

Biological Reconnaissance Assessment for 21396 Chino Hills Fire Station 68 Project

City of Chino Hills

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July 17, 2023

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City of Chino Hills
Chino Valley Fire District
3969 College Crest Drive
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Subject: Biological Reconnaissance Assessment for Report regarding the Fire Station 68 and the Essential Resource Facility (ERF) South of Intersection of Pipeline Avenue and Soquel Canyon Road, Chino Hills, California

Chambers Group, Inc. (Chambers Group) was retained by the City of Chino Hills to conduct a literature review and biological reconnaissance-level survey for the Chino Hills Fire Station 68 (Project). The purpose of this survey was to document existing vegetation communities, identify special status species with a potential for occurrence, and map habitats that could support special status wildlife species, as well as evaluate potential impacts of the Project to these resources.

Project Site Location and Description

The 3.74-acre Project site is located south of the intersection of Pipeline Avenue and Soquel Canyon Road in Chino Hills, San Bernardino County, California. The site is located within the United States Geological Survey (USGS) *Prado Dam*, California 7.5-minute topographic quadrangle. The property is currently a vacant undeveloped lot surrounded by single-family residential homes to the north, east, and west, and Chino Hills State Park to the south. The Project site is located along a moderately steep, northeast-facing slope with an elevational range of approximately 940 to 860 above mean sea level (amsl). A map of the Project location and Project vicinity is provided in Attachment 1: Figure 1.

Literature Review

Prior to performing the biological reconnaissance survey, a literature review was conducted for soils, jurisdictional water features that contribute to hydrology, and special status species known to occur within the Project's vicinity (approximately 5 miles) of the Project site.

Soils

Prior to performing the biological reconnaissance survey, soil maps for the Project site were referenced in accordance with categories set forth by the U.S. Department of Agriculture (USDA) Soil Conservation Service and the USDA Natural Resources Conservation Service (NRCS 2023) Web Soil Survey (USDA 2023).

Hydrology

Prior to performing the field survey, a database review of the U.S. Fish and Wildlife Service's (USFWS 2023) National Wetlands Inventory (NWI) and National Hydrography Database (NHD) blueline drainages was referenced (NHD 2023). A general assessment of waters potentially regulated by the U.S. Army Corps of Engineers (USACE), California Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) was conducted for the Survey Area. Pursuant to Section 404 of the Clean Water Act, USACE regulates the discharge of dredged and/or fill material into waters of the United States. The State of California (State) regulates discharge of material into waters of the State pursuant to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act (California Water Code, Division 7, §13000 et seq.). Pursuant to Division 2, Chapter 6, Sections 1600-1602 of the California Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed,



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channel, or bank of any river, stream, or lake which supports fish or wildlife. A desktop assessment was conducted of available data prior to the biological reconnaissance survey in the field.

Special Status Habitats and Species

The most recent records of the California Natural Diversity Database (CNDDDB) managed by CDFW (2023) and the California Native Plant Society's Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California (CNPS 2023) were reviewed for the following quadrangles containing and surrounding the Project: *Prado Dam, Corona North, Guasti, Ontario, San Dimas, Yorba Linda, Orange, Black Star Canyon, and Corona South*, California USGS 7.5-minute quadrangles. These databases contain records of reported occurrences of federally or State listed endangered or threatened species, California Species of Concern (SSC), or otherwise special status species or habitats that may occur within or in the immediate vicinity of the Project site (Attachment 1: Figure 2 – CNDDDB Occurrences Map).

Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on foot within the Project site. During the survey, the biologists identified and mapped all vegetation communities found within the site onto aerial photographs (Attachment 1: Figure 3 – Vegetation Communities Map). Plant communities were determined in accordance with the *Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Plant nomenclature follows that of *The Jepson Manual, Vascular Plants of California, Second Edition* (Baldwin et al. 2012). Plant and wildlife species observed or detected within the Project site were recorded (Attachments 2 and 3). Site photographs were taken depicting current site conditions (Attachment 4).

Results

Chambers Group biologists Heather Franklin and Corey Jacobs conducted the biological reconnaissance survey within the Project site to identify vegetation communities, the potential for occurrence of special status species, and/or habitats that could support special status wildlife species. The survey was conducted on foot between 0800 and 1300 hours on March 6, 2023. Weather conditions during the survey included temperatures ranging from 56 to 60 degrees Fahrenheit, wind speeds between 1 and 3 miles per hour, with 40 percent cloud cover and 0 percent precipitation.

Biological Site Conditions

Soils

According to the results from the USDA NRCS Web Soil Survey (USDA 2023), the Project site is in San Bernardino County, CA677 part of the soil map. Two soil types are known to occur within and/or adjacent to the site. The soil types are described below.

- Nacimiento clay loam occurs within the majority of the Project site. The parent material is residuum weathered derived dominantly from calcareous shale. The available water storage is classified as low (approximately 4.8 inches) with a depth to the water table of more than 80 inches (USDA 2023).
- Fontana clay loam occurs within 10 percent of the Project site. This occurs at the very northwest corner of the Project site. The parent material is residuum weathered from sedimentary rock. The available water storage is classified as low (approximately 4 inches) with a depth to the water table of more than 80 inches (USDA 2023).

Hydrology

No jurisdictional features such as drainages or swales were observed within the Project site (Attachment 1: Figure 4 – Jurisdictional Waters Map) during the survey. A large NWI/NHD mapped blue-line feature occurs directly south/southwest of the site outside of the Project boundary. The feature was historically mapped by the NHD as a riverine system flowing through the Project site. However, it appears that the historical flow path was altered during



the development of the residential neighborhood surrounding the site. The feature now flows north through a cement-lined culvert located south and outside of the Project boundary, goes subsurface under the site, and continues under Soquel Canyon Parkway in a northeast direction. The drainage facilitates flow during storm events from the hills to the south within Chino Hills State Park.

