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December 1, 2020

Governor's Office of Planning & Research

Dec 02 2020

Ms. Nancy McWilliams, Senior Civil Engineer
Solano Irrigation District
810 Vaca Valley Parkway, Suite 201
Vacaville, CA 95688
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STATE CLEARINGHOUSE

Subject: Farrell Road and Gibson Canyon Road Intersection Improvements Project,
Mitigated Negative Declaration, SCH No. 2020110179, Solano County

Dear Ms. McWilliams:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt a Mitigated Negative Declaration (MND) from Solano Irrigation District (District) for the Farrell Road and Gibson Canyon Road Intersection Improvements Project (Project) pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.¹

CDFW is submitting comments on the MND to inform the District, 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 and 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 Swainson's hawk (*Buteo*

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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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 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.

As noted in the MND, the Project will impact a drainage that falls under CDFW's 1600 authority and will notify CDFW pursuant to Fish and Game Code section 1602 (page 14 and Mitigation Measure BIO-4). CDFW will consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement (or an ITP) until it has complied with CEQA as a Responsible Agency.

Migratory Birds and Raptors

CDFW also has authority 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.

PROJECT DESCRIPTION SUMMARY

Proponent: Solano Irrigation District

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Objective: The Project will relocate existing pipelines at the intersection of Gibson Canyon Road and Farrell Road in unincorporated Solano County. A 27-inch diameter concrete cylinder transmission pipeline will be relocated approximately 80 feet south of the intersection; a 10-inch diameter water main that crosses Gibson Canyon Road just north of the intersection will be relocated either 50 feet north or 100 feet south of the intersection; and two 4-inch water mains may be relocated approximately 10 feet west along Gibson Canyon Road. Primary Project activities include trenching, including trenching through a drainage, cut and cover construction techniques to relocate pipelines, excavating, and grading.

Location: The Project takes place in unincorporated Solano County immediately west of the City of Vacaville. The Project is located at the intersection of Farrell Road and Gibson Canyon Road, north of Ulatis Creek. The approximate Project centroid is at Latitude 38.3792°, Longitude -121.99824°.

Timeframe: The Project will take approximately 30 days to complete.

ENVIRONMENTAL SETTING

The Project area is dominated by urban roadway, grassland, and farmland. Ground-disturbing activities will impact less than one acre of land, including at least 0.15 acres of the ephemeral drainage ditch. The ephemeral drainage on site connects to an unnamed tributary of Ulatis Creek. Habitat within the Project area includes non-native grassland, disturbed developed areas including roads, and a roadside drainage. A nearby riparian corridor and scattered trees near the Project area provide potential nesting habitat for raptors. Special-status species with the potential to occur in the Project area include, but are not limited to, Swainson's hawk (*Buteo swainsoni*) (CESA Threatened), burrowing owl (*Athene cunicularia*), white-tailed kite (*Elanus leucurus*), and Keck's checkerbloom (*Sidalcea keckii*).

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the District in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Project Description and Identified Impacts

The MND identifies four pipelines that will be relocated: one 27-inch concrete cylinder transmission pipeline, two 4-inch water mains, and one 10-inch water main (page i and viii). The Project work is further described in Figure 3, Project Features, which depicts the existing and planned pipe placement overlaid on aerial imagery of the Project area (page vii). However, the 10-inch pipe is not included in Figure 3, so it is not clear where that portion of the Project will occur. In addition, the 10-inch pipeline may be relocated in

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one of two different alignments. Neither of these alignments is portrayed in Figure 3, nor are these options discussed in terms of potential impacts to the environment. It is not clear how the ultimate alignment will be decided or whether one alignment may be more environmentally protective than the other. Then, on page 14 of the MND, a “proposed 8-inch pipeline” is referenced along with trench dimensions, but this 8-inch diameter pipe is not included in the Project description. Due to these conflicting and missing items, the Project description is unclear, making the potential impacts unclear. CDFW recommends clarifying the Project description with all pipe dimensions and proposed locations. Potential impacts from all potential pipe alignments should be analyzed and reduced to less than significant. Please also be advised that CDFW will require a detailed Project description for the LSA Notification, including pipe dimensions (length and diameter), pipe material, trench dimensions, and area of ground disturbance.

