

DEPARTMENT OF WATER RESOURCES

NORTHERN REGION OFFICE
2440 MAIN STREET
RED BLUFF, CA 96080-2356



June 28, 2019

State Clearinghouse
1400 Tenth Street
Post Office Box 3044
Sacramento, California 95812-3044
E-mail: State.Clearinghouse@opr.ca.gov

Subject: CEQA Notice of Exemption – Arbuckle Monitoring Well Installation

The purpose of this letter is to submit the enclosed California Environmental Quality Act (CEQA) Notice of Exemption form (Appendix E) and Determination Memo (form DWR 100a) to install a multi-completion groundwater elevation observation well approximately 2 miles north of the town of Arbuckle in Colusa County. The California Department of Water Resources is proposing to install the observation well on a 160-acre property, located on the south side of Hahn Road, approximately 1.3 miles east of Interstate 5. The Arbuckle multi-completion groundwater elevation observation well will be incorporated into the larger Colusa Basin groundwater elevation monitoring program and be one of the key groundwater elevation monitoring wells used as part of a future ground subsidence monitoring network and the Colusa Basin Sustainable Groundwater Management Plan.

The completed well will be drilled to a depth of approximately 1,000 feet and consist of three to four discrete monitoring zones to be determined by the site geologist/engineer after the completion of the test hole and downhole geophysical survey. The well will be drilled with a rotary drill rig and mud pump. Other necessary equipment onsite may include a pipe truck, water truck, cement truck, backhoe, front-end loader, and support vehicles.

The proposed multi-completion groundwater elevation observation well installation is for information gathering purposes and falls under Categorical Exemption described in CEQA Guidelines §15306 for Information Collection (Class 6). Proposed activities are not anticipated to result in any significant impact to the environment.

If you have any questions or need additional information, please contact me at (530) 529-7307.

Sincerely,

A handwritten signature in blue ink, appearing to read "Brian Humphrey".

Brian Humphrey, Environmental Scientist
Environmental Services Section

Enclosures

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk

County of: _____

From: (Public Agency): CA Dept of Water Resources
2440 Main Street
Red Bluff, CA 96080

(Address)

Project Title: Arbuckle Monitoring Well Installation Project

Project Applicant: California Department of Water Resources

Project Location - Specific:

The project is located on the south side of Hahn Road, approximately 1.3 miles east of Interstate 5 and two miles north of the town of Arbuckle in Colusa County. (Latitude: 39°03'14.28"N, Longitude: 122°3'38.69"W)

Project Location - City: Arbuckle

Project Location - County: Colusa

Description of Nature, Purpose and Beneficiaries of Project:

DWR is proposing to install a multi-completion groundwater elevation observation well, which will be incorporated into the Colusa Basin groundwater monitoring program, subsidence monitoring network, and the Colusa Basin Sustainable Groundwater Management Plan.

Name of Public Agency Approving Project: California Department of Water Resources

Name of Person or Agency Carrying Out Project: California Department of Water Resources

Exempt Status: (check one):

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number: 15306. Information Collection
- Statutory Exemptions. State code number: _____

Reasons why project is exempt:

The installation of the monitoring well will be used to measure groundwater elevations. Proposed activities are not anticipated to impact any environmental resources, including scenic resources, cultural resources or special status plants or wildlife species. The project will not result in any significant impact to the environment.

Lead Agency

Contact Person: Brian Humphrey Area Code/Telephone/Extension: (530) 529-7307

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? Yes No

Signature:  Date: 6/28/19 Title: Environmental Scientist

Signed by Lead Agency Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Governor's Office of Planning & Research

JULY 01 2019

STATE CLEARINGHOUSE

Revised 2011

OFFICE MEMO

TO: Debbie Spangler Engineering Geologist Northern Region Office	DATE: June 28, 2019
FROM: Brian Humphrey Environmental Scientist Environmental Services Section Northern Region Office	SUBJECT: CEQA Notice of Exemption – Arbuckle Monitoring Well Installation

Project Location: The California Department of Water Resources (DWR), Northern Region Office is proposing to install a multi-completion groundwater elevation observation well approximately 2 miles north of the town of Arbuckle in Colusa County ([Figure 1](#)). The observation well will be installed on a 160-acre property (APN 018-180-037-000) owned by Arwill Farms LLC, located on the south side of Hahn Road, approximately 1.3 miles east of Interstate 5 ([Figure 2](#)). The legal description is Section 22 of Township 14N, Range 2W based on the Arbuckle United States Geological Survey (USGS) 7.5' quadrangle.

Purpose: The Arbuckle multi-completion groundwater elevation observation well will be incorporated into the larger Colusa Basin groundwater elevation monitoring program and be one of the key groundwater elevation monitoring wells used as part of a future ground subsidence monitoring network and the Colusa Basin Sustainable Groundwater Management Plan.