One small depressional area was observed within the middle portion of the site near the northern boundary. The depressional feature is likely the result of human disturbance and manipulation of the area. Based on historical imagery of the area, the depression appears to have been excavated in 2014, and the site appears to be maintained on an annual basis. Currently, the area is composed primarily of non-native grasses with the exception of a few immature arroyo willow (*Salix lasiolepis*) and one Peruvian pepper tree (*Schinus molle*) located along the southern side of the depression. The area lacked evidence of hydrology and a test soil pit revealed non-hydric soils. Based on a lack of hydrological connectivity to a water feature in the area and the lack of hydric soils, this area is not classified as a wetland.

In addition, two areas inundated with water were observed within the northeast and northwest corners of the Project site. No hydrological features (i.e., ordinary high water mark, channelization, flow patterns) were observed in this area. Both areas are fed solely by nuisance water from the sprinklers located along the adjacent hillsides for ornamental vegetation within the residential community. Soil pits were investigated in each area. Soil pit one was taken in the northwest area and revealed a soil characteristic of 2.5y 4/1 with 10 percent redox of 2.5y 7/8 and consisted of clay loam. Evidence of hydrology included saturated soils and a water table at 10 inches. No hydrophytic vegetation was observed within the area. Soil pit two was taken in the northeast area and revealed a soil characteristic of 2.5y 4/1 with no redox and consisted of sandy clay loam. Evidence of hydrology included saturated soils and a water table at 3 inches. No hydrophytic vegetation was observed within the area. As stated above, both areas are fed completely by nuisance water from the surrounding residential community and lack any natural sources of hydrology or connectivity to hydrologic features. In addition, both areas lack hydrophytic vegetation. Therefore, neither inundated area qualifies as a wetland. Wetland determination forms are provided in Attachment 5.

Only one drainage feature was observed during the survey, located outside (south) of the Project. No impacts are anticipated to occur to the drainage feature; therefore, no impact to waters of the United States or waters of the State are anticipated to occur as a result of this Project.

Vegetation Communities and Other Areas

Two vegetation communities or land types were found within the Project site during the biological reconnaissance survey, Bare Ground and Non-Native Grassland. The majority of the Project site is comprised of Non-Native Grassland. The communities are described in the following subsections.

Bare Ground

Bare Ground areas are generally devoid of vegetation but do not contain any form of pavement. Bare Ground has higher water permeability and higher fossorial rodent habitat potential. Bare Ground is present throughout the northern portion of the Project site.

Non-Native Grassland

Non-Native Grassland, as described by Sawyer et al. (2009), is dominated by a continuous to open ground layer of annual grasses and herbs, less than 4 feet in height. They occur in foothills, waste places, rangelands, or openings in woodlands. The floristic composition of this vegetation community matches the non-native grassland described by Holland (1986); it exists on fine-textured, usually clay soils in valleys and foothills below 3,000 feet elevation. This community includes annual species that germinate with the onset of the late fall rains, with growth, flowering and seed production occurring from winter through spring. Plants usually die and persist as seeds through the summer-fall dry season (Holland 1986).

Non-Native Grassland was present throughout the majority of the Project site. Native species identified within this community within the Project site included common fiddleneck (*Amsinckia menziesii*), mediterranean stork's-bill



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(*Erodium malacoides*), and silver bush lupine (*Lupinus albifrons* var. *albifrons*). Non-native species within the Project site included riggut grass (*Bromus diandrus*), shortpod mustard (*Hirschfeldia incana*), Foxtail chess (*Bromus madritensis*), wild oat (*Avena fatua*), rat-tail fescue (*Festuca myuros*), Italian ryegrass (*Festuca perennis*), glaucous foxtail barley (*Hordeum murinum*), annual bluegrass (*Poa annua*), tocalote (*Centaurea melitensis*), blessed thistle (*Centaurea benedicta*), bristly ox-tongue (*Helminthotheca echioides*), common sow thistle (*Sonchus oleraceus*), black mustard (*Brassica nigra*), shepherd's purse (*Capsella bursa-pastoris*), London rocket (*Sisymbrium irio*), Russian thistle (*Salsola tragus*), white sweetclover (*Melilotus albus*), cheeseweed (*Malva parviflora*), scarlet pimpernel (*Anagallis arvensis*), and curly dock (*Rumex crispus*). There are 2.41 acres of Non-Native Grassland within the Project site.

General Plants

A total of 24 plant species were observed within the Project site during the biological reconnaissance survey (Attachment 2: Plant Species Observed). Plant species observed during the survey were representative of the existing Project site conditions. No special status plant species were observed during the survey.

General Wildlife

A total of 14 wildlife species were observed within the Project site during the biological reconnaissance survey. Wildlife species observed or detected during the survey were characteristic of the existing Project site conditions. A complete list of wildlife species observed or detected is provided in Attachment 3 – Wildlife Species Observed/Detected List.

Sensitive Species

Special Status Species

The following information is a list of abbreviations used to help determine special status biological resources potentially occurring in the Survey Area.

CNPS California Rare Plant Rank (CRPR)

- 1A = Plants presumed extinct in California.
- 1B = Plants rare and endangered in California and throughout their range.
- 2 = Plants rare, threatened or endangered in California but more common elsewhere in their range.
- 3 = Plants about which we need more information, a review list.
- 4 = Plants of limited distribution; a watch list.

CRPR Extensions

- 0.1 = Seriously endangered in California (greater than 80 percent of occurrences threatened/high degree and immediacy of threat).
- 0.2 = Fairly endangered in California (20 to 80 percent occurrences threatened).
- 0.3 = Not very endangered in California (less than 20 percent of occurrences threatened).

