

Hungry Valley SVRA

Vegetation Mapping Report 2023

California State Parks



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Link to GIS data files

[Finescale Vegetation Mapping at the SVRAs \(arcgis.com\)](#)

Introduction

Goals and Purpose

This finescale vegetation map for Hungry Valley SVRA was developed by California State Park staff in 2021-2023. Its development was prompted by the passage of Senate Bill 249, in which California Department of Parks and Recreation's Off-Highway Motor Vehicle Recreation Division (OHMVRD) was charged with meeting new legislative mandates to ensure resources compliance within all State Vehicular Recreation Areas (SVRAs). These mandates require (among other things) that OHMVRD compile an inventory of native plant communities within each SVRA [PRC 5090.35 (c)(1)]. To meet this requirement, OHMVRD has consulted the California Department of Fish and Wildlife's Vegetation Classification and Mapping Program (VegCAMP) to source finescale vegetation maps

that cover the SVRA footprint, or, if not available, used the VegCAMP methods to develop a new finescale vegetation map.

The finescale vegetation map and associated data is intended to provide an inventory of native plant communities, inform the park's natural resource management planning including the Wildlife Habitat Protection Plan (WHPP), and establish a baseline for measuring future vegetation change.

Summary of Vegetation Mapping Effort

Spring 2021	Conduct field surveys to sample vegetation types
Fall 2022	Preliminary data analysis
Spring 2022	Conduct field surveys to sample vegetation types
Fall 2022	Data analysis and linework to produce a draft map
Spring 2023	Field check of the draft map
Summer 2023	Finalize map

Description of Hungry Valley SVRA

Hungry Valley SVRA is a 19,800 acre park within the Transverse Mountain Ranges, just south of Tejon Pass and the town of Gorman. The park is surrounded by National Forest land and by Tejon Ranch. Before becoming a SVRA in 1980, the park had a history of homesteading, mining, and unofficial OHV use. The climate is semiarid mediterranean, with hot dry summers and winters cold enough for some snowfall. There are a few ephemeral streams, a small stream in the southern portion of the park with summer base flow, and a small perennial spring on the western edge of the park.

Methods

Fieldwork

Field surveys were conducted on April 5-8, 2021 by State Park staff, using VegCAMP's standard methods for Relevé, Rapid Assessment, and Reconnaissance samples (Appendix D, CDFW a, CDFW-CNPS). Fifteen formal samples were taken, in addition to many notes and photo points throughout the park. A second set of nineteen formal surveys, plus notes and photo points were taken on April 11-15, 2022 by State Park staff. Additional informal surveys were taken on May 5th 2022 with both state park staff and Chico State Geographic Information Center staff. Lastly, a map check was done by State Park staff on May 1-4, 2023, where 57 polygons that were not confidently identified during the linework process were visited and assessed for vegetation type.

Data interpretation and linework

Hungry Valley SVRA is not covered by any previous CDFW VegCAMP mapping or vegetation classification projects. Additionally, it is located where multiple eco-regions meet, resulting in a unique mixture of plant species and communities that are not yet classified in the National Vegetation Classification System or the Manual of California Vegetation. Existing vegetation classifications from VegCAMP projects in the Mojave Desert (Menke et al., 2013), the Tehachapi Mountains (Klein and Keeler-Wolf, 2014), and the Southern Sierra Nevada Foothills (Reyes et al.,

2022), as well as the alliance descriptions in the Manual of California Vegetation Online (California Native Plant Society) were referenced when classifying vegetation for the park, and CDFW VegCAMP staff were consulted for advice with types that were difficult to fit. Some provisional types were named for the purposes of this project. It is expected that in the future, new classifications will be developed for the region and some of the types here may change to reflect a more appropriate name. See the vegetation key developed for the park below.

Linework followed the mapping standards found in the “Survey of California Vegetation Classification and Mapping Standards”(CDFW b) as much as possible. The minimum mapping unit was 1 acre, and ¼ acre for wetland or special types. Polygons were divided based on a change in cover class according to Braun-Blanquet categories (<1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%), with a 5-acre minimum mapping unit break for overstory vegetation, and a 10-acre minimum mapping unit break for understory vegetation. Base imagery was NAIP 2020.

Vegetation Types and Descriptions

Table 1. Vegetation Community Types in Hungry Valley SVRA, Surveyed 2021-2023.

