



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



October 30, 2020

Governor's Office of Planning & Research

Oct 30 2020

STATE CLEARINGHOUSE

Mr. Fred Buderer, Acting Community Development Director
City of Vacaville
650 Merchant Street
Vacaville, CA 95688
fred.buderer@cityofvacaville.com

Subject: City of Vacaville Recycled Water Project, Mitigated Negative Declaration,
SCH No. 2020100113, Solano County

Dear Mr. Buderer:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration (MND) from City of Vacaville (City) for the City of Vacaville Recycled Water Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

CDFW is submitting comments on the MND to inform the City, as the Lead Agency, of our concerns regarding potentially significant impacts to sensitive resources associated with the proposed project.

CDFW ROLE

CDFW is a Trustee Agency with responsibility under CEQA (Pub. Resources Code, § 21000 et seq.) pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a Responsible Agency if a project would require discretionary approval, such as a California Endangered Species Act (CESA) Incidental Take Permit (ITP), a Lake or Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

REGULATORY REQUIREMENTS

California Endangered Species Act

Please be advised that a CESA ITP must be obtained if the Project has the potential to result in take² of plants or animals listed under CESA such as giant garter snake (*Thamnophis gigas*), tricolored blackbird (*Agelaius tricolor*), California tiger salamander

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

² Take is defined in Fish and Game Code section 86 as hunt, pursue, catch, capture, or kill, or attempt any of those activities.

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(*Ambystoma californiense*), or Swainson's hawk (*Buteo swainsoni*), either during construction or over the life of the Project. Issuance of a CESA ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain a CESA ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c), 21083; CEQA Guidelines, §§ 15380, 15064, and 15065). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Lake and Streambed Alteration Agreement

CDFW requires an LSA Notification, pursuant to Fish and Game Code section 1600 et. seq., for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that may substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. Work within ephemeral streams, washes, watercourses with a subsurface flow, and floodplains are subject to notification requirements.

CDFW considers trenchless, subsurface construction work below streams, including horizontal directional drilling, as potentially substantial changes to the stream. The City should notify CDFW for this type of work pursuant to Fish and Game Code section 1602. CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or ITP) until it has complied with CEQA as a Responsible Agency. As such, the MND should include CDFW as a Responsible Agency in section 2.5, Table 2-4, page 2-9.

Migratory Birds and Raptors

CDFW also has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include sections 3503, 3503.5, and 3513. Fully protected species, such as white-tailed kite (*Elanus leucurus*) may not be taken or possessed at any time (Fish and Game Code, § 3511). Migratory birds are also protected under the federal Migratory Bird Treaty Act.

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PROJECT DESCRIPTION SUMMARY

Proponent: City of Vacaville

Objective: The objective of the Project is to increase local use of recycled water through agriculture irrigation, urban irrigation, and industrial reuse. The Project will provide approximately 2,830 acre-feet of tertiary treated recycled water from the Easterly Wastewater Treatment Plant (WWTP) for these purposes. Project components include installing 9 miles of new recycled water distribution pipelines; constructing new diversion structure, wet well, 2.5 million gallon water storage tank, pump station, and water truck filling station at the Easterly WWTP; and constructing new off-site recycled water storage tank and booster pump station. Primary Project activities include trenching, cut and cover construction techniques to install pipelines, trenchless technology including horizontal directional drilling to install pipes beneath drainages, excavating, grading, and paving.

Location: The Project takes place in the eastern portion of the City of Vacaville, in Solano County. The Project is bounded by Hay Road to the south, Midway Road to the north, highway 505 to the northwest, Nut Tree Road to the west, and Lewis Road to the east. Much of the Project activities will take place at the Easterly WWTP located at 6040 Vaca Station Road, Vacaville, CA 95687, just southeast of the unincorporated Community of Elmira. The approximate Project centroid is at Latitude 38.35369°, Longitude -122.91647°.