Federal

- FE = Federally listed; Endangered
- FT = Federally listed; Threatened

State

- ST = State listed; Threatened
- SE = State listed; Endangered



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- RARE = State listed; Rare (Listed “Rare” animals have been re-designated as Threatened, but Rare plants have retained the Rare designation.)
- SSC = State Species of Special Concern
- WL = CDFW Watch List
- FP = CDFW Fully Protected

The following information was used to determine biological resources potentially occurring within the Survey Area. The criteria used to evaluate the potential for special status species to occur within the Survey Area are outlined in Table 1.

Table 1: Criteria for Evaluating Special Status Species Potential for Occurrence (PFO)

PFO*	CRITERIA
Absent:	Species is restricted to habitats or environmental conditions that do not occur within the Survey Area.
Low:	Historical records for this species do not exist within the vicinity (approximately 5 miles) of the Survey Area, and/or habitats or environmental conditions needed to support the species are of poor quality.
Moderate:	Either a historical record exists of the species within the vicinity of the Survey Area (approximately 5 miles) and marginal habitat exists on the Survey Area, or the habitat requirements or environmental conditions associated with the species occur within the Survey Area, but no historical records exist within 5 miles of the Survey Area.
High:	Both a historical record exists of the species within the Survey Area or its immediate vicinity (approximately 1 mile), and the habitat requirements and environmental conditions associated with the species occur within the Survey Area.
Present:	Species was detected within the Survey Area at the time of the survey.

*PFO: Potential for Occurrence

Special Status Plant Species

Database searches (CDFW 2023; CNPS 2023) resulted in a list of six federally and/or State listed threatened, endangered, or otherwise special status plant species documented to historically occur within the vicinity of Project site. Of the six plant species, it was determined that all six plant species are considered absent from the Project site due to the lack of suitable habitat or the Project site. No special status plant species were found during the biological reconnaissance survey.

The following 6 plant species are considered **Absent** from the Survey Area due to lack of suitable habitat:

- Braunton’s milk-vetch (*Astragalus brauntonii*)—**FE**, CRPR 1B.1
- Gambel’s water cress (*Nasturtium gambelii*)—**FE, ST**, CRPR 1B.1
- Nevin’s barberry (*Berberis nevinii*)—**FE, SE**, CRPR 1B.1
- San Fernando valley spineflower (*Chorizanthe parryi* var. *Fernandina*)—**SE**, CRPR 1B.1
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *Sanctorum*) —**FE, SE**, CRPR 1B.1
- slender-horned spineflower (*Dodecahema leptoceras*)—**FE, SE**, CRPR 1B.1

Special Status Wildlife Species

Database searches (CDFW 2023; USFWS 2023) resulted in a list of 17 federally and/or State listed endangered or threatened, State SSC, or otherwise special status wildlife species documented to occur within the Project site. After a



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literature review and the assessment of the various habitat types within the Project site, it was determined that 16 special status wildlife species are considered absent and one species has a high potential to occur directly adjacent to the site.

The following 16 wildlife species are considered **Absent** from the Survey Area due to the absence of suitable habitat present within the site:

- arroyo toad (*Anaxyrus californicus*)—**FE, SSC**
- bald eagle (*Haliaeetus leucocephalus*)—**SE**
- California black rail (*Laterallus jamaicensis coturniculus*)—**ST**
- California least tern (*Sternula antillarum browni*)—**FE, SE**
- coastal California gnatcatcher (*Polioptila californica californica*)—**FT, SSC**
- Delhi sands flower-loving fly (*Rhaphiomidas terminates abdominalis*)—**FE**
- quino checkerspot butterfly (*Euphydryas Editha quino*)—**FE**
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*)—**FE, SSC**
- Santa Ana sucker (*Catostomus santaanae*)—**FT**
- San Diego fairy shrimp (*Branchinecta sandiegonensis*)—**FE**
- southwestern willow flycatcher (*Empidonax traillii extimus*)—**FE, SE**
- steelhead-Southern California DPS (*Oncorhynchus mykiss irideus* pop.10)—**FE**
- Stephens' kangaroo rat (*Dipodomys stephensi*)—**FT, ST**
- Swainson's hawk (*Buteo swainsoni*)—**ST**
- tricolored blackbird (*Agelaius tricolor*)—**ST**
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)—**FT, SE**

The analysis of the CNDDDB search and field survey resulted in one species with a **high** potential to occur directly adjacent to the Project site.

least Bell's vireo (*Vireo bellii pusillus*) FE, SE

The least Bell's vireo (nesting) is a federal- and state-listed endangered subspecies of the Bell's vireo. The least Bell's vireo typically nests in willows (*Salix* spp.) and other riparian trees or shrubs, and typically nests 3 to 6 feet above the ground. This species requires densely vegetated riparian habitat along streams and rivers during the spring and summer months to breed, and foraging in habitat adjacent to its nesting territory, which is typically riparian or chaparral (USFWS 2023). The Project site itself lacks riparian habitat required by this species for nesting; however, high quality habitat occurs within the drainage feature located south of the site. In addition, least Bell's vireo has been recorded within a half a mile of the Project site in a drainage located directly west of the site. Therefore, this species has a high potential to occur within the direct vicinity of the Project site.

United States Fish Wildlife Service Critical Habitat

Critical Habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated Critical Habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated Critical Habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Designated Critical Habitat delineates all suitable habitat, occupied or not, that is essential to the survival and recovery of the species. According to the USFWS Critical Habitat WebGIS map, the Project site does not fall within Designated Critical Habitat (USFWS 2023). However, critical habitat for least Bell's vireo occurs approximately 2.15 miles west of the Project site.