Map code	NVCS Name	Common name (* = Sensitive)	Acres
Tree vegetation types			
1	Pinus monophylla Alliance	Singleleaf pinyon woodland	671
2	Juniperus californica Alliance	California juniper woodland	617
3	Quercus lobata Alliance	Valley oak woodland	* 27
4	Populus fremontii - Fraxinus velutina - Salix gooddingii Alliance	Fremont cottonwood woodland	* 4
5	Populus fremontii - Salix lucida ssp. lasiandra Association	Fremont cottonwood – red willow woodland	* 19
6	Salix laevigata Association	Red willow woodland	* 26
Shrub vegetation types			
7	Salix exigua Alliance	Sandbar willow thickets	5
8	Salix lasiolepis Alliance	Arroyo willow thickets	4
9	Adenostoma fasciculatum Alliance	Chamise chaparral	311
10	Arctostaphylos glauca Alliance	Bigberry manzanita chaparral	60
11	Quercus john-tuckeri Alliance	Tucker oak chaparral	942
12	Quercus john-tuckeri / Juniperus californica / Ericameria linearifolia Association	Tucker oak/California juniper/Interior goldenbush chaparral	* 3,491
13	Quercus john-tuckeri / Pinus monophylla – Pinus sabiniana Provisional Association	Tucker oak/Singleleaf pinyon chaparral (Provisional)	* 1,335
14	Lotus scoparius – Lupinus albifrons – Eriodictyon spp. Alliance	Deerweed-silver lupine-yerba santa scrub	115
15	Ericameria linearifolia - Cleome isomeris Alliance	Interior goldenbush - bladderpod scrub	178

16	Central and South Coastal Californian Coastal Sage Scrub Group	Central and South Coastal Californian Coastal Sage Scrub Group	1,407
17	Eriogonum fasciculatum Alliance	California buckwheat scrub	971
18	Eriogonum fasciculatum – Hesperoyucca whipplei Association	California buckwheat - chaparral yucca scrub	1,913
19	Hesperoyucca whipplei Provisional Alliance	Chaparral yucca scrub (Provisional)	* 34
20	Salvia mellifera Alliance	Black sage scrub	606
21	Lepidospartum squamatum Shrubland Alliance	Scale broom scrub	* 106
22	Encelia (actonii, virginensis) - Viguiera reticulata Shrubland Alliance	Brittle brush scrub	* 10
23	Ericameria cooperi Provisional Alliance	Cooper's goldenbush scrub (Provisional)	653
24	Ephedra viridis Alliance	Mormon tea scrub	104
25	Ericameria nauseosa Alliance	Rubber rabbitbrush scrub	2,176
26	Artemisia tridentata Alliance	Big sagebrush	300
27	Artemisia tridentata – Ericameria nauseosa Association	Big sagebrush - rubber rabbitbrush scrub	437
28	Ceanothus greggii - Fremontodendron californicum Shrubland Alliance	Ceanothus- flannelbush chaparral	* 6
29	Intermontane Deep or Well-drained Soil Scrub Group	Intermontane Deep or Well-drained Soil Scrub Group	11
Herbaceous vegetation types			
30	Mediterranean California Naturalized Annual and Perennial Grassland Group	Mediterranean California Naturalized Annual and Perennial Grassland Group	100
31	California Annual Forb/Grass Vegetation Group	California Annual Forb/Grass Vegetation Group	2,099
32	Eschscholzia californica Association	California poppy fields	702
33	Arid West Freshwater Emergent Marsh Group	Arid West Freshwater Emergent Marsh Group	6
34	Californian Warm Temperate Marsh/Seep Group	Californian Warm Temperate Marsh/Seep Group	3
35	Naturalized Warm-Temperate Riparian and Wetland Group	Naturalized Warm-Temperate Riparian and Wetland Group	9
36	Cliff, Scree, Rock outcrop	Cliff, Scree, Rock outcrop	34
37	Urban	Urban	150
38	Water	Water	1

Vegetation Community Descriptions

Woodland Vegetation Types

Oak Woodland

Valley Oak (*Quercus lobata*) Woodland Alliance: Valley oak (*Quercus lobata*) is a distinctive tree <30 meters with tall trunks and deciduous lobed leaves. Individual valley oaks exist within Hungry Valley SVRA, including small individuals on the edge of the dry lakebed in the Condor Mesa Area. Large valley oaks also grow within Hungry Valley SVRA in an open woodland in the southeastern portion of the park near the South Entrance and within the Oak Woodland Natural Preserve. A wide variety of shrubs and herbs occur in the understory.