Project Description: The completed well will be drilled to a depth of approximately 1,000 feet and consist of three to four discrete monitoring zones to be determined by the site geologist/engineer after the completion of the test hole and downhole geophysical survey. The well will be drilled with a rotary drill rig and mud pump. Other necessary equipment on site may include a pipe truck, water truck, cement truck, backhoe, front-end loader, and support vehicles. The following are a list of steps involved with the proposed drilling process:

1. An 8-inch diameter test hole will be drilled to a depth of approximately 1,000 feet.
2. A downhole geophysics survey and well design will be completed based on the test hole, which will determine the number, depth, and type of casings and material to be placed within the well.
3. The test hole will then be enlarged to approximately 18 inches in diameter to house three to four 2-inch PVC or steel casings placed at different depths with the deepest at approximately 1,000 feet. During the drilling operations, all drilling fluid (freshwater and bentonite) will be contained in a recirculation system with drilling cuttings separated with a shaker.
4. Well casings will be placed in the hole at different depths and backfilled with sand and/or bentonite. When the mud is thinned for well construction, the excess drilling fluid will be pumped into a bermed area, measuring approximately 30 feet by 30 feet, depending on the volume of fluid.
5. A sanitary seal will be installed at the surface, which will entail placing concrete and/or bentonite in the upper 20 feet of the hole.
6. Fresh groundwater will then be circulated from the well to flush drilling fluid from the surface of the geologic formation and annular material.
7. A four- to five-foot square concrete slab will be poured around the 2-inch well casings, which will be contained within 24- to 36-inch diameter steel well housing measuring approximately 3.5 feet in height with a locking lid.
8. The excess drilling cuttings and mud will be disposed and stored on-site and used by the landowner.
9. The site will be cleaned of trash and debris, while equipment and materials will be removed.

The proposed activities are anticipated to take three weeks to complete and will likely be scheduled to take place during the spring/summer of 2019.

Environmental Setting: The project area is located along the south side of Hahn Road situated within a staging area used for farm equipment and supplies, while the surrounding area consists of recently planted orchards. Structures on the property consist of a large barn (approximately 800 feet south of Hahn Road) and a non-functioning windmill. The area surrounding the barn has been previously disturbed and used to stage farm equipment and supplies. There are also two farm access roads located within the project area that are used to access the barn, staging area, and adjacent orchards from Hahn Road. Vegetative overstory on the property consists of two non-native locust trees (*Robinia spp.*) and several large black walnut trees (*Juglans hindsii*) along Hahn Road and the first 300 feet of the two farm roads accessing the property. The entire project area has been previously disturbed with road base and gravel spread over the majority of the project limits.

Cultural Resources: A small historic site was identified near the original project footprint, which consisted of a concrete foundation of a previous water tank, a pumping mechanism for a previous well, a windmill, and historic ceramic and glass scatter (Figure 2). The proposed project footprint was relocated away from the identified site and will be avoided. No significant cultural resources were found in the relocated project area; therefore, the project will have no effect on any cultural resources.

Should any of the above project plans be modified to include work that will disturb the ground surface in areas not reviewed by this memo, additional studies will be required. If cultural resources are uncovered while engaging in construction activities, all work will temporarily cease until the findings can be assessed by a qualified archaeologist and an appropriate course of action can be determined. Should human remains be uncovered, all work must stop immediately, and the County coroner must be contacted pursuant to California Health and Safety Code 7050.5(b).

Biological Resources: California Department of Fish and Wildlife's (CDFW's) California Natural Diversity Database (CNDDDB) was used to create a map to depict special status plant and wildlife species documented within ten miles of the project site. Based on a literature search and CDFW's CNDDDB, a list of special status plant and wildlife species with the potential to occur within the project vicinity was compiled and evaluated (Appendices A and B). Evan MacKinnon, DWR environmental scientist, and I surveyed the project limits on May 23, 2019 to identify any potential biological resources within and adjacent to the project area. Follow-up surveys were conducted on June 17 and 20, 2019 to monitor the status of a red-tailed hawk nest. The entire property has been previously disturbed. Vegetation consisted of non-native ruderal vegetation growing in sparse locations and overstory vegetation consisting of two non-native locust trees and large black walnut trees located along Hahn Road and the two farm roads accessing the property from Hahn Road.

Flora

Wetlands and/or other Special Aquatic Habitats:

No work will take place within any jurisdictional wetlands, waters of the U.S., or other special aquatic habitats.

Invasive Plant Species:

Proposed activities are not anticipated to be responsible for the introduction of noxious weeds or the spread of existing noxious weeds.

Special Status Plant Species:

The project site was surveyed for any rare or special status plant species. All proposed activities will take place on previously disturbed areas where there is no potential suitable habitat for special status or rare plant species to occur. The proposed project is not anticipated to impact special status or rare plant species (Appendix A).

Fauna

Giant Gartersnake (*Thamnophis gigas*):

The giant gartersnake is a State and federally threatened species, which currently persists primarily in irrigation canals and drains associated with rice agriculture and remnant managed wetlands. There is no suitable habitat within or adjacent to the project site. Therefore, proposed activities are not anticipated to impact giant gartersnakes.

Special Status Bat Species:

Small crevices and/or cavities within the existing barn structure (>100 feet from proposed drilling location) have the potential to provide day roosting habitat for special status bat species. The barn structure was visually inspected and no bats or evidence (guano, urine staining, or smell) were observed on or around the structure to suggest it was being used by bats. No impacts to bat species are anticipated as a result of the proposed activities associated with the project.