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Conclusions and Recommendations

Hydrology

A large drainage and culvert occur directly south/southwest (outside) of the Project site. Work will not occur outside of the proposed Project boundaries; therefore, no impacts to this drainage is anticipated to occur as a result of the Project. The two small inundated areas lack any connectivity to hydrologic features and are not considered wetlands; therefore, no impacts to jurisdictional waters or wetlands are anticipated to occur as a result of Project activities. In order to minimize temporary impacts to drainage and culvert located to the south, BMP's including silt fencing and straw waddle are recommended throughout construction activities.

Special Status Plant Species

Following the literature review and after the field assessment of the various habitat types in the Project site, it was determined that of the six special status plant species with a potential to occur are considered absent within the Project site due to a lack of suitable habitat for these species. No special status species were observed during the field survey.

Special Status Wildlife Species

Following the literature review and the assessment of the various habitat types within the Project site, it was determined that 16 of 17 special status wildlife species known to occur within the Project site are considered absent due to a lack of suitable habitat for these species.

No sensitive wildlife species were observed during the field survey.

Least Bell's vireo has a high potential to occur directly adjacent to the Project site, within 500 feet of the site. Although 100 percent of the habitat that is occupied or potentially occupied by LBVI will be avoided by the proposed Project, and habitat that represents long-term conservation value for LBVI will not be impacted by the proposed Project, Chambers Group recommends the following mitigation measures to ensure the nesting/breeding activities of this species are not disrupted and no impact to habitat that represents long-term conservation value for LBVI occurs as a result of the proposed Project:

- The project impact footprint, including any construction buffer, shall be staked and fenced (e.g., with orange snow fencing, silt fencing or a material that is clearly visible) and the boundary shall be confirmed by a qualified biological monitor prior to ground disturbance. The construction site manager shall ensure that the fencing is maintained for the duration of construction and that any required repairs are completed in a timely manner.
- Equipment operators and construction crews will be informed of the importance of the construction limits by the biological monitor prior to any ground disturbance.
- Construction activities within 500 feet of the nearest extent of adjacent riparian habitat will be avoided from April 1 to August 31.
- If construction cannot be avoided from April 1 to August 31, a preconstruction survey shall be conducted by a qualified biologist. If LBVI or nesting LBVI are observed, a 500-foot avoidance buffer shall be implemented, and a biological monitor should be present throughout work activities to ensure the individual is not impacted by work activities.
- For any vegetation clearing or work within 100 feet of riparian habitat, a biologist will monitor to ensure encroachment into the riparian habitat area does not occur.
- Active construction areas will be watered regularly (at least once every two hours) to control dust and thus minimize impacts on vegetation within and adjacent to the riparian habitat.



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- Construction personnel will strictly limit their activities, vehicles, equipment, and construction materials to the limits of disturbance and designated staging areas and routes of travel approved by the biological monitor.
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the limits of disturbance and at least 200 feet from jurisdictional aquatic features. These designated areas will be clearly marked and located in such a manner as to contain runoff and will be approved by the biological monitor.
- To avoid attracting predators, the project site will be kept clear of trash and debris. All food related trash items will be enclosed in sealed containers and regularly removed from the site.

To minimize potential impacts to nesting birds protected under the Migratory Bird Treaty Act (MBTA), construction activities should take place outside nesting season (February 1 to August 31) to the greatest extent practicable.

If construction activities occur during nesting season, a preconstruction nesting bird survey should be conducted prior to initiation of ground-disturbing activities. To the maximum extent practicable, a minimum buffer zone around occupied nests should be determined by a qualified biologist to avoid impacts to the active nest. The buffer should be maintained during physical ground-disturbing activities. Once nesting has ceased and the nestlings has fledged, the buffer may be removed.

Please contact me at (949) 261-5414 or hfranklin@chambersgroupinc.com if you have any questions or concerns regarding this memo report.

Sincerely,

CHAMBERS GROUP, INC.



Heather Franklin

Senior Biologist

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Attachments

- Attachment 1:** Figure 1 – Project Location and Vicinity Map
- Figure 2 – CNDDDB Occurrences Map
- Figure 3 – Vegetation Communities Map
- Figure 4 – Jurisdictional Waters Map

Attachment 2: Plant Species Observed

Attachment 3: Wildlife Species Observed

Attachment 4: Site Photographs

Attachment 5: Wetland Determination Forms



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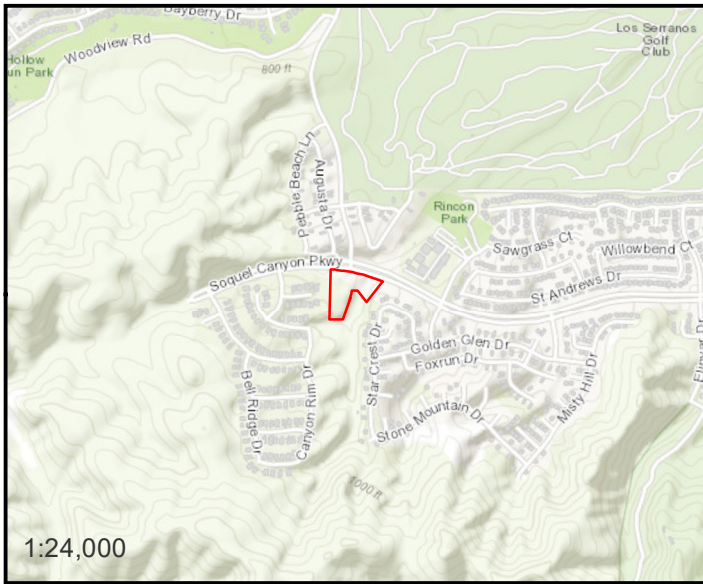
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ATTACHMENT 1 – FIGURES