Timeframe: The Project will be completed in phases over an approximately 2-year period. The Project is expected to begin the summer of 2021 and be complete by 2023.

ENVIRONMENTAL SETTING

The Project area is a mix of agricultural fields, residential properties, and commercially developed land. Ulatis Creek, Old Alamo Creek, and New Alamo Creek flow from west to east across the Project area and contain some riparian habitat. Old Alamo Creek has received treated wastewater effluent from the Easterly WWTP since 1959. Currently, Easterly WWTP discharges 7.5 million gallons per day (approximately 12 cubic feet per second) into Old Alamo Creek. Upstream of the Easterly WWTP, the majority of the natural flow of Old Alamo Creek was diverted into a flood control channel called New Alamo Creek in the early 1960s. Since that time, Old Alamo Creek is typically dry during the summer except for discharge of effluent from Easterly WWTP. Habitat within the Project Area includes non-native grassland, Himalayan blackberry (*Rubus armeniacus*), sunflower fields and other agriculture fields, disturbed developed areas including parking lots and roads, roadside ditches, and riparian corridors. Ground squirrels occupy the southwestern portion of the Project area and may be present elsewhere. Special-status species with the potential to occur in the Project area include, but are not limited to,

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Swainson's hawk, California tiger salamander, giant garter snake, tricolored blackbird, burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), western pond turtle (*Emys marmorata*), foothill yellow-legged frog (*Rana boylei*), California red-legged frog (*Rana draytonii*), and Contra Costa goldfields (*Lasthenia conjugens*).

COMMENTS AND RECOMMENDATIONS

CDFW offers the 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 and wildlife (biological) resources.

Flow Reduction in Old Alamo Creek

The MND identifies that approximately 2.5 million gallons per day (mgd) will be diverted from entering Old Alamo Creek in order to reuse the effluent as irrigation; this is also identified as a 34% reduction in the amount of flow that will enter Old Alamo Creek from Easterly WWTP (pages 3-36 and 3-56). As the main source of water to the downstream reach of Old Alamo Creek, a reduction could have potentially significant impacts to downstream fish and wildlife. This includes western pond turtle, a California species of special concern, and other aquatic organisms that may use the reach as habitat. The MND discusses the reduction in flow as a beneficial impact by reducing the pollutants associated with wastewater effluent that enter Old Alamo Creek and flow downstream (page 3-36). The MND does not adequately assess or address potential downstream impacts from the reduction in the amount of water in the system. CDFW recommends that the MND include an assessment of biological resources downstream of the Easterly WWTP and identify whether flow reductions would significantly impact these downstream resources. If impacts are potentially significant, additional mitigation measures including minimum flow releases should be identified.

Swainson's Hawk

The MND identifies that Swainson's hawk protocol surveys prior to Project activities, relying instead on the generic pre-hawk, listed as threatened pursuant to CESA, may occur within the Project area (Table 6, page 3-16 and Appendix B). Suitable nesting trees exist in the riparian areas near the Project area, and the farmland and grassland within the Project area provide suitable foraging habitat. In addition, there are California Natural Diversity Database (CNDDDB) occurrences of Swainson's hawk near the Project area (page 3-13). The MND does not require Swainson's construction nesting bird surveys identified in Mitigation Measure BIO-1. This measure requires nesting bird surveys to occur within the Project area and the 250 feet surrounding the Project area. It also requires these surveys within 10 days before commencing Project activities. Mitigation Measure BIO-1 does not provide adequate survey techniques to effectively identify nesting Swainson's hawk in and near the Project area. Surveys should be

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conducted up to a half-mile radius around the Project area and surveys should be completed for at least the two survey periods immediately prior to Project commencement, requiring multiple site visits potentially spanning four months. The breeding population of Swainson's hawks in California is estimated to have declined by 91% since 1900 and the species continues to be threatened by on-going and cumulative loss of foraging habitat (CDFW 2016). The proposed Mitigation Measure BIO-1 has a high probability of failing to detect nesting Swainson's hawks that could be disturbed by Project activities, leading to a potentially significant impact to Swainson's hawk through nest abandonment or reduced health and vigor of young. To reduce impacts to less-than-significant, CDFW recommends including the following Mitigation Measure:

Mitigation Measure BIO-6: Swainson's Hawk Surveys

If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to September 15), prior to beginning work on this Project, a qualified biologist shall survey for Swainson's hawk nesting activity. The qualified biologist shall conduct surveys according to the Recommended timing and methodology for Swainson's Hawk Nesting Surveys in California's Central Valley³. Survey methods should be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys will be conducted: 1) within a minimum 0.5-mile radius of the Project site or a larger area if needed to identify potentially impacted active nests, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys will occur annually for the duration of the Project. The qualified biologist should have a minimum of two years of experience implementing the survey methodology resulting in detections. If active Swainson's hawk nests are detected, the Project shall implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist. For a reduced buffer, the Project shall consult with CDFW and provide rationale that considers visual and auditory disturbances. If take of Swainson's hawk cannot be avoided, the Project will consult with CDFW pursuant to CESA and obtain an Incidental Take Permit. CDFW Bay Delta Region staff is available to provide guidance on the Incidental Take Permit application process.

California Tiger Salamander

The MND states that California tiger salamanders (CTS), listed as threatened pursuant to CESA and the federal Endangered Species Act (ESA), are unlikely to occur in the Project area due to limited grassland habitat (Table 6, page 3-17 and Appendix B).

³ Swainson's Hawk Technical Advisory Committee, 2000.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline>

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However, the MND also states that northern vernal pools have a moderate potential to occur in the Project area (Table 6, page 3-15 and Appendix B) and that non-native grassland occupied by ground squirrels is present (Appendix B, page 21). CTS rely on vernal pools for breeding and upland grassland with burrows for the rest of their life cycle. CNDDDB documents that CTS occur approximately three miles to the southeast of the southern edge of the Project area. CTS in Solano County continue to be threatened by habitat loss and fragmentation, and potential take of individuals could significantly impact the population (U.S. Fish and Wildlife Service (USFWS) 2017). Project activities including trenching and grading have the potential to incidentally take CTS, a potentially significant impact. To reduce impacts to less-than-significant, CDFW recommends surveying the Project site for CTS habitat prior to ground disturbing activities. If habitat occurs on-site, the City should consult with USFWS pursuant to the federal ESA and CDFW pursuant CESA, as an ITP is warranted. CDFW Bay Delta Region staff is available to provide guidance on the ITP application process.

Burrowing Owl

The MND identifies that burrowing owl, a California Species of Special Concern, has a moderate likelihood of occurring within the Project area (Table 6, page 3-16 and Appendix B). There are documented occurrences of burrowing owl within one mile of the Project area according to CNDDDB and potentially suitable grassland habitat occurs within the site. The MND does not require burrowing owl protocol surveys prior to Project activities, relying instead on the generic pre-construction nesting bird surveys identified in Mitigation Measure BIO-1. As noted above, this measure requires nesting bird surveys to occur within the Project area and the 250 feet surrounding the Project area. It also requires these surveys within 10 days before commencing Project activities. Mitigation Measure BIO-1 does not provide adequate survey techniques to effectively identify nesting or roosting burrowing owls in and near the Project area. In accordance with CDFW's *Staff Report on Burrowing Owl Mitigation, Appendix C: Habitat Assessment and Reporting Details*⁴ (CDFW 2012 Staff Report), owls may be disturbed up to 1,640 feet (500 meters) from a project. Therefore, the buffer area surveyed should be increased commensurate with the type of disturbance anticipated as outlined in the CDFW 2012 Staff Report, and should include burrow surrogates such as culverts, piles of concrete or rubble, and other non-natural features, in addition to burrows and mounds. Due to the probability of missing burrowing owls on or adjacent to the Project area under the proposed survey methodology, the Project could result in burrowing owl nest abandonment, loss of young, reduced health and vigor of owlets, or injury or mortality of adults. Burrowing owls are a California Species of Special Concern due to population decline and breeding range retraction. Based on the above, the