Migratory Bird Treaty Act (MBTA):

Migratory birds, their occupied nests, and their eggs are protected under the Migratory Bird Treaty Act. Existing structures and trees within and adjacent to the project site provide potential nesting habitat for several migratory and special status bird species. The typical nesting window for migratory and special status bird species within the project area is from February 15 through August 31, which also includes nesting raptors. No tree removal is anticipated as part of the proposed project, but noise generated from proposed drilling activities have the potential to impact the nesting behavior of bird species nesting within or adjacent to the project area. No nests were identified on the barn structure. However, a red-tailed hawk (*Buteo jamaicensis*) nest was observed in the southern-most black walnut tree along the west farm road, see [Figure 2](#). An adult red-tailed hawk was observed perched above the nest, while another adult was soaring above. Unfortunately, it was not determined if young were present in the nest. Follow-up surveys were conducted on June 17 and 20, 2018, which involved monitoring the nest and conversations with the property owner and workers on the property. Adult red-tailed hawks were observed near the nest, and property workers indicated they have heard young in the nest during the week of June 16. If proposed drilling activities take place between February 15 and August 31, an additional survey should be conducted prior to construction to determine presence of nesting red-tailed hawks.

Construction noise generated within 500 feet of a red-tailed hawk nest is typically analyzed and/or monitored to confirm proposed activities will not impact the nesting behavior of red-tailed hawks. The proposed drilling operations will be beyond the 500 feet buffer (see [Figure 3](#)), located approximately 750 feet southeast of the nest. If the nest is active during the proposed drilling operations, foot traffic should be minimized around the tree, and a biological monitor should be on-site for any unanticipated activities within 500 feet of the nest.

Tri-colored Blackbird (*Agelaius tricolor*):

The State has recently listed the tri-colored blackbird as a threatened species. Tri-colored blackbirds nest in large colonies typically in freshwater marshes with dense vegetation over 6 feet tall, often consisting of cattails (*Typha spp.*) and/or Himalayan black berry (*Rubus armeniacus*). There is not suitable habitat within or adjacent to the project site. Therefore, proposed activities are not anticipated to impact tri-colored blackbirds.

Swainson's hawk (*Buteo swainsoni*):

The Swainson's hawk is a State threatened species. Swainson's hawks in the Central Valley typically construct their nests in riparian woodlands, roadside trees, trees along fields, and isolated trees, while foraging in open grass and agricultural fields. Nesting typically occurs between late March and late August. The nearest documented Swainson's hawk nest is located approximately 1.1 miles southeast of the project site. The large black walnut trees along Hahn Road and the two farm roads provide potential nesting habitat for Swainson's hawks, but no foraging habitat is located adjacent. As previously mentioned, these trees were

surveyed for the presence of active nests where a red-tailed hawk nest was observed in one of the trees. Since no Swainson's hawk nests were observed, the proposed project is not anticipated to impact Swainson's hawks.

Summary:

If drilling operations are scheduled to take place between February 15 and August 31, a pre-construction survey will be conducted prior to the start of drilling operations to determine if the nest is still considered active. If the nest is determined to be active, measures will be implemented to minimize impacts to nesting red-tailed hawks. Proposed activities associated with the project are not anticipated to result in impacts to sensitive habitats or special status plant or wildlife species.

Hazardous Waste: The Cortese List is a compilation of contaminated sites identified by the California State Water Resource Control Board; active, closed, and inactive landfills identified by the Integrated Waste Management Board; and potential hazardous waste sites identified by the Department of Toxic Substance Control (DTSC). This list was reviewed as part of the initial screening for the project and the proposed project is not within or impacting any site on the Cortese List.

Permits: No regulatory permits (U.S. Army Corps of Engineers, Regional Water Quality Control Board, or California Department of Fish and Wildlife) will be required since the proposed activities will not impact wetlands and/or riparian vegetation, place fill within or dredge material from waters of the U.S., or substantially change the streambed or streambank.

Conservation Measures / Best Management Practices:

1. If drilling operations are scheduled to take place between February 15 and August 31, the Northern Region Office, Environmental Services Section will be contacted to conduct a pre-construction nest survey prior to the start of drilling operations to identify any active nests located within or immediately adjacent to the project site. If a nest is identified and determined to be active, appropriate measures will be implemented to avoid potential impacts to the nesting bird. These measures may include having a biological monitor on-site for any unusual activities within 500 feet of a raptor nest and/or minimizing activities including foot traffic around the nest tree.
2. All proposed activities shall avoid the archaeological sensitive area as depicted on the attached aerial (Figure 2).
3. If previously unidentified cultural materials are revealed during project-related activities, work shall be halted in the immediate vicinity until a qualified archaeologist can assess the significance of the find. Additional archaeological survey may be required if the project limits expand beyond the area reviewed for cultural resources. If human remains are uncovered, all work must stop immediately, and the County coroner must be contacted pursuant to California Health and Human Safety Code 7050.5(b).
4. Hazardous materials associated with construction activities must be stored and used in accordance with practices that prevent them from polluting receiving waters.
5. Equipment must be kept in good working order and any petroleum or lubricant spills must be cleaned up immediately and reported to Northern Region Office, Environmental Services Section.
6. All trash and debris must be removed at the end of the project.

Summary: The proposed project is not anticipated to impact any environmental resources, including scenic resources, cultural resources, hazardous waste sites, sensitive habitats, and special status plants or wildlife species. Overall, proposed activities are not anticipated to result in any significant impact to the environment.

Name of Public Agency Approving Project: California Department of Water Resources

Name of Person or Agency Implementing Project: California Department of Water Resources

Reasons Why Project is Exempt:

- Categorical Exemption 15306. Information Collection (Class 6): Exempts basic data collection, research, experimental management, and resource evaluation activities that do not result in major disturbances to an environmental resource.