 Project Location

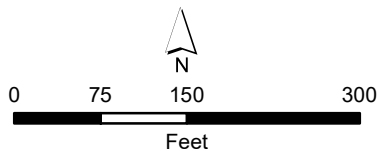
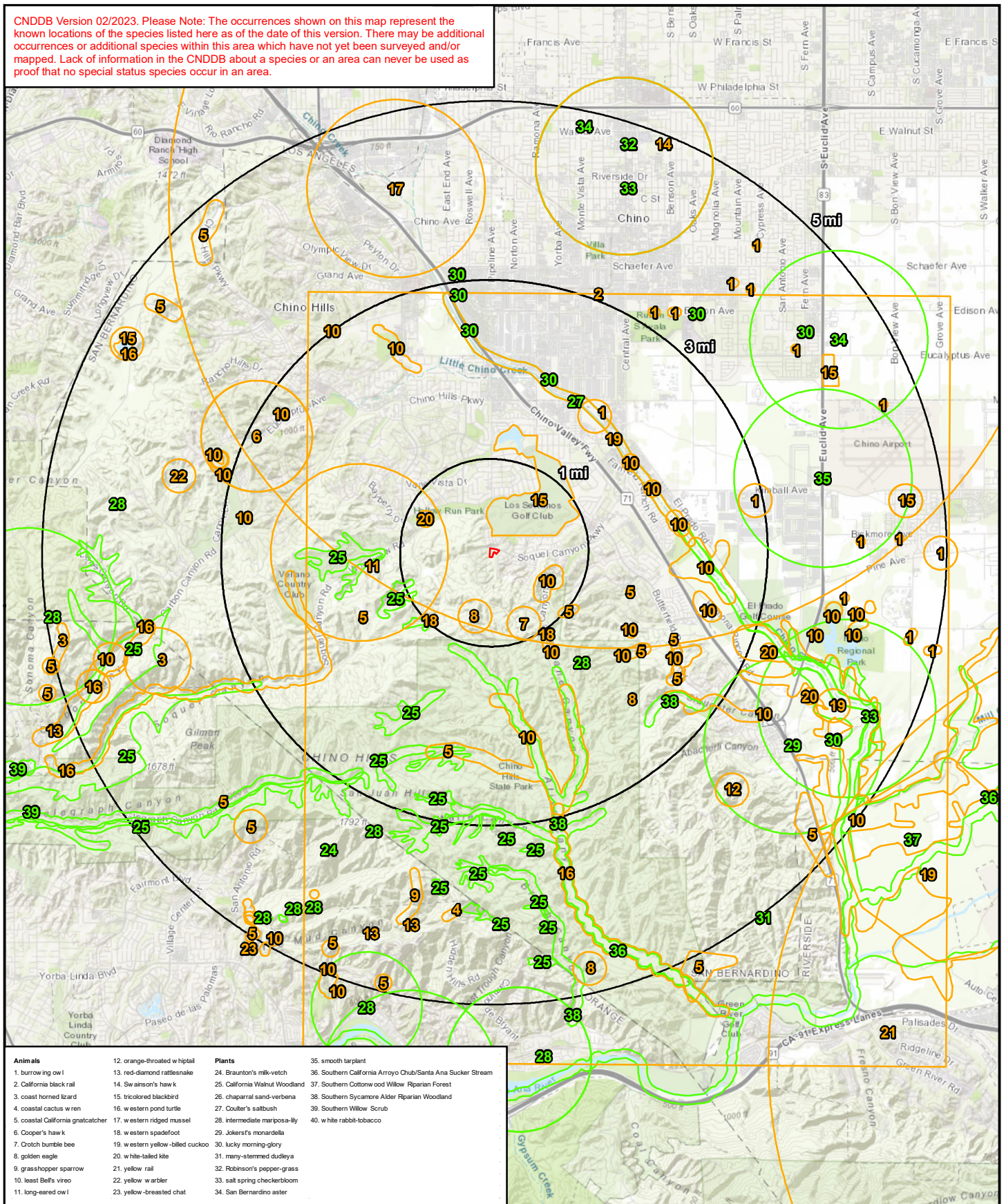


Figure 1
Chino Valley Fire Station 68
Project Location and Vicinity

CNDDB Version 02/2023. Please Note: The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDB about a species or an area can never be used as proof that no special status species occur in an area.



Animals	Plants
1. burrowing owl	24. Braunton's milk-vetch
2. California black rail	25. California Walnut Woodland
3. coast horned lizard	26. chaparral sand-verbena
4. coastal cactus wren	27. Coulter's saltbush
5. coastal California gnatcatcher	28. intermediate mariposa-lily
6. Cooper's hawk	29. Jokers's monardella
7. Crotch bumble bee	30. lucky morning-glory
8. golden eagle	31. many-stemmed dudleya
9. grasshopper sparrow	32. Robinson's pepper-grass
10. least Bell's vireo	33. salt spring checkerbloom
11. long-eared owl	34. San Bernardino aster
12. orange-throated whiptail	35. smooth tarplant
13. red-diamond rattlesnake	36. Southern California Arroyo Chub/Santa Ana Sucker Stream
14. Swainson's hawk	37. Southern Cottonwood Willow Riparian Forest
15. tricolored blackbird	38. Southern Sycamore Alder Riparian Woodland
16. western pond turtle	39. Southern Willow Scrub
17. western ridged mussel	40. white rabbit-tobacco
18. western spadefoot	
19. western yellow-billed cuckoo	
20. white-tailed kite	
21. yellow rail	
22. yellow warbler	
23. yellow-breasted chat	