Environmental Setting and Identified Impacts

The MND identifies only the Portion of the Project area that is south of Farrell Road and west of Gibson Canyon Road as having aquatic features (page 12, Figure 4). However, a review of aerial imagery, topographic maps, and other resources shows that aquatic features likely exist to the north of Farrell Road and to the west and east of Gibson Canyon Road (see Attachment). CDFW recommends providing further documentation as to why these areas were precluded from the aquatic feature map. These features would likely be subject to CDFW’s 1600 authority and should be clearly identified. Potential impacts to these features also need to be further clarified, identified, and appropriately minimized, avoided, and mitigated.

Cumulative Impacts and Associated Future Project

The MND describes the Project as a necessary precursor to future intersection improvements that will be conducted by Solano County (page i and viii). This future project will have impacts in the same footprint as the proposed Project. The MND should provide further details regarding this future, related work, especially if the road improvement work is anticipated to occur soon after the Project. If this is the case, then mitigation implemented by the Project, such as seeding and re-contouring the drainage after pipe installation, could almost immediately be impacted by the road work activities, practically voiding the mitigation. The MND should include additional details about associated projects and address the cumulative impacts of all activities by proposing alternative mitigation if necessary.

Swainson’s Hawk

The MND identifies that Swainson’s hawk, listed as threatened pursuant to CESA, may occur within the Project area (page 13, Appendix A). Suitable nesting trees exist in the riparian areas near the Project area, and the farmland and grassland within the Project

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area provide suitable foraging habitat. In addition, there are California Natural Diversity Database (CNDDDB) occurrences of Swainson's hawk near the Project area (page 13). The MND does not require Swainson's hawk protocol-level surveys, relying instead on the pre-construction nesting bird surveys identified in Mitigation Measure (MM) BIO-2. This measure requires nesting bird surveys to occur within the Project area and the 50 feet surrounding the Project area. It also requires these surveys within 15 days before commencing Project activities. MM BIO-2 does not provide adequate survey techniques to effectively identify nesting Swainson's hawk in and near the Project area. Surveys should be 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 MM BIO-2 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-9: 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 Valley*³. 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 shall 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 shall 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

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

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considers visual and auditory disturbances. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.

CDFW Bay Delta Region staff is available to provide guidance on the ITP application process.

Burrowing Owl

The MND does not identify that burrowing owl, a California Species of Special Concern, may occur within the Project area (page 11). The MND Appendix A CNDDDB quad-search results include burrowing owl, but the biological resources section of the MND states "the 2 special-status species that have the potential to be present" include Swainson's hawk and white-tailed kite. The only explanation for excluding burrowing owl as potentially present in the Project area comes from a single-day reconnaissance level-survey on July 23, 2020. There are documented occurrences of burrowing owl approximately two miles east of the Project area according to the CNDDDB, and potentially suitable grassland habitat occurs within the site. The California Wildlife Habitat Relationships predicted habitat suitability model identifies the Project area is highly suitable habitat for burrowing owl (CDFW 2014). Similarly, the California Bay Area Linkage Network identifies the habitat surrounding the Project area as a core area capable of sustaining at least 50 burrowing owls (Penrod et al. 2013). 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 MM BIO-2. As noted above, this measure requires nesting bird surveys to occur within the Project area and the 50 feet surrounding the Project area. It also requires these surveys within 15 days before commencing Project activities, if Project activities will occur during the nesting season. MM BIO-2 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 Project may

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

Mitigation Measure BIO-10: 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 2012 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 2012 Staff Report on Burrowing Owl Mitigation survey methodology. Surveys shall 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-11 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-11: 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.

Special-status Plants

The MND identifies a list of special-status plants with potential to occur in the area in Appendix A, but presumes no significant impact to special-status plants based on a single site visit on July 23, 2020 (page 11). While the majority of the habitat in the 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-12: 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 Communities*⁵. 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 Endangered Species Act, such as Keck’s checkerbloom, are discovered in the Project area the District shall consult with U.S. Fish and Wildlife Service prior to commencing Project activities. If impacts to any

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

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special-status plants cannot be avoided completely during construction, the Project will provide compensatory mitigation including offsite 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.

Pre-Construction Nesting Bird Surveys

The MND identifies that Project activities may disturb nesting birds (page 13). The MND includes MM BIO-2, which requires nesting bird surveys prior to the commencement of Project activities, if activities will take place during the nesting bird season (page 15). MM BIO-2 specifies that “the nesting surveys should be conducted within 15 days before the initiation of construction activities.” The potential 15-day delay between nesting bird surveys and construction activities could allow for nesting birds to go undetected. Project activities could then impact nesting birds, a potentially significant impact. To reduce impacts to less-than-significant, CDFW recommends that pre-construction nesting bird surveys occur no more than seven days prior to commencement of activities.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special-status species and natural communities detected during Project surveys to the 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 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 District in identifying and mitigating Project impacts on biological resources.

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Questions regarding this letter or further coordination should be directed to Ms. Amanda Culpepper, Environmental Scientist, at amanda.culpepper@wildlife.ca.gov; or Mr. James Hansen, Acting Senior Environmental Scientist (Supervisory), at james.hanse@wildlife.ca.gov.

Sincerely,

DocuSigned by:

BE74D4C93C604EA...
Gregg Erickson
Regional Manager
Bay Delta Region

Attachment

cc: State Clearinghouse

REFERENCES

- CDFW. 2014. California Interagency Wildlife Task Group. CWHR version 9.0 personal computer program. Sacramento, CA. <https://wildlife.ca.gov/Data/CWHR>
- 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>
- Penrod, K., P.E. Garding, C. Paulman, P. Beier, S. Weiss, N. Schaefer, R. Branciforte, and K. Gaffney. 2013. Critical Linkages: Bay Area & Beyond. Produced by Science & Collaboration for Connected Wildlands, Fair Oaks, CA in collaboration with the Bay Area Open Space Council's Conservation Lands Network. https://www.bayarealands.org/?crb_render_featured_project=yes&crb_popup_in dex=30

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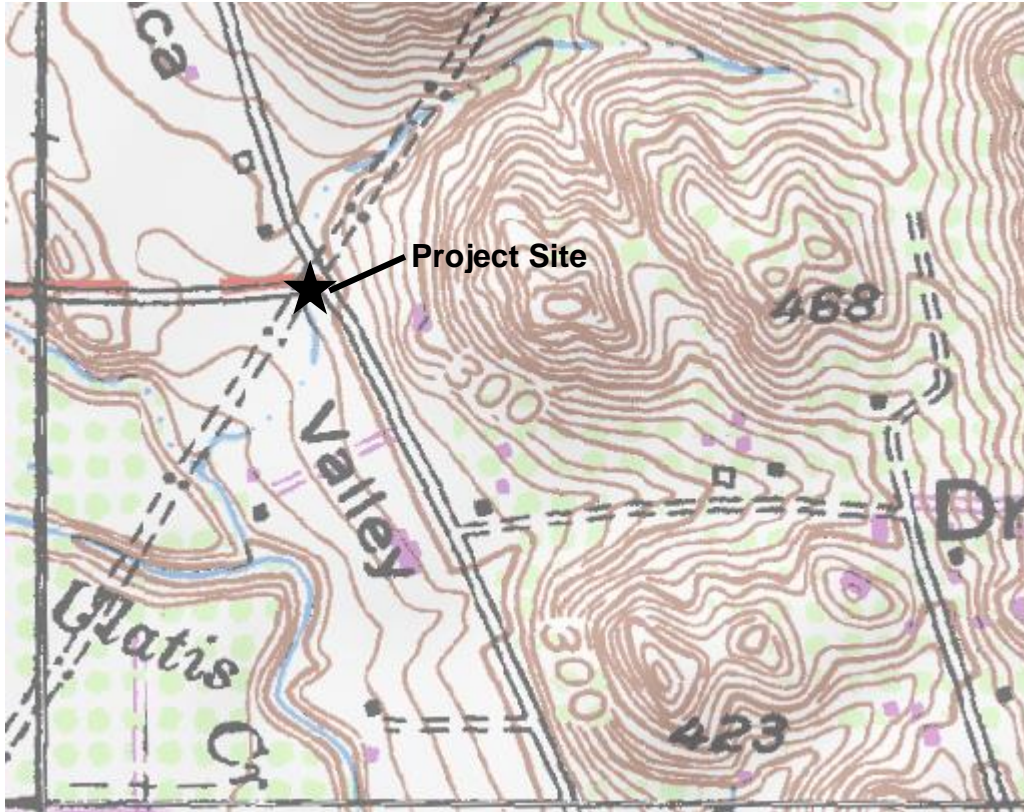


Figure 1. Topographic map showing an ephemeral stream that begins east of Gibson Canyon Road and north of Farrell Road and then travels south and west to Ulatis Creek (BIOS Topographic Hillshade Basemap, <https://apps.wildlife.ca.gov/bios/>)



Figure 2. Aerial imagery showing vegetation that approximates the ephemeral drainage shown in the topographic map in Figure 1 (Google Earth, imagery date Sept. 1, 2018).