Lead Agency Contact Person and Phone: Brian Humphrey (530) 529-7307

Signature:  Date: 6/28/19

Governor's Office of Planning & Research

JULY 01 2019

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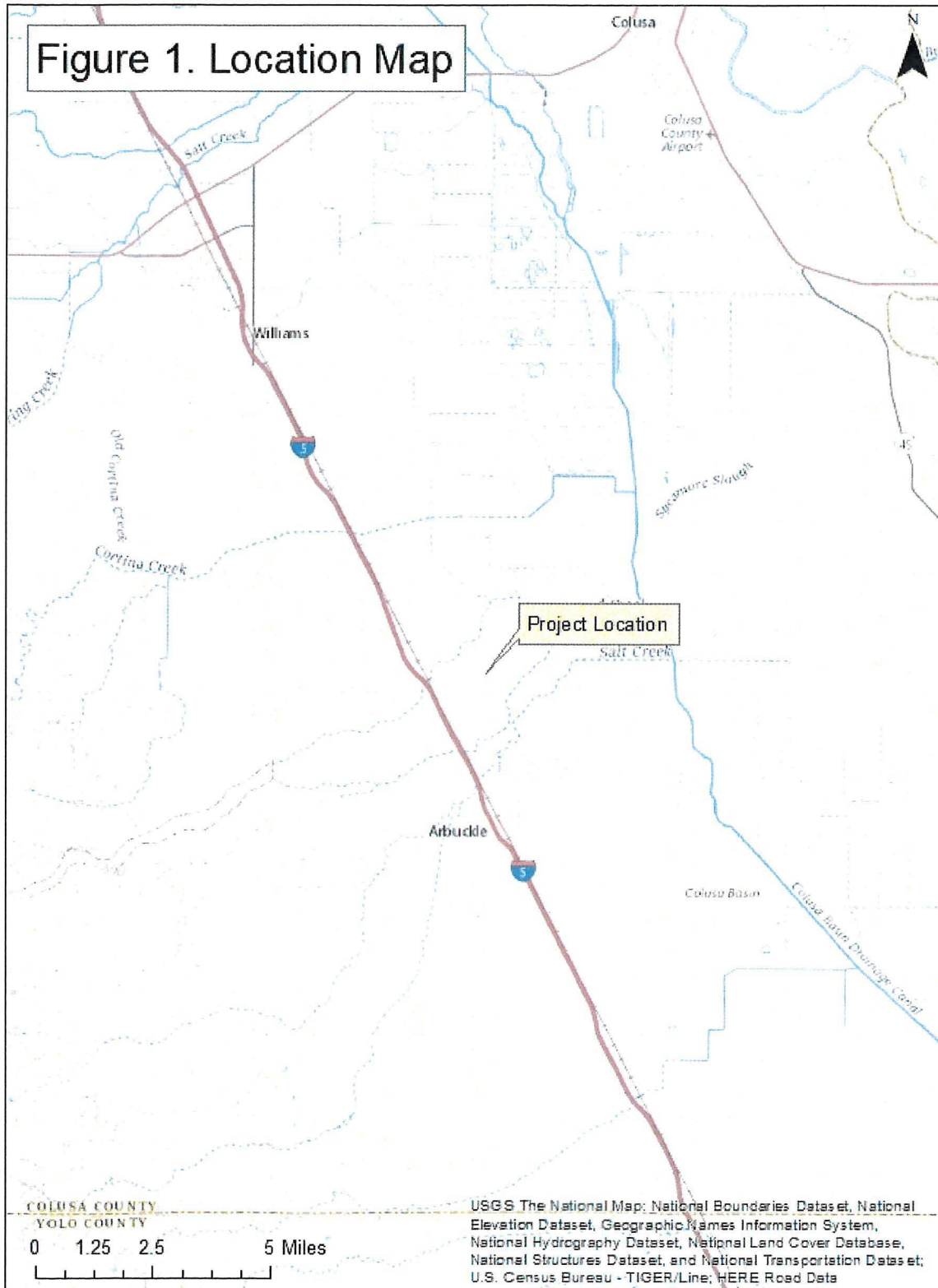
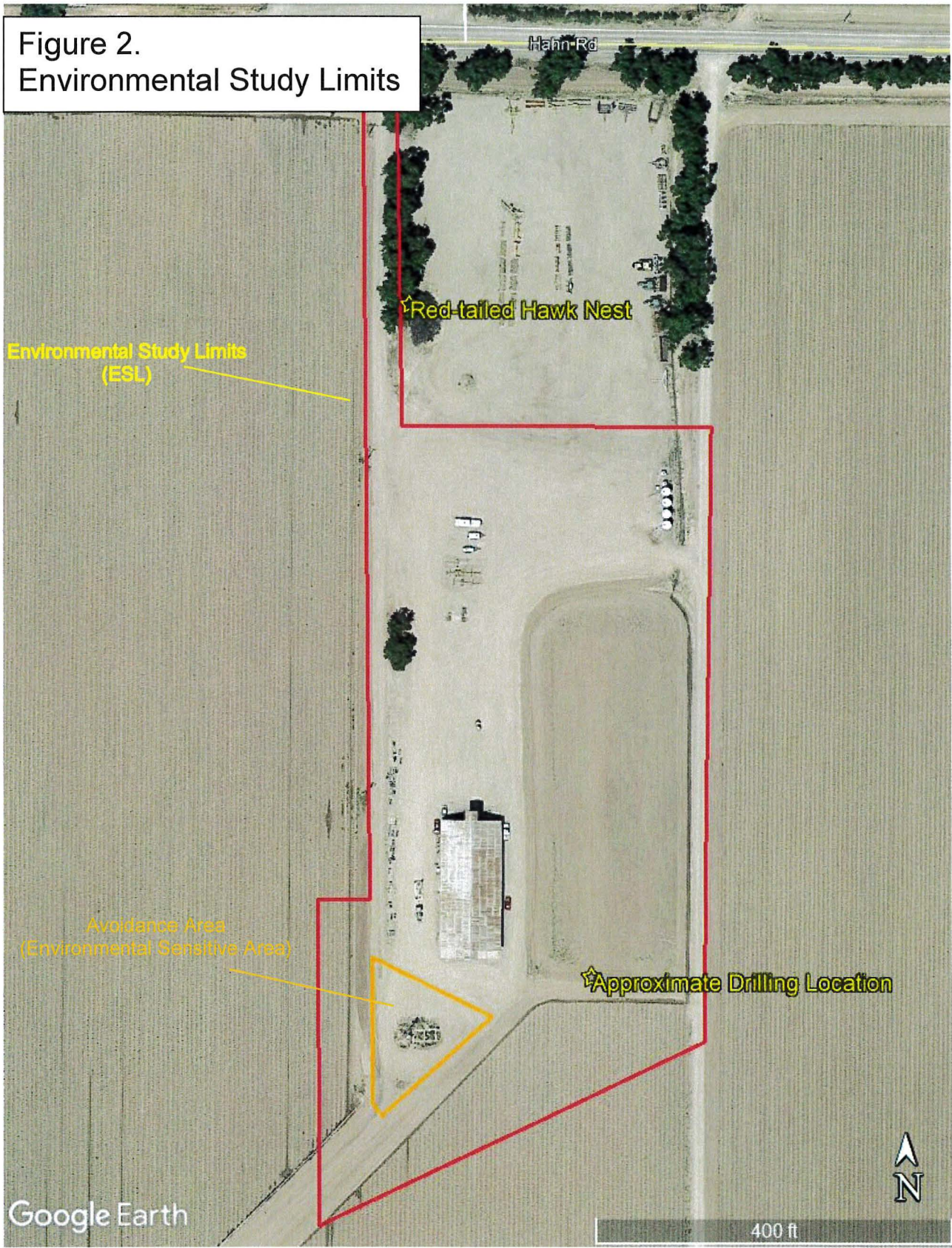