▭ Project Location
CNDDB Occurrences
▭ Animals
▭ Plants

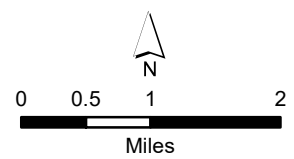


Figure 2
Chino Valley Fire Station 68
Project Location and Vicinity



- Project Location
- Vegetation Communities**
- Bare Ground/Disturbed
- Non-Native Grassland

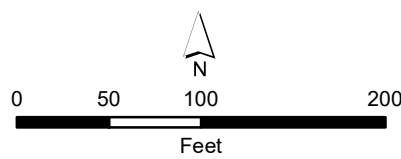
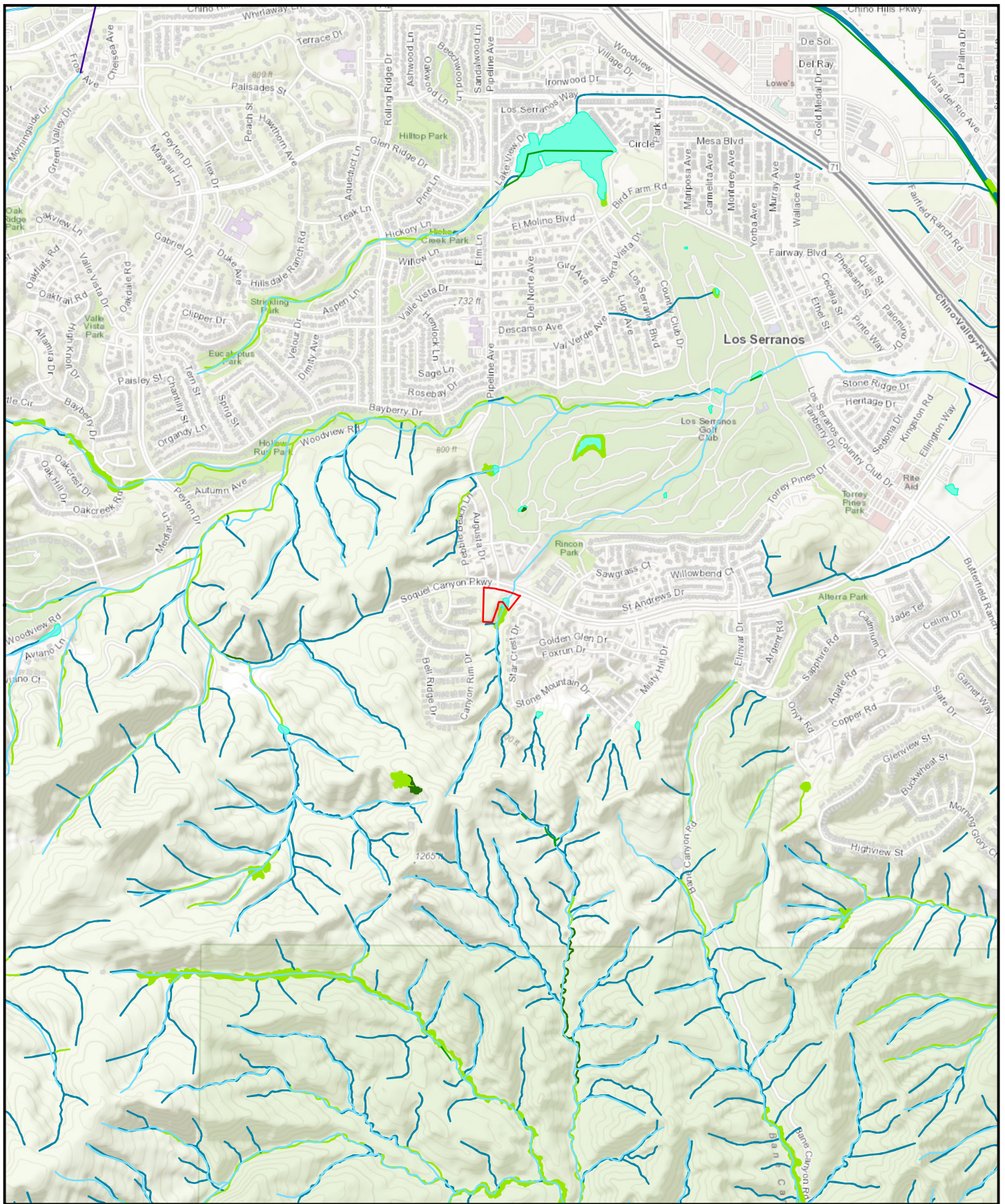


Figure 3
Chino Valley Fire Station 68
Vegetation Communities



- Project Location
- NHD**
- Artificial Path Connector Stream River
- NWI**
- Freshwater Emergent Wetland Lake
- Freshwater Forested/Shrub Wetland Riverine
- Freshwater Pond