Conifer Woodland

Pinyon Pine (*Pinus monophylla*) Alliance: The pinyon woodland within Hungry Valley SVRA is commonly composed of three dominant species: single leaf pinyon (*Pinus monophylla*), California juniper (*Juniperus californica*), and Tucker oak (*Quercus john-tuckeri*). The pinyon pines are dominant and diagnostic in the overstory of this community even though their presence may be sparse (sometimes having <5% cover), and they may grow as tall as 15 meters. Other species that co-exist in the shrub layer include big sagebrush (*Artemisia tridentata*), big berry manzanita (*Arctostaphylos glauca*), mountain mahogany (*Cercocarpus betuloides*), thick-leaved yerba santa (*Eriodictyon crassifolium*), and rubber rabbitbrush (*Ericameria nauseosa*). This vegetation type grows predominantly on north-facing slopes throughout Hungry Valley SVRA.

California Juniper (*Juniperus californica*) Alliance: California juniper (*Juniperus californica*) is a small tree that generally grows less than 5 meters tall. Widespread within Hungry Valley SVRA in a variety of habitats, in some areas stands form a near monoculture while in other areas it is mixed with a variety of other species. When co-dominant with pinyon pine or Tucker oak, California juniper must have >60% cover to be classified as the Juniper Alliance. In some cases, the various combinations of species have been described as different associations listed below and in the shrubland classifications. The shrub layer can be open to intermittent, and the herb layer is usually sparse.

California Juniper/California Buckwheat (*Juniperus californica*/*Eriogonum fasciculatum*) Provisional Association: This vegetation type is widespread within Hungry Valley SVRA, creating cover of open, low woodland that supports the growth of shrubs between the junipers. Sagebrush (*Artemisia tridentata*) and goldenbush (*Ericameria* spp.) may also be mixed with California buckwheat (*Eriogonum fasciculatum*).

Riparian Woodland and Shrubland Types

Fremont Cottonwood Woodlands (*Populus fremontii* - *Fraxinus velutina* - *Salix gooddingii* Alliance; and *Populus fremontii* - *Salix lucida* ssp. *lasiandra* Association): Fremont cottonwoods (*Populus fremontii*) and willows (*Salix* sp.) are winter-deciduous trees that are indicators of wetland habitat, where the tree and shrub vegetation receives moisture from a high water table and groundwater. Fremont cottonwoods grow to heights of < 25 m, forming a continuous to open upper canopy. Within Hungry Valley SVRA, Fremont cottonwoods are limited to a few small drainages and ephemeral streams. In these stands, Fremont cottonwood may have low absolute cover (as low as 5%) and willow species may be co-dominant with equal or higher cover.

Willow (Sandbar, Red, Black, Arroyo Willow - *Salix exigua*, *S. laevigata*, *S. gooddingii*, *S. lasiolepis*) Alliances: Four species of willow can be found within the park, typically in wetlands, riparian zones, or seasonally moist basins. They may be in pure or mixed stands or in association with Fremont

cottonwood and can form shrubby willow thickets or attain treelike stature in the upper canopy. Stands dominated by a single species in the tree canopy are classified as that species type, i.e., Red willow (*Salix laevigata*) Alliance.

Sandbar Willow (*Salix exigua*) Shrubland Alliance: Sandbar willow is a shrub-sized, narrow-leaved willow. It has a general appearance similar to mulefat (*Baccharis salicifolia*), but with different floral features. Within Hungry Valley SVRA, it is found mainly in the northern portion of the Condor Mesa Area in areas of low, flat topography.

Chaparral Vegetation Types

Tucker Oak (*Quercus john-tuckeri*) Alliance: (Note: Per the classification rules in the MCV, Tucker oak is considered a shrub rather than a tree.)

Tucker oak is a shrub form of oak, with individuals growing up to 6 meters tall. It generally is an evergreen except during periods of drought, when it may lose some of its leaves. This plant community has *Quercus john-tuckeri* at > 50% relative cover in the shrub canopy, which can be open to continuous. It is widely distributed throughout the central portion of Hungry Valley SVRA, with large stands along the western boundary.