⁴ Department of Fish and Wildlife (then Fish and Game), 2012.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline>

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Project may potentially significantly impact burrowing owls. To reduce impacts to less-than-significant CDFW recommends the following Mitigation Measures:

Mitigation Measure BIO-7: Burrowing Owl Habitat Assessment, Surveys, and Avoidance

Prior to Project activities, a habitat assessment shall be performed following Appendix C: Habitat Assessment and Reporting Details of the CDFW Staff Report on Burrowing Owl Mitigation. The habitat assessment will extend at least 150 meters from the Project area boundary and include burrows and burrow surrogates. If the habitat assessment identifies potentially suitable burrowing owl habitat, then a qualified biologist shall conduct surveys following the CDFW Staff Report on Burrowing Owl Mitigation survey methodology. Surveys will encompass the Project area and a sufficient buffer zone to detect owls nearby that may be impacted. Time lapses between surveys or Project activities will trigger subsequent surveys including but not limited to a final survey within 24 hours prior to ground disturbance. The qualified biologist will have a minimum of two years of experience implementing the CDFW survey methodology resulting in detections. Detected nesting burrowing owls will be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report and any passive relocation plan for non-nesting owls will be subject to CDFW review.

Please be advised that CDFW does not consider exclusion of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a “take” avoidance, minimization, or mitigation measure for the reasons outlined below. Therefore, to mitigate the impacts of potentially evicting burrowing owls to less-than-significant, Mitigation Measure BIO-8 outlined below should require habitat compensation with the acreage amount identified in any eviction plan. The long-term demographic consequences of exclusion techniques have not been thoroughly evaluated, and the survival rate of excluded owls is unknown. Burrowing owls are dependent on burrows at all times of the year for survival or reproduction, therefore eviction from nesting, roosting, overwintering, and satellite burrows or other sheltering features may lead to indirect impacts or “take” which is prohibited under Fish and Game Code section 3503.5. All possible avoidance and minimization measures should be considered before temporary or permanent exclusion and closure of burrows is implemented to avoid “take.”

Mitigation Measure BIO-8: Burrowing Owl Habitat Preservation

If the Project would impact an unoccupied active burrowing owl burrow or burrow surrogate (i.e., a burrow used in the past 3 years for nesting or a burrow where a non-nesting owl would be evicted as described above), the following habitat preservation will be implemented prior to Project construction:

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Impacts to each nesting site will be mitigated by permanent preservation of two occupied nesting sites with appropriate foraging habitat within Solano County, through a conservation easement and provision of an endowment for long term management.

Impacts to burrowing owl roosting, overwintering, and foraging habitat will be mitigated by permanent preservation of off-site habitat occupied by burrowing owl at a 2:1 mitigation to impact ratio, through a conservation easement and provision of an endowment for long-term management. The CDFW 2012 Staff Report states, “current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal...”

The Project may implement alternative methods for preserving habitat with written acceptance from CDFW. Finding suitable habitat to preserve as described above may be infeasible, and in this case impacts to burrowing owl as described above will be fully avoided in order to avoid potentially significant impacts.

Tricolored Blackbird

The MND recognizes that tricolored blackbird has a “moderate” potential of occurring within the Project area. The MND also identifies tricolored blackbird as a species of special concern (Table 6, page 3-16 and Appendix B). Please revise the status of Tricolored blackbird to reflect that it is now **listed as threatened pursuant to CESA** [Cal. Code Regs. §670.5 (b)(5)(H)]. The statewide tricolored blackbird population has declined between 75% and 90% over the last 25 years and remains at or near its smallest recorded size (CDFW 2018). Project activities that occur between February 15 and August 31 could disturb nesting tricolored blackbirds leading to reduced nest success, a potentially significant impact. The MND proposed to rely on generic pre-construction nesting bird surveys identified in Mitigation Measure BIO-1 to identify and avoid impacts to nesting tricolored blackbirds. This measure requires nesting bird surveys to occur within the Project area and the 250 feet surrounding the Project area and identifies that “raptor or special-status species nests shall be protected by a buffer with a minimum radius of 200 feet” (page 3-12). To reduce impacts to less-than-significant, CDFW recommends implementing a 300-foot no-disturbance buffer around identified nesting colonies (CDFW 2015). If colonies are identified in the Project area, CDFW should be immediately notified. Consultation pursuant to CESA is warranted if the Project could lead to incidental take of tricolored blackbirds.

Special-Status Plants

The MND identifies a list of special-status plants with potential to occur in the area, but presumes no significant impact to special-status plants based on a single site visit on July 25, 2019 (Appendix B pages 24 and 34). While the majority of the habitat in the

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Project area is disturbed or managed, without appropriately timed botanical surveys one cannot conclude that no special-status plants are present. Without strong evidence of absence, the Project has the potential to crush and kill special-status plants and could significantly impact special-status plants on-site or those that could be indirectly impacted by the Project through, for example, changes in hydrology or introduction of invasive species. To reduce impacts to less-than-significant, CDFW recommends the following Mitigation Measure:

Mitigation Measure BIO-9: Special-Status Plant Surveys

A qualified biologist will conduct surveys during the appropriate blooming period for all special-status plants that have the potential to occur on the Project site the season prior to the start of construction. Surveys will be conducted following Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities⁵. If special-status plants are found during surveys, the Project will be re-designed to avoid impacts to special-status plants. If special-status plants listed as threatened or endangered under the federal ESA, such as Contra Costa goldfields, are discovered in the Project area the City will consult with USFWS prior to commencing Project activities. If impacts to any special-status plants cannot be avoided completely during construction, the Project will provide compensatory mitigation including off-site habitat preservation or another method accepted in writing by CDFW. The qualified biologist will be knowledgeable about plant taxonomy, familiar with plants of the region, and have experience conducting botanical field surveys according to vetted protocols.

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 CNDDDB. The CNDDDB field survey form, online field survey form, and contact information for CNDDDB staff can be found at the following link: <https://wildlife.ca.gov/data/CNDDDB/submitting-data>.

FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be

⁵ Department of Fish and Wildlife, 2018. <https://www.wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants>

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operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish and Game Code, § 711.4; Pub. Resources Code, § 21089).

CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Ms. Amanda Culpepper, Environmental Scientist, at amanda.culpepper@wildlife.ca.gov, or Ms. Karen Weiss, Senior Environmental Scientist (Supervisory), at karen.weiss@wildlife.ca.gov.

Sincerely,

DocuSigned by:

BE74D4C93C604EA...
Gregg Erickson
Regional Manager
Bay Delta Region

cc: State Clearinghouse

REFERENCES

- CDFW. 2015. California Department of Fish and Wildlife (Department) Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. State of California Natural Resources Agency, Sacramento, CA. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=99310&inline>
- CDFW. 2016. Status Review: Swainson's Hawk (*Buteo swainsoni*) in California, Reported to the California Fish and Game Commission, Five-year Status Report. State of California Natural Resources Agency, Sacramento, CA. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=133622&inline>
- CDFW. 2018. Report to the Fish and Game Commission: A Status Review of the Tricolored Blackbird (*Agelaius tricolor*) in California. State of California Natural Resources Agency, Sacramento, CA. <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=154287&inline>
- USFWS. 2017. Recovery Plan for the Central California Distinct Population Segment of the California Tiger Salamander (*Ambystoma californiense*). U.S. Fish and Wildlife Service, Pacific Southwest Region, Sacramento, California. https://www.fws.gov/sacramento/outreach/2017/06-14/docs/Signed_Central_CTS_Recovery_Plan.pdf