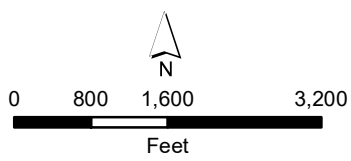


Figure 4
Chino Valley Fire Station 68
Jurisdictional Features

ATTACHMENT 2 – PLANT SPECIES OBSERVED



ATTACHMENT 2: PLANT SPECIES OBSERVED

Scientific Name	Common Name
ANGIOSPERMS (EUDICOTS)	
ASTERACEAE	SUNFLOWER FAMILY
<i>Centaurea melitensis</i> *	tochalote
<i>Centaurea benedicta</i> *	Blessed thistle
<i>Helminthotheca echioides</i> *	bristly ox-tongue
<i>Sonchus oleraceus</i> *	Common sow thistle
BORAGINACEAE	BORAGE FAMILY
<i>Amsinckia menziesii</i>	Common fiddleneck
BRASSICACEAE	MUSTARD FAMILY
<i>Brassica nigra</i> *	black mustard
<i>Capsella bursa-pastoris</i> *	Shepherd's purse
<i>Hirschfeldia incana</i> *	shortpod mustard
<i>Sisymbrium irio</i> *	London rocket
CHENOPODIACEAE	GOOSEFOOT FAMILY
<i>Salsola tragus</i> *	<i>Russian thistle</i>
GERANIACEAE	GERANIUM FAMILY
<i>Erodium malacoides</i> *	Mediterranean stork's-bill
FABACEAE	LEGUME FAMILY
<i>Lupinus albus</i> var. <i>albus</i>	Silver bush lupine
<i>Melilotus albus</i> *	white sweetclover
MALVACEAE	MALLOW FAMILY
<i>Malva parviflora</i> *	cheeseweed
MYRSINACEAE	MYRSINE FAMILY
<i>Anagallis (Lysimachia) arvensis</i> *	Scarlet pimpernel
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Rumex crispus</i> *	Curly dock
SALICACEAE	WILLOW FAMILY
<i>Salix lasiolepis</i>	Arroyo willow
ANGIOSPERMS (MONOCOTS)	
POACEAE	GRASS FAMILY
<i>Avena fatua</i> *	<i>wild oat</i>
<i>Bromus diandrus</i> *	Ripgut grass
<i>Bromus madritensis subsp. rubens</i> *	<i>red brome</i>
<i>Festuca myuros</i> *	<i>rat-tail fescue</i>
<i>Festuca perennis</i> *	Italian ryegrass
<i>Hordeum murinum</i> *	<i>glaucous foxtail barley</i>
<i>Poa annua</i> *	<i>Annual bluegrass</i>

*Non-Native Species, +Ornamental, Unlikely to be Invasive

ATTACHMENT 3 – WILDLIFE SPECIES OBSERVED/DETECTED



ATTACHMENT 3 – WILDLIFE SPECIES LIST

Scientific Name	Common Name
CLASS AVES	BIRDS
TROCHILIDAE	HUMMINGBIRDS
<i>Calypte anna</i>	Anna's hummingbird
AEGITHALIDAE	BUSHTITS
<i>Psaltriparus minimus</i>	bushtit
ANATIDAE	DUCKS, GEESE, SWANS
<i>Anas discors</i>	mallard
CHARADRIIDAE	PLOVERS
<i>Charadrius vociferus</i>	killdeer
CORVIDAE	JAYS & CROWS
<i>Corvus brachyrhynchos</i>	American crow
COLUMBIDAE	DOVES
<i>Zenaida macroura</i>	mourning dove
EMBERIZIDAE	EMBERIZIDS
<i>Melospiza</i>	song sparrow
MIMIDAE	MOCKINGBIRDS, THRASHERS
<i>Mimus polyglottos</i>	northern mockingbird
PICIDAE	WOODPECKERS
<i>Melanerpes formicivorus</i>	acorn woodpecker
TROGLODYTIDAE	WRENS
<i>Thryomanes bewickii</i>	Bewick's wren
TYRANNIDAE	TYRANT FLYCATCHERS
<i>Sayornis nigricans</i>	black phoebe
<i>Sayornis saya</i>	say's phoebe
FRINGILLIDAE	FINCHES
<i>Carpodacus mexicanus</i>	house finch
<i>Spinus tristis</i>	Lesser goldfinch

ATTACHMENT 4 – SITE PHOTOGRAPHS



ATTACHMENT 4 – SITE PHOTOGRAPHS



Photo 1.
Overview of the Project site from the northwest corner of the site. Photo facing southeast.



Photo 2.
Photo showing an overview of the site from the northeast corner of project site. Photo facing southwest.



Photo 3.
Photo showing overview of the site from the southeast corner. Photo facing north.



Photo 4.
Photo showing an overview of the site from the west side. Photo facing northeast.



Photo 5.
Photo depicts depression from disturbance with willows at the southern end of depression. Photo facing south.



Photo 6.
Photo depicts the potential wetland in the northeast corner of the Project site. Photo facing northeast.



Photo 7.
Photo depicts Soil Pit 1 taken near the northwest corner. Photo taken facing northwest.

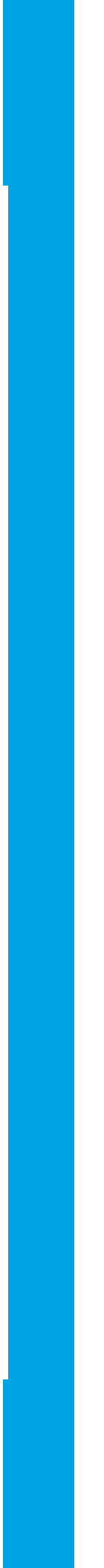


Photo 8.
Photo showing the riparian vegetation within the drainage and the concrete culvert that runs under the Project site, located outside the southeast portion of the Project boundary. Photo facing south.



Photo 9.
Photo showing the riparian vegetation and drainage located south/east of the site. Photo facing northeast.

ATTACHMENT 4 – WETLAND DETERMINATION FORMS



WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Chino Valley Fire Station 68 _____ City/County: Chino Hills/San Bernardino County _____
 Sampling Date: 03/06/2023 _____ Applicant/Owner: City of Chino Hills State: CA _____ Sampling Point: WL1_ _____
 Investigator(s): Heather Franklin and Corey Jacobs _____ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): depression _____ Local relief (concave, convex, none): concave _____ Slope (%): 0 _____
 Subregion (LRR): _____ Lat: 33.958130 N _____ Long: -117.713616 W _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: N/A _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes No _____ (If no, explain in Remarks.)
 Are Vegetation __, Soil _____, or Hydrology _____ significantly disturbed? Yes _____ Are "Normal Circumstances" present? Yes No _____
 Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? No _____ (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No _____
Remarks: Not normal Circumstances as it is fed solely by nuisance water from the sprinklers located along the adjacent hillsides for ornamental vegetation within the residential community.	