Tucker Oak/California Juniper/Interior Goldenbush (*Quercus john-tuckeri*/*Juniperus californica*/*Ericameria linearifolia*) Association: Tucker oak and California juniper often are found together in Hungry Valley SVRA in locations where conditions are not quite moist enough for single-leaf pinyon pine, especially along the lower slopes of ridges and hills and around the outer portions of valley bottom lands. In some locations, this Association forms a closed canopy of vegetation, but in others, it is somewhat open, with individual shrubs standing apart from one another.

Tucker Oak/Singleleaf Pinyon (*Quercus john-tuckeri*/*Pinus monophylla*) Provisional Association: Pinyon pine is present throughout, but with lower cover (sometimes <5% absolute cover) than the Tucker oak.

Chamise (*Adenostoma fasciculatum*) Chaparral Alliance: Chamise (*Adenostoma fasciculatum*) has at least 50% relative cover in the shrub canopy, with an intermittent to continuous canopy up to 4 m tall. In Hungry Valley SVRA, chamise mainly occurs in the southern portion on south-facing slopes, especially east of Freeman Canyon and Hungry Valley Road, southwest of Mystic Canyon, as well as along the western boundary, west of Maxey Ranch Road. In some locations, it may form nearly pure stands, but in many areas, it is mixed with other shrubs, especially California buckwheat.

Big Berry Manzanita (*Arctostaphylos glauca*) Chaparral Alliance: Big berry manzanita (*Arctostaphylos glauca*) is a long-lived, evergreen, sclerophyllous shrub that grows up to 6 m. They do not sprout after being top killed from fire. For this Alliance, *Arctostaphylos glauca* is dominant or co-dominant in the shrub canopy, typically on mid to upper slopes of moderate to high elevations. Chamise (*Adenostoma fasciculatum*) is a common co-dominant shrub along with black sage (*Salvia mellifera*) and chaparral yucca (*Hesperoyucca whipplei*).

Ceanothus – Flannelbush (*Ceanothus greggii*- *Fremontedendron californicum*) Shrubland Alliance: Desert ceanothus (*Ceanothus greggii*) has >30% cover in the shrub canopy with flannelbush (*Fremontedendron californicum*) and a diverse mix of other shrubs. Both *C. greggii* and *F.*

californicum are components of desert chaparral vegetation that inter-relate with other desert scrub species and pinyon-juniper woodland in post-burn settings. There is one known small stand of this alliance in the northern part of the park.

Other Shrubland Types

Rubber Rabbitbrush (*Ericameria nauseosa*) Shrubland Alliance: Rubber rabbitbrush (*Ericameria nauseosa*) is a fast-growing, early-seral shrub that establishes after disturbance. Rubber rabbitbrush has >50% relative cover in the shrub layer with heights < 3 m; the canopy is open to continuous. The herbaceous layer is sparse or grassy. Rubber rabbitbrush is a dominant species in various locations within Hungry Valley SVRA, particularly in areas that have been disturbed or burned in the past. Rubber rabbitbrush has slender stems with small flower clusters, but its density generates what appears to be a complete yellow flower cover in late summer-early fall. Other species of rabbitbrush and goldenbush (*Ericameria*) may also have a co-dominant role in the areas that are classified as this vegetation community within Hungry Valley SVRA.

Big Sagebrush (*Artemisia tridentata*) Alliance: *Artemisia tridentata* is dominant in the shrub canopy or may be co-dominant with interior goldenbush or California buckwheat. Shrub height is typically < 2 m and the canopy may be open to continuous. This Alliance occurs in a variety of habitats where soils are sandy to loamy, well drained, and deep. The herbaceous layer is sparse to intermittent and grassy.

Big Sagebrush - Rubber Rabbitbrush (*Artemisia tridentata*- *Ericameria nauseosa*) Association: Along with the big sagebrush, rubber rabbitbrush (*Ericameria nauseosa*) is one of the more widespread shrubs within Hungry Valley SVRA. This combination of big sagebrush and rubber rabbitbrush shrub vegetation is quite prevalent in Hungry Valley SVRA, especially occurring in the open valleys on the north, west, and southwest sides.