Figure 2.
Environmental Study Limits



Google Earth

400 ft

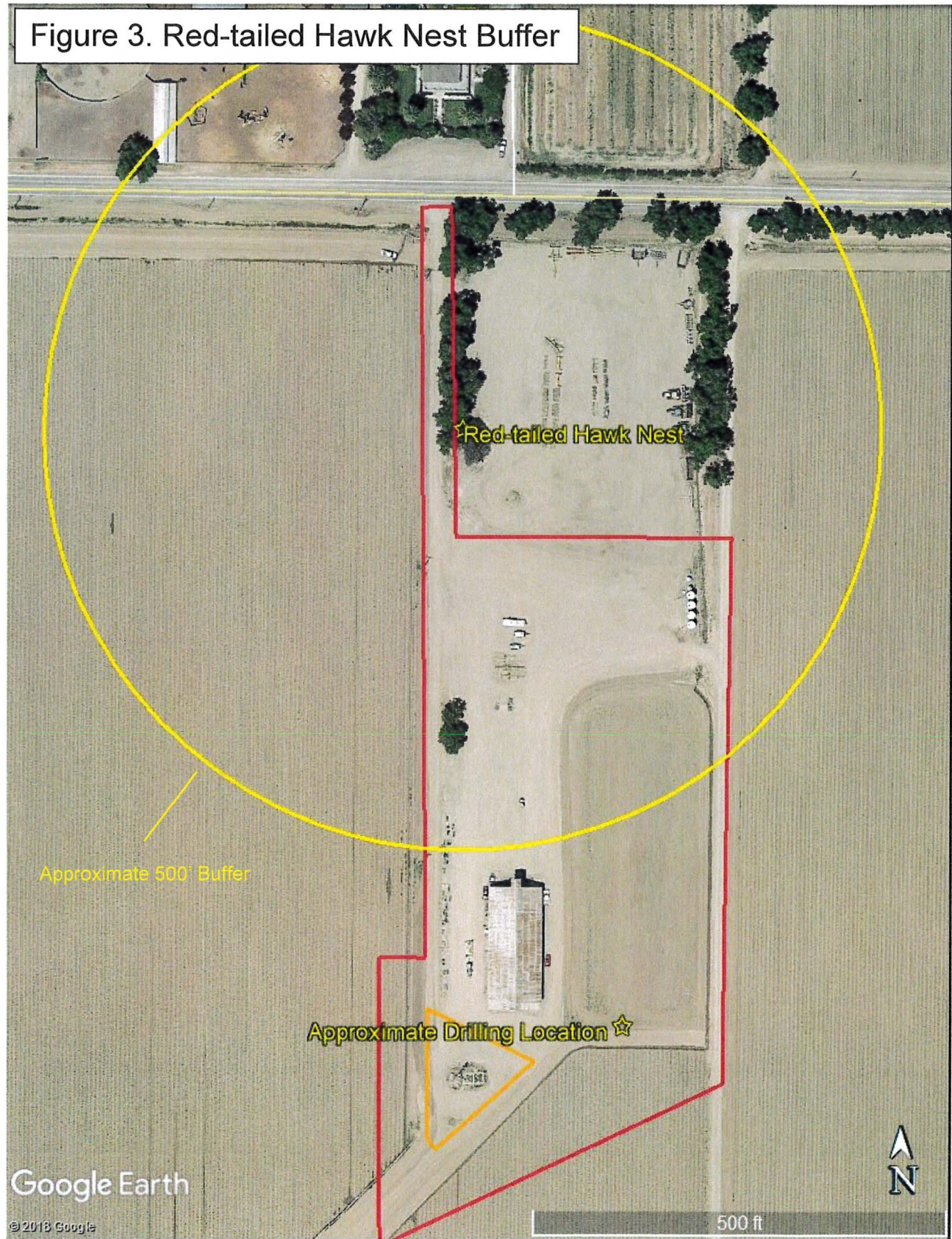
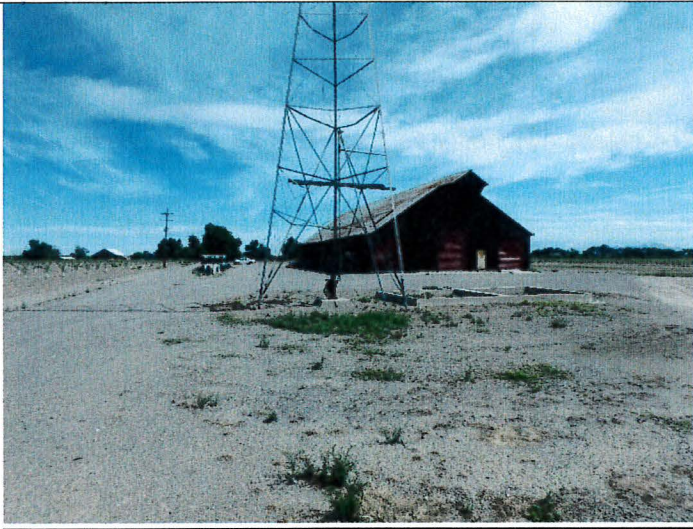
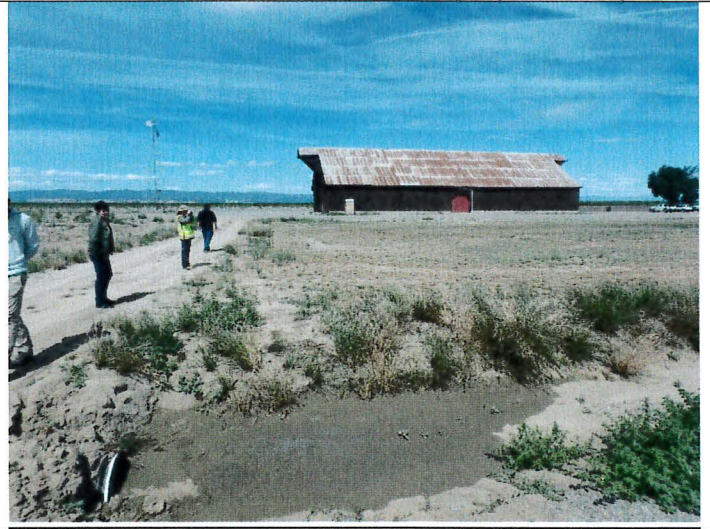


Figure 3. Property Photos



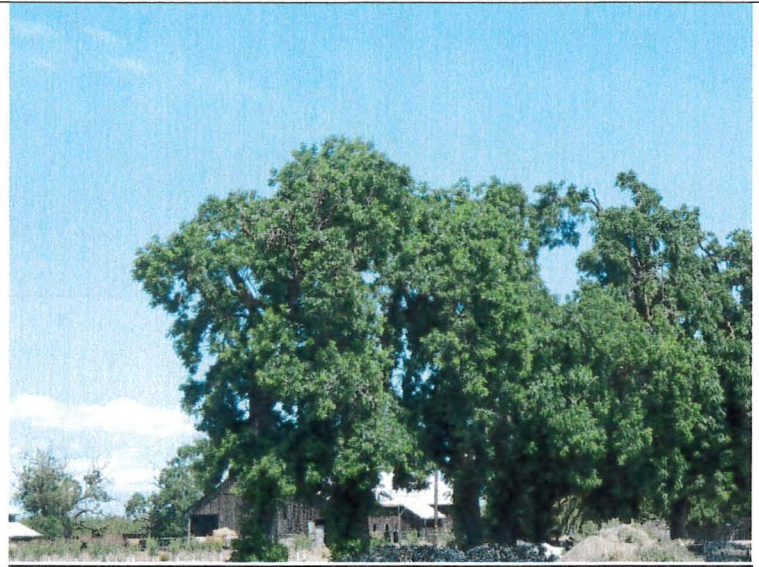
Looking north from southwest corner of project area.



Looking west at proposed drilling site from southwest corner of project area.



Looking northwest at black walnut trees along farm road.



Red-tailed hawk nest tree, located in southern tree along farm road.

Appendix A.

Potential Special Status Plant Species Table

Rare Plant Survey; Arbutuckle Monitoring Well Installation Project on Hahn Rd.; June 12, 2019

Scientific Name Common Name	Legal Status*		Distribution	Habitat Associations	Identification Period (Blooms)	Potential to Occur at the Project Site
	Federal/State/CNPS					
<i>Astragalus tener</i> var. <i>ferrisae</i> Ferris's milk-vetch	--/--/1B.1		Butte, Colusa, Glenn, Solano, Sutter, Yolo	Meadows and seeps (vernally mesic). Valley and foothill grassland (subalkaline flats). 7-246 ft.	Apr-May	None, no suitable habitat.
<i>Atriplex cordulata</i> var. <i>cordulata</i> heartscale	SC/--/1B.2		Western Central Valley and valleys of adjacent foothills	Alkali grassland, alkali meadow, alkali scrub	May-October	None, no suitable habitat.
<i>Atriplex depressa</i> Brittlescale	--/--/1B.2		Western Central Valley and valleys of adjacent foothills	Alkali grassland, alkali meadow, and alkali scrub	May-Oct	None, no suitable habitat.
<i>Atriplex persistens</i> Vernal pool smallscale	SC/--/1B.2		Colusa, Glenn, Madera, Merced, Solano, Stanislaus, and Tulare	Chenopod scrub, Playas, Vernal pools, Wetlands; >377' in elevation	Jun-Oct	None, no suitable habitat.
<i>Chloropyron palmanum</i> Palmate-bracted bird's-beak	E/E/1B.1		Alameda, Colusa, Fresno, Madera, Yolo, extirpated from San Joaquin County	Chenopod scrub, Valley and foothill grassland/alkaline. 16-509ft.	May-October	None, no suitable habitat.
<i>Extriplex joaquinana</i> San Joaquin spearscale	--/--/1B.2		Utah, Contra Costa, Colusa, Glenn, Merced, Napa, Sacramento, San Benito, Santa Clara*, San Joaquin*, Solano, Tulare*, Yolo	Chenopod scrub, Meadows, Playas, Valley and foothill grassland / alkaline	Apr-Sep	None, no suitable habitat.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter's goldfields	SC/--/1B.1		Tehama, Kern (extirpated), Los Angeles (extirpated), Orange (extirpated), Riverside, Santa Barbara, San Bernardino (extirpated), San Diego, San Luis Obispo, Tulare (possibly extirpated), and Ventura Counties	Coastal salt marshes and swamps, playas, and vernal pools. Elevation: 3-4,002 ft.	Feb-Jun	None, no suitable habitat.
<i>Layia septentrionalis</i> Colusa layia	--/--/1B.2		Inner North Coast Range	Sandy or serpentine soils, in grasslands and openings in chaparral and foothill woodlands	Apr-May	Low, no suitable habitat.

Rare Plant Survey: Arbuckle Monitoring Well Installation Project on Hahn Rd.: June 12, 2019

Scientific Name Common Name	Legal Status*		Distribution	Habitat Associations	Identification Period (Blooms)	Potential to Occur at the Project Site
	Federal/State/CNPS					
<i>Navarretia leucocephala</i> ssp. <i>bakeri</i> Baker's navarretia	--/--1B.1		Colusa, Glenn, Lake, Lassen, Mendocino, Marin, Napa, Solano, Sonoma, Sutter, Tehama, Yolo	Cismontane woodland, Lower montane coniferous forest, Meadows and seeps, Valley and foothill grassland, Vernal pools/mesic. Elevation: 16-5,709 ft.	Apr-Jul	None, no suitable habitat.
<i>Fuccinellia simplex</i> California alkali grass	--/--1B.2		Butte, Colusa, Glenn, Yolo and Sacramento and San Joaquin Valley	Valley grassland, wetland-riparian (usually in wetlands)	Mar-May	None, no suitable habitat.
<i>Trichocoronis wrightii</i> var. <i>wrightii</i> Wright's trichocoronis	--/--2B.1		Riverside, extirpated from Colusa, Merced, Riverside, San Joaquin, Sutter	Meadows, Marshes and Swamps, Riparian forest, and alkaline Vernal pools	May-Sep	None, no suitable habitat.

* Status Explanations:

- Federal**
- = No status definition.
 - E = listed as endangered under the federal Endangered Species Act.
 - SC = species of concern; species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.
- State**
- = No status definition.
 - E = listed as endangered under the California Endangered Species Act.
- California Native Plant Society**
- 1B = List 1B species: rare, threatened, or endangered in California and elsewhere.

Appendix B.