VEGETATION

<u>Tree Stratum</u> (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: 1 _____ (A) Total Number of Dominant Species Across All Strata: 1 _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: 1 _____ (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
Total Cover: 0 _____				Prevalence Index worksheet: _____ Total % Cover of: _____ Multiply by: _____ OBL species 0 _____ x 1 = 0 _____ FACW species 0 _____ x 2 = 0 _____ FAC species 1 _____ x 3 = 3 _____ FACU species 1 _____ x 4 = 4 _____ UPL species 0 _____ x 5 = 0 _____ Column Totals: 2 _____ (A) 7 _____ (B) Prevalence Index = B/A = 3.5 _____
<u>Sapling/Shrub Stratum</u>				
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover: 0 _____				
<u>Herb Stratum</u>				Hydrophytic Vegetation Indicators: <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain)
1. <i>Rumex crispus</i>	5	No	FAC	
2. <i>Festuca myuros</i>	60	Yes	FACU	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: 65 _____				
<u>Woody Vine Stratum</u>				¹ Indicators of hydric soil and wetland hydrology must be present.
1. _____	_____	_____	_____	
2. _____	_____	_____	_____	
Total Cover: 0 _____				
% Bare Ground in Herb Stratum 25 _____ % Cover of Biotic Crust 0 _____				Hydrophytic Vegetation Present? Yes _____ No <input checked="" type="checkbox"/>
Remarks:				

SOIL

Sampling Point: WL1 _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	2.5y 4/1	95	7.5yr	3	C	M	clay loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ²Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) (LRR C)
- 1 cm Muck (A9) (LRR D)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

- 1 cm Muck (A9) (LRR C)
- 2 cm Muck (A10) (LRR B)
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____
 Depth (inches): _____

Hydric Soil Present? Yes _____ No **X** _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Secondary Indicators (2 or more required)

Primary Indicators (any one indicator is sufficient)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) (Nonriverine)
- Sediment Deposits (B2) (Nonriverine)
- Drift Deposits (B3) (Nonriverine)
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)
- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Plowed Soils (C6)
- Other (Explain in Remarks)

- Water Marks (B1) (Riverine)
- Sediment Deposits (B2) (Riverine)
- Drift Deposits (B3) (Riverine)
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Thin Muck Surface (C7)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X _____ No _____ Depth (inches): _____
 Water Table Present? Yes X _____ No _____ Depth (inches): 6 _____
 Saturation Present? Yes X _____ No _____ Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes **X** _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Chino Valley Fire Station 68 _____ City/County: Chino Hills/San Bernardino County _____
 Sampling Date: 03/06/2023 _____ Applicant/Owner: City of Chino _____ State: CA_ Sampling Point: WL2_
 Investigator(s): Heather Franklin and Corey Jacobs _____ Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): depression _____ Local relief (concave, convex, none): concave _____ Slope (%): 0 _____
 Subregion (LRR): _____ Lat: 33.958401 _____ Long: -117.715227 _____ Datum: _____
 Soil Map Unit Name: _____ NWI classification: _____ N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X _____ No _____ (If no, explain in Remarks.)
 Are Vegetation X_, Soil X_____, or Hydrology _____ significantly disturbed? Yes _____ Are "Normal Circumstances" present? Yes X _____ No _____
 Are Vegetation X_____, Soil X_____, or Hydrology _____ naturally problematic? No _____ (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No X _____ Hydric Soil Present? Yes X _____ No _____ Wetland Hydrology Present? Yes X _____ No _____	Is the Sampled Area within a Wetland? Yes X _____ No _____
Remarks: Not normal Circumstances as it is fed solely by nuisance water from the sprinklers located along the adjacent hillsides for ornamental vegetation within the residential community.	

VEGETATION

<u>Tree Stratum</u> (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. _____	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: 1 _____ (A)
2. _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: 1 _____ (B)
3. _____	_____	_____	_____	Percent of Dominant Species That Are OBL, FACW, or FAC: 1 _____ (A/B)
4. _____	_____	_____	_____	
Total Cover: 0 _____				
<u>Sapling/Shrub Stratum</u>				
1. _____	_____	_____	_____	Prevalence Index worksheet: _____ Total % Cover of: _____ Multiply by: _____ OBL species 0 _____ x 1 = 0 _____ FACW species 0 _____ x 2 = 0 _____ FAC species 1 _____ x 3 = 3 _____ FACU species 0 _____ x 4 = 0 _____ UPL species 1 _____ x 5 = 5 _____ Column Totals: 2 _____ (A) 8 _____ (B) Prevalence Index = B/A = 4 _____
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
Total Cover: 0 _____				
<u>Herb Stratum</u>				
1. <i>Rumex crispus</i>	5	No	FAC	Hydrophytic Vegetation Indicators: ___ Dominance Test is >50% ___ Prevalence Index is ≤3.0 ¹ ___ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) ___ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present.
2. <i>Helminthotheca echioides</i>	30	No	UPL	
3. <i>Brassica nigra</i>	15	No	None	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
Total Cover: 50 _____				
<u>Woody Vine Stratum</u>				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No X _____
2. _____	_____	_____	_____	
Total Cover: 0 _____				
% Bare Ground in Herb Stratum 20 _____	% Cover of Biotic Crust 30 _____			

Remarks:

