

Dear Mr. MacLachlan:

At Michael Miller's (Vista Towers) request, I have prepared this addendum to the 2012 *Biological Resources Survey Report – La Grange Cell Tower*. The addendum has been prepared to update information on special-status biological resources that could be adversely affected by the proposed La Grange Cell Tower Project (i.e., proposed project) given that the original biological resources survey report is four years old and proposed location of the new telecommunications infrastructure is now approximately 600 feet west of the location proposed in 2012.

The project site is now located approximately 4,000 feet southwest of the intersection of La Grange Road and State Highway 132 (Figure 1). The project site and immediately adjacent lands within 500 feet of the site have been evaluated in this addendum to identify evidence of special-status plants and wildlife, rare or sensitive vegetation communities, and potential jurisdictional waters or wetlands that could be affected by the proposed project that may not have been previously addressed in the 2012 biological resources survey report.

Analytical Methods

A standard nine-quadrangle CNDDB/Rarefind 5 report was generated for the project site (i.e., query of the USGS 7.5-minute topographic quadrangle in which the project site is found as well as the immediate eight surrounding topographic quadrangles, viz. La Grange and the surrounding Chinese Camp, Cooperstown, Keystone, Merced Falls, Moccasin, Penon Blanco Peak, Snelling, and Turlock Lake quads). The California Natural Diversity Data Base (CNDDB) contains records for special-status species, as well as sensitive natural communities, which have been reported to the California Department of Fish and Wildlife (CDFW). The Rarefind 5 report for the project site is provided in Appendix A. Each of the species identified in the

Rarefind 5 report were then compared against the species addressed in the 2012 biological resources survey report to determine if any new species or important occurrences (i.e., nearby occurrences) have been recorded in the CNDDDB. New species occurrences were then evaluated in terms of the species' likelihood of occurrence on the project site. The evaluation considered the known distribution and habitat requirements of the species such that one of the following findings was prepared:

- Known to Occur – species has previously been documented within or immediately adjacent to the project site.
- High Potential – species has not been documented within or immediately adjacent to the project site, but should be expected on more than 50% of visits to suitable habitat in the project site during the appropriate season and time of day.
- Moderate Potential – species has not been documented within or immediately adjacent to the project site, but should be expected on less than 50% of visits to suitable habitat in the project site during the appropriate season and time of day.
- Low Potential – species has not been documented within or immediately adjacent to the project site nor is it likely to occur on the project site, but its presence cannot be completely discounted due to incomplete information on the taxon's distribution or habitat requirements.
- No Potential – species does not occur within the project site due to the lack of required habitat features for the species or the known range of the species is well defined and does not include the project site.

Other sources of information on special-status species in California were subsequently reviewed given that the CNDDDB is not inclusive of all special-status species that may occur in an area. A review of the CDFW's *List of Special Animals* (July 2016) and *List of Special Vascular Plants, Bryophytes, And Lichens* (July 2016) was therefore conducted to determine if any special-status species not identified in the Rarefind 5 report have the potential to occur in the project site. This review was based on my professional experience within the region and elsewhere in California, but also included review of other published sources of information on special-status species in California. These latter sources include the following:

- Amphibian and Reptile Species of Special Concern in California (Jennings and Hayes 1994).
- California Bird Species of Special Concern. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California and California Department of Fish and Game (Shuford and Gardali 2008).
- The Distribution of the Birds of California (Grinnell and Miller 1944).
- California Birds: Their Status and Distribution (Small 1994).

- California's Wildlife Volume II Birds (Zeiner et al. 1990).
- eBird. 2016. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available: <http://www.ebird.org>. (Accessed: August 29, 2016).
- Mammalian Species of Special Concern in California (Williams 1986).
- Mammal Species of Special Concern (unfinished 1998 update) (CDFW 1998).
- Mammals of the Pacific States: California, Oregon, and Washington (Ingles 1978).
- Bat species accounts prepared as course materials for Ecology and Conservation of California Bats offered through San Francisco State University's Sierra Nevada Field Campus.
- Western Bat Working Group website (<http://wbwg.org/western-bat-species/>).
- Recovery Plan for Upland Species of the San Joaquin Valley, California (USFWS 1998).
- Wildlife and Rare Plant Ecology of Eastern Merced County's Vernal Pool Grasslands (Volmar Consulting 2002).

Species that are known or expected to occur in the vicinity of the project site were then further evaluated in this addendum if not addressed previously in the 2012 biological resources survey report.

Vegetation Communities and Site Characteristics

The project site is located within blue oak savannah (a plant community that is widely distributed in the vicinity of La Grange). The topography of the site and surrounding lands is characterized as gently rolling, low-elevation hills. The onsite oak savannah supports a variety of annual non-native grasses, grassland-associated forbs, and occasional mature blue oaks (*Quercus douglasii*). It should be noted that no oaks are located within the proposed boundaries of the project site.

Jurisdictional Wetlands and Other Waters

Jurisdictional wetlands or other waters of the United States are areas that cannot be dredged or filled without a permit from the U.S. Environmental Protection Agency or U.S. Army Corps of Engineers (this latter permit is commonly referred to as a "Section 404" permit in reference to the section of the federal Clean Water Act that requires such permits). Actions that require issuance of a "Section 404" permit include earth-moving activities that result in fill of jurisdictional wetlands and other waters. It should be noted that such actions may also require the issuance of state permits (e.g., California Fish and Game Code Section 1603 streambed alteration agreements).

Wetlands or other waters of the United States are identified based on three criteria, viz. (1) soil characteristics, (2) hydrology, and (3) plant species. The U.S. Army Corps of Engineers (USACE) has developed a procedure and manual for delineating wetlands that requires comprehensive evaluation of these three criteria during field environmental assessments. A formal wetland delineation was not conducted for the purposes of this report. However, no waters that are subject to the jurisdiction of the USACE or CDFW occur within the project site.

Special-Status Plant Species

Four special-status plant taxa that have been documented in the project vicinity were considered to have some potential, albeit low, to occur on or near the project site in the 2012 biological resources survey report. These taxa include Hoover's calycadenia (*Calycadenia hooveri*), beaked clarkia (*Clarkia rostrata*), delicate bluecup (*Githopsis tenella*), and forked hare-leaf (*Lagophylla dichotoma*). In the absence of suitable protocol surveys for these species, they cannot be discounted as occurring on the project site.

The CNDDDB/Rarefind 5 query that was conducted in support of this addendum found one new special-status plant species that was not previously recorded in the nine-quadrangle study area for the proposed project (i.e., during the 2012 query). This species, eel-grass pondweed (*Potamogeton zosteriformis*), a freshwater marsh obligate, does not occur in blue oak woodland (Table 1). Therefore, it is considered to have no potential to occur on the project site.

Special-Status Wildlife Species

Five special-status wildlife taxa that have been documented in the project vicinity were considered to have some potential, albeit low, to occur on or near the project site in the 2012 biological resources survey report. These taxa include California tiger salamander (*Ambystoma californiense*), ferruginous hawk (*Buteo regalis*), merlin (*Falco columbarius*), yellow-billed magpie (*Pica nuttalli*), and San Joaquin pocket mouse (*Perognathus inornatus inornatus*). In the absence of suitable protocol surveys for these species, they cannot be discounted as occurring on the project site. Two special-status species, Nuttall's woodpecker (*Picoides nuttallii*) and oak titmouse (*Baeolophus inornatus*), have a moderate potential for occurring immediately adjacent to the project site (i.e., in adjacent oaks). Both of the latter species have been recorded near the project site. Furthermore, these species tend to be common and widespread in cismontane woodland throughout much of California.

No focused surveys for special-status wildlife species other than California tiger salamander (CTS) were conducted in 2012. This latter survey effort found that there is only one known aquatic breeding site for the species that is within the maximum known dispersal/migration distance for the species (approximately two miles) that is not precluded by a barrier to movement (e.g., river, irrigation canal, lake, large area of active agriculture involving disking, etc.). This CNDDDB occurrence (i.e., CTS #84) is located approximately 0.94 miles southwest of the currently proposed project site. Furthermore, there is continuous, suitable upland habitat for the species

between the breeding site and project site that could allow movement to the site (i.e., grassland/oak savannah). Nonetheless, it is known that the density of California tiger salamanders in the upland landscape decreases substantially with increasing distance away from a breeding pond. Therefore, the probability of one or more California tiger salamanders from CTS #84 occurring within the 60 x 60 foot project site or 125 x 15 foot new gravel access road is extremely low. The extremely low number of potentially suitable burrows for the species and type of burrows (i.e., Botta's pocket gopher burrows) that were found near the project site during the 2012 survey reduces this probability even further.

The CNDDDB/Rarefind 5 query that was conducted in support of this addendum found four new special-status wildlife taxa that were not previously recorded in the nine-quadrangle study area for the proposed project (i.e., during the 2012 query). Three of these species, Crotch bumble bee (*Bombus crotchii*), Morrison bumble bee (*Bombus morrisoni*), and Swainson's hawk (*Buteo swainsoni*), have some potential, albeit low, to occur on or immediately adjacent to the project site (Table 1).

Least Bell's vireo (*Vireo bellii pusillus*), another taxon that has been found in the nine-quadrangle study area since the previous assessment in 2012, is a riparian obligate (Table 1). Therefore, it would not occur at or near the project site. Furthermore, there have been very few records of the taxon in portions of California north of the Tehachapi Mountains during the last 70 years. Therefore, it is considered to have no potential to occur on the project site.

Conclusions

No special-status plant taxa are known to occur on the project site. However, four special-status plant taxa are considered to have a low potential to occur on the project site. These species (Hoover's calycadenia, beaked clarkia, delicate bluecup, and forked hare-leaf) cannot be discounted without appropriate protocol surveys conducted during the blooming period of the taxon. However, it should be noted that any effects of the proposed project to special-status plant species are unlikely to rise to the level of "substantial effect" (as defined in the California Environmental Quality Act [CEQA] Guidelines) given the small footprint of the project.

Eight special-status wildlife taxa (Crotch bumble bee, Morrison bumble bee, California tiger salamander, Swainson's hawk, ferruginous hawk, merlin, yellow-billed magpie, and San Joaquin pocket mouse) are considered to have a low potential for occurring on the project site given the presence of potentially suitable habitat, limited survey data in the region, and known occurrences scattered throughout eastern Stanislaus County. Though they are unlikely to occur on the project site, these species cannot be entirely discounted without additional survey work. However, it should be noted that any effects of the proposed project on special-status wildlife species are unlikely to rise to the level of "substantial effect" given the small footprint of the project. Furthermore, in regards to California tiger salamander, the likelihood of occurrence is extremely low for the reasons specified previously. These reasons include the following: (1) the nearest known aquatic

breeding site from which individuals could move to the project site is 0.94 miles away; (2) there is a limited window of access from the breeding site to the project site given that the species exhibits unidirectional movement during dispersal or migration; (3) the density of individuals in the landscape decreases exponentially with distance from a single breeding site; (4) there are barriers to the movement of the species from all other known breeding sites in the project vicinity; and (5) the only other pond in the project vicinity that could provide a source of individuals to the project site was found in 2012 to not be occupied by the species (possibly due to the presence of an established bullfrog population).

Nuttall's woodpecker and oak titmouse have not been recorded on the project site, but are considered to have a moderate potential for occurring in oaks that are immediately adjacent to the site. These latter species have been recorded at multiple locations in eastern Stanislaus County including near the town of La Grange (eBird data base). Any effects of the proposed project to these latter species are also unlikely to rise to the level of "substantial effect" given the small footprint of the project.

Lastly, no other important, significant, or regulated biological resources (including wetlands, rare plant communities, aquatic habitats, roost sites, staging areas, nesting raptors, etc.) were found to be associated with the project site.

Should you have any questions in regards to the above findings or other information provided in this survey report do not hesitate to contact me (916-638-7368).

Sincerely,

A handwritten signature in cursive script, reading "Michael Bumgardner". The ink is dark and the signature is fluid, with a long horizontal stroke at the end.

Michael Bumgardner



Figure 1

La Grange New Mobile Telephone Cell Tower Project Site – Stanislaus County, California

TABLE 1

**ADDITIONAL SPECIAL-STATUS SPECIES RECORDED OR POTENTIALLY OCCURRING
WITHIN THE VICINITY OF THE LA GRANGE NEW CELL TOWER PROJECT, STANISLAUS COUNTY**

Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
PLANTS				
<i>Pomatogeton zosteriformis</i>	Eel-grass pondweed	none/none/CNPS list 2B.2	The species is an annual herb that occurs in freshwater marshes. It blooms from June to July. It is known from only 20 extant occurrences in California in Contra Costa, Lake, Lassen, Merced, Mono, Modoc, and Shasta counties.	No Potential. No suitable habitat for the species occurs at or immediately adjacent to the project site. Therefore, the species has no potential to be affected by the project.
INVERTEBRATES				
<i>Bombus crotchii</i>	Crotch bumble bee	none/SA/none	This species occurs from coastal California east to the Sierra Nevada-Cascade crest. It occurs at relatively warm and dry sites in open grassland and scrub habitats. Colonies are annual and only the new, mated queens overwinter. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees.	Low Potential. There is suitable habitat for the species (i.e., large, open, undisturbed tracts of oak savanna) at and near the project site. However, there is only a single record of the species from the project vicinity (within 5 miles) and it is from 1956. Therefore, the species is considered to have some potential, albeit low, to occur in the vicinity of the project site.
<i>Bombus morrisoni</i>	Morrison bumble bee	none/SA/none	This species inhabits open dry scrub where it nests in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in	Low Potential. There is suitable habitat for the species (i.e., large, open, undisturbed tracts of oak savanna) at and near the project site. However, there is

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			dead trees. It occurs throughout the mountain west from California east of the Sierra-Cascade Ranges to southern British Columbia; in the desert west especially in the highlands, and east to New Mexico, Texas, and north to western South Dakota. It has been sporadically found west of the Sierra-Cascade crest in Oregon and California.	only a single record of the species from the project vicinity (within 5 miles) and it is from 1968. Therefore, the species is considered to have some potential, albeit low, to occur in the vicinity of the project site.
BIRDS				
<i>Buteo swainsoni</i>	Swainson's hawk (nesting)	none/ST/BCC	The species occurs in California as a breeding resident in the Central Valley (primarily in the southern Sacramento and northern San Joaquin valleys), Klamath Basin, and Modoc Plateau. However, nesting pairs are also occasionally found in the Mojave Desert, Lanfair Valley (San Bernardino County), Antelope Valley (Los Angeles County), and eastern San Luis Obispo County. In the Central Valley the species typically nests in riparian woodland or forest stands, or oak savannah. Nest territories are located adjacent to suitable foraging habitat (e.g., grassland, suitable grain and row crop fields, alfalfa, and pastures).	Low Potential. There is suitable nesting and foraging habitat for the species (i.e., large, open, undisturbed tracts of oak savanna and riparian woodland) within 5 miles of the project site. However, there are very few records of the species from the project vicinity (within 5 miles) in the eBird data base and most of these records are associated with riparian woodland. Lastly, the project site is at the upper elevational limit of where the species is found nesting in central California. Therefore, the species is considered to have some potential, albeit low, to nest in the vicinity of the project site.

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<i>Vireo bellii pusillus</i>	Least Bell's vireo (nesting)	FE/SE/none	Found as a summer resident (late March to late August) in coastal valleys from Monterey County south through coastal southern California to San Diego County. Also occurs at scattered locations along the western border of the deserts. There have been recent records from the Sacramento Valley given the subspecies' recovery in southern California. It typically nests in dense willow riparian communities, but is also occasionally found in live oak stands adjacent to drainages.	No Potential. The project site and immediate vicinity do not provide suitable nesting habitat for the subspecies (i.e., dense riparian vegetation). In addition, the subspecies has rarely been reported in the Central Valley or surrounding areas during the last 70 years. Therefore, there is no potential for the species to nest on the project site or be affected by the project during nesting.

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Genus/Species	Common Name	Status Federal/CA/Other	Habitats and Seasonal Distribution in California	Likelihood of Occurrence on Project Site
FEDERAL	FE FT FPE FPT FC BCC	Federally listed as Endangered Federally listed as Threatened Federally proposed as Endangered Federally proposed as Threatened Federal Candidate Species (former Category 1 candidates) U.S. Fish and Wildlife Service designated "Birds of Conservation Concern" 2008		
STATE	SE ST SR CFP CSC SA	State listed as Endangered State listed as Threatened State listed as Rare California Department of Fish and Game designated "Fully Protected" California Department of Fish and Game designated "Species of Special Concern" California Department of Fish and Game designated "Special Animal"		
OTHER	CNPS List 1A CNPS List 1B CNPS List 2 CNPS List 3 CNPS List 4 CNPS Threat Rank 0.1 CNPS Threat Rank 0.2 CNPS Threat Rank 0.3	Plants presumed extinct in California Plants that are rare, threatened, or endangered in California and elsewhere Plants that are rare, threatened, or endangered in California, but are more common elsewhere Plants about which we need more information – a review list Plants of limited distribution – a watch list Seriously threatened in California (high degree/immediacy of threat) Fairly threatened in California (moderate degree/immediacy of threat) Not very threatened in California (low degree/immediacy of threats or no current threats known)		

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LIKELIHOOD OF OCCURRENCE DEFINITIONS				
	Known to Occur		Taxon was observed within or immediately adjacent to the project site or has previously been documented within or immediately adjacent to the project site.	
	High Potential		Taxon has not been documented within or immediately adjacent to the project site, but should be expected on more than 50% of visits to suitable habitat on and near the project site during the appropriate season and time of day.	
	Moderate Potential		Taxon has not been documented within or immediately adjacent to the project site, but should be expected on less than 50% of visits to suitable habitat on and near the project site during the appropriate season and time of day.	
	Low Potential		Taxon has not been documented within or immediately adjacent to the project site nor is it likely to occur on or near the project site, but its presence cannot be completely discounted due to incomplete information on the taxon's distribution or habitat requirements.	
	No Potential		Taxon does not occur within or immediately adjacent to the project site due to the lack of required habitat features for the taxon, or the known range of the taxon is well defined and does not include the project vicinity.	

Appendix A

CNDDDB Special-Status Species Occurrences in the Vicinity of the Project Site

La Grange Mobile Telephone Cell Tower Project Biological Resources Report, Stanislaus County, California