Procedures; Section (§) 13.21 – Issuance of permits. Available online: https://www.ecfr.gov

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Appendix A. Results of the golden eagle local area population (LAP) analysis for the San José Wastewater Facility Headworks Improvements Project

Focal Project: San José Wastewater Facility Headworks Improvements Project

Predicted eagle take (annual)	**0.59**

Local Area Population (LAP) Estimates by Local Area Density Unit (LADU):

Focal Project_Density Unit	Estimated Number of Eagles
SanJoseWastewaterHeadworks _COASTAL_CALIFORNIA	187.61
SanJoseWastewaterHeadworks_NORTHERN_PACIFIC_RAINFOREST	0.47
SanJoseWastewaterHeadworks_SIERRA_NEVADA	1.62
San José Wastewater Headworks LAP (total)	**189.7**

1% LAP Benchmark	**1.9**
5% LAP Benchmark	**9.48**

Permitted Projects with Overlapping LAPs:

Project ID	Estimated Annual Take	Percent Overlap With Focal Project	Overlapping Area (SqMi)	Overlapping Take
Project 02735B	2.4	67.26%	19312.62	1.61
Project 23857D	1.18	25.70%	7442.42	0.3
All Projects (total)	**3.58**			**1.19**

Known Unpermitted Take Summary	
Cause of take	**# eagles from 2011-2020**
Unknown	50
Electrocution;Poisoned (pesticide)	2
Other	4
Trauma	6
Collision with wind turbine;Infection	1
Poisoned (lead);Infection	0
Electrocution	24
Collision with wind turbine	55
Collision with wind turbine;Poisoned (pesticide)	2
Other;Trauma	1
Collision with wire	2

Collision with vehicle;Poisoned (pesticide)	1
Poisoned (lead)	10
Infection;Trauma	1
Electrocution;Trauma	0
Poisoned (pesticide);Starvation	1
Poisoned (pesticide);Infection;Starvation	1
Collision with vehicle	7
Trauma;Starvation	1
Collision/electrocution	1
Poisoned (pesticide)	1
10-year total	**171**
10-year annual average	**17.1**

LAP Take Results	**Number of Eagles (Annual)**	**Percent of LAP**
Permitted Take		
Total Overlapping Take	1.91	1.01%
Focal Project Predicted Take	0.59	0.31%
Total Permitted Take (Focal Project + Total Overlapping Take)	2.5	1.32%
Unpermitted Take	17.1	9.01%

ENVIRONMENTAL SERVICES NEWS

SAN JOSÉ – SANTA CLARA REGIONAL WASTEWATER FACILITY CONSTRUCTION GIVES WIDE BERTH TO GOLDEN EAGLES

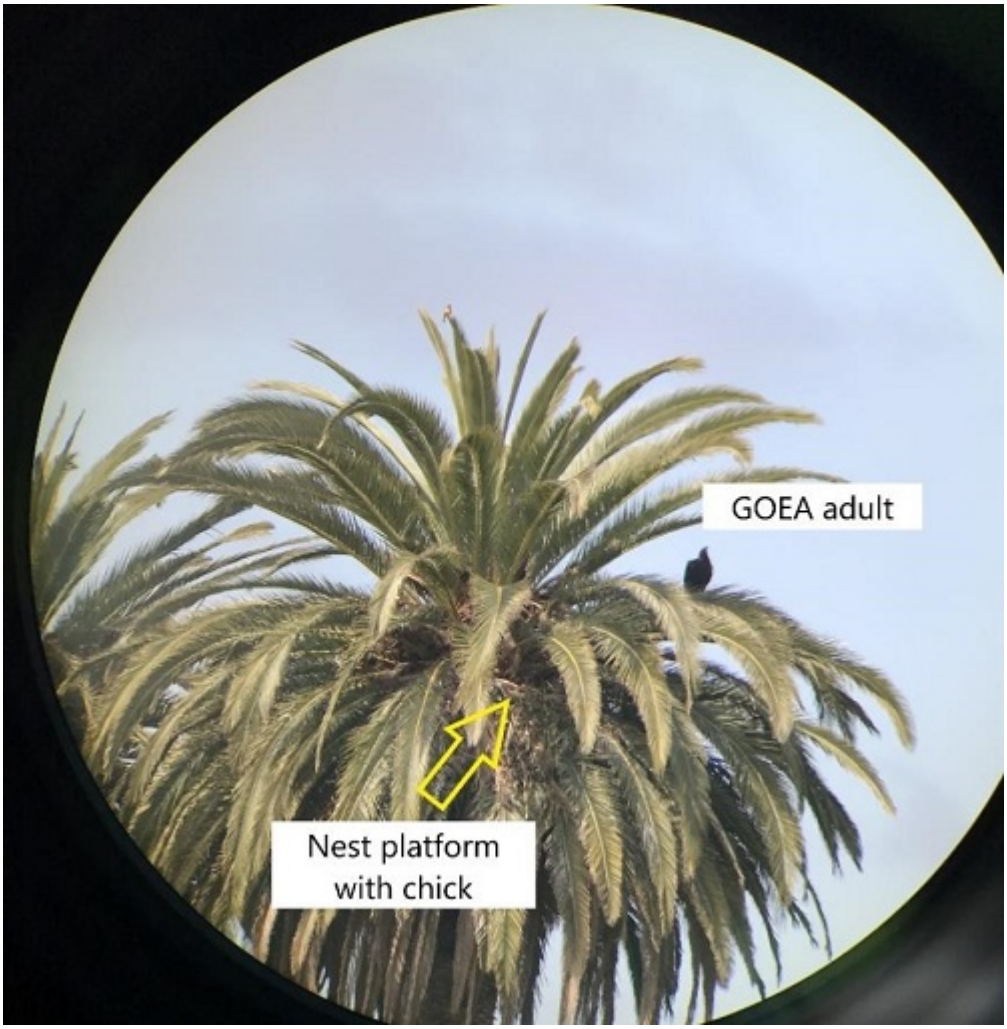
Post Date: 01/13/2021 8:00 AM

The San José-Santa Clara Regional Wastewater Facility (RWF) sits on 2,600 of acres, the size twice as big as Golden Gate Park. Its bufferlands are home to an abundance of wildlife including burrowing owls, migratory birds, steelhead and longfin smelt, and sturgeon, among other creatures.