Potential Special Status Wildlife Species Table

Arbuckle Monitoring Well Installation Project on Hahn Rd.; June 18, 2019

Common Name Scientific Name	Legal Status*		Distribution	Habitat Associations	Potential to Occur at the Project Site
	Federal	State			
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	E/--		Vernal pools in the Sacramento Valley from the Vina plains in Butte County south to Sacramento County and west to the Jepson Prairie region of Solano County.	Vernal pools with either clear or turbid water in grass bottomed swales of unplowed grasslands. Bottoms of pools are either mud or old alluvial soils underlain by hardpan. Pools typically have a neutral pH, very low conductivity, and alkalinity.	None, no suitable habitat.
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T/--		Occurs within Central Valley of California. Stream side habitats below 2,000 feet throughout the Central Valley.	Elderberry shrubs in riparian areas in association with blue elderberry (<i>Sambucus mexicana</i>). Prefers to lay eggs in elderberry with 2-8 inch diameter.	None, no suitable habitat.
Steelhead - Central Valley ESU <i>Oncorhynchus mykiss</i>	T/--		Sacramento River and tributaries	Cool freshwater streams and rivers, require sand and gravel for spawning	None, no suitable habitat.
Western spadefoot <i>Spea hammondi</i>	SC/SC		Sierra Nevada foothills, Central Valley, Coast Ranges, coastal counties in southern California	Shallow streams with riffles and seasonal wetlands, such as vernal pools in annual grasslands and oak woodlands	None, no suitable habitat.
Foothill yellow-legged frog <i>Rana boylei</i>	FSS/CT		Occurs in the Klamath, Cascade, North Coast, South Coast, Transverse, and Sierra Nevada Ranges up to approximately 6004 feet	Creeks or rivers in woodlands or forests with rock and gravel substrate and low overhanging vegetation along the edge; usually found near riffles with rocks and sunny banks nearby.	None, no suitable habitat.
Grant garter snake <i>Thamnophis gigas</i>	T/T		Central Valley from Fresno north to the Gridley/Sutter Buttes area; has been extirpated from areas south of Fresno	Sloughs, canals, and other small water-ways where there is a prey base of small fish and amphibians; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter	None, no suitable habitat.

Arbuckle Monitoring Well Installation Project on Hahn Rd.; June 18, 2019

Common Name Scientific Name	Legal Status*		Habitat Associations	Potential to Occur at the Project Site
	Federal State	Distribution		
White-faced ibis <i>Plegadis chihi</i>	SC/SC	Both resident and winter populations on the Salton Sea and in isolated areas in Imperial, San Diego, Ventura, and Fresno Counties; breeds at Honey Lake, Lassen County, at Mendota Wildlife Management Area, Fresno County, and near Woodland, Yolo County. Winters in Merced County and along the Sacramento River to Colusa, Glenn, Butte, Sutter, and Yolo Counties.	Prefers freshwater marshes with reeds, cattails, and rushes, but may nest in trees and forage in flooded agricultural fields, especially flooded rice fields	None, no suitable habitat.
Cackling (Aleutian Canada) goose <i>Branta hutchinsii leucopareia</i>	DL/--	The entire population winters in Butte Sink, then moves to Los Banos, Modesto, the Delta, and East Bay reservoirs; stages near Crescent City during spring before migrating to breeding grounds	Roosts in large marshes, flooded fields, stock ponds, and reservoirs; forages in pastures, meadows, and harvested grainfields; corn is especially preferred	None, no suitable habitat.
Swainson's Hawk <i>Buteo swainsoni</i>	BCC/T	Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County	Nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields	Moderate, large trees in project vicinity provide potential nesting
Mountain plover <i>Charadrius montanus</i>	--/--	Does not breed in California; in winter, found in the Central Valley south of Yuba County, along the coast in parts of San Luis Obispo, Santa Barbara, Ventura, and San Diego Counties; parts of Imperial, Riverside, Kern, and Los Angeles Counties	Occupies open plains or rolling hills with short grasses or very sparse vegetation; nearby bodies of water are not needed; may use newly plowed or sprouting grainfields	None, no suitable habitat.
Burrowing Owl <i>Athene cunicularia</i>	BCC/SC	Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast	Level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows	Low, no suitable habitat.

Arbuckle Monitoring Well Installation Project on Hahn Rd.; June 18, 2019

Common Name Scientific Name	Legal Status*		Distribution	Habitat Associations	Potential to Occur at the Project Site
	Federal	State			
Bank Swallow <i>Riparia riparia</i>	-	T	The state's largest remaining breeding populations are along the Sacramento River from Tehama County to Sacramento County and along the Feather and Lower American Rivers, in the Owens Valley. Nesting areas also include the plains east of the Cascade Range south through Lassen County, northern Siskiyou County, and small populations near the coast from San Francisco County to Monterey County.	Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam	None, no suitable habitat.
Tricolored Blackbird <i>Agelaius tricolor</i>	B	CCT	Permanent resident in the Central Valley from Butte County to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties. Rare nester in Siskiyou, Modoc, and Lassen Counties	Nests in dense colonies in emergent marsh vegetation, such as reeds and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs. Probably requires water at or near the nesting colony. Requires large foraging areas, including marshes, pastures, agricultural wetlands, dairies, and feedlots, where insect prey is abundant.	None, no suitable habitat.
American badger <i>Taxidea taxus</i>	-	SC	Occurs statewide except for the northwestern corner in Del Norte County and parts of Humboldt and Siskiyou Counties.	Dwell in areas with short grasses. They can be found in places like prairies, plains, farmland, and edges of woodland. Also can be found in shelter along roadways, fence rows, ditches banks, and field edges. They need habitats with deep top soils. This makes it easier for them to burrow and make dens.	Low, no suitable habitat.

Arbuckle Monitoring Well Installation Project on Hahn Rd.; June 18, 2019

* Status Explanations:

Federal

-- = No status definition.

BCC =U.S. Fish and Wildlife Service; Birds of Conservation

E = listed as endangered under the federal Endangered Species Act.

FSS = Forest Service sensitive species

SC = species of concern: species for which existing information indicates it may warrant listing but for which substantial biological information to support a proposed rule is lacking.

T = listed as threatened under the federal Endangered Species Act.

State

-- = No status definition.

CT =Candidate Threatened

SC = Species of special concern in California.

T = Listed as threatened under the California Endangered Species Act.