The RWF serves 1.4 million residents and treats an average of 110 million gallons of wastewater per day from eight cities. ESD is ensuring this critical infrastructure continues to work for decades to come by addressing this need through its Capital Improvement Program (CIP), rebuilding infrastructure worn from more than 60 years of nonstop service, and updating treatment processes with exciting new technologies. The CIP plans, designs, and constructs projects recommended by the 2013 Plant Master Plan, which envisioned $2 billion in Facility investments over a 30-year span; the largest public works project in the San Francisco South Bay. The first phase is a 10-year CIP with $1.4 billion of improvements, which started in July 2014.

But with wildlife so close by, the CIP team has been careful to ensure their projects don't impact the birds nearby. When the Headworks Improvement and New Headworks project broke ground on June 1, 2020, the CIP team discovered a set of golden eagles and a three-week old eaglet nesting in a nearby palm tree. Golden eagles are one of the largest birds in North America, with dark brown feathers and a golden sheen on the back of their heads and necks. The birds are listed as a protected species in California and by federal law.

With their nesting tree within a thousand feet of the construction area at the regional wastewater facility, the CIP team worked closely with Environmental Science Associates (ESA), the City of San José's environmental consultant, to create a Golden Eagle Nest Avoidance Plan. The plan included establishing a no-disturbance fence, a buffer zone around the project area to prevent the eaglet from entering the construction area, monitoring by a biologist for three days prior to the start of construction. This helped to establish a baseline behavior of the young bird, as well as daily monitoring for two weeks after post-fledgling to observe any changes in adult behavior that would compromise the nest. The plan was submitted and approved by the California Department of Fish and Wildlife as well as the U.S. Fish and Wildlife Service for approval.



The biologist did not observe any change in behavior. Throughout the summer, the golden eagle adults and the eaglet were frequently observed perched in the understory of the palm tree or flying around the RWF bufferlands, a sign that the eaglet successfully fledged and that the Headworks construction activity did not perturb the eagles in any way. This type of sensitivity while working on a major public works project is indicative of the commitment that the CIP team has in protecting the environment and wildlife.

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U.S. Fish and Wildlife Service
California - Great Basin Region
Migratory Birds Program

Recommended Buffer Zones for Ground-based Human Activities around Nesting Sites of Golden Eagles in California and Nevada

May 2021

For most ground-based human activities, we recommend a one-mile no-disturbance buffer surrounding golden eagle nesting sites in California and Nevada; see table below for specifics on activity and buffer recommendations. Recommended buffers may increase or decrease, depending on specific site or activity circumstances. Buffers may be reduced in consultation with the U.S Fish and Wildlife Service (Service) when the nest is not in use or activities are not in line-of-sight of the nest[a]. In parts of California, eagles maintain year-round territories that may require additional protection. We recommend consultation with the Service for determining buffer zones for high intensity or long duration activities, unique circumstances, activities not listed in the table below, or when historic levels of human activity are a consideration.

Activity	Recommended No-Disturbance Buffer
Use of Motorized Vehicles off-road and on water: Including, but not limited to, passenger vehicles, all-terrain vehicles, dirt bikes, and snowmobiles. Any passenger vehicle driving on dirt or gravel roads that are not part of a routinely used transportation corridor. Also includes motorized boating activities.	1 mile
Pedestrian and Non-Motorized Activity[b]: Including, but not limited to, walking, running, hiking, biking, camping, rock climbing, bird watching, fishing, hunting, horseback riding, canoeing, kayaking, and biological surveys[c].	1 mile
Developed Sites: Including, but not limited to, facilities, developed campground sites, and designated snowmobile and off-road vehicle courses.	1 mile
Industrial, Municipal, and Construction Activity: Including, but not limited to, urbanization; mining; oil and gas development; solar development; logging; power line construction; road construction & maintenance; facilities construction; and agricultural operations.	1 mile
Blasting and other loud non-regular noise: Including, but not limited to, detonation devices, fireworks classified by the Federal Department of Transportation as Class B explosives, recreational shooting, and outdoor concerts.	2 miles

[a] An *in-use nest* is defined as a "golden eagle nest characterized by the presence of one of more eggs, dependent young, or adult eagles on the nest in the past 10 days during the breeding season" (50 CFR 22.3) and "(b)reeding begins…with the start of courtship…" (*Programmatic Environmental Impact Statement for the Eagle Rule Revision*, United States Department of the Interior, Fish and Wildlife Service, December 2016).

[b] Many existing nest sites experience some level of intermittent and on-going low levels of disturbance from these types of human activities, and the resident pair of eagles may have acclimated to these existing levels of disturbance. However, increases in human activity may not be tolerated by nesting eagles.

[c] Qualified biologists conducting ground-based eagle monitoring may follow distance recommendations in Pagel et al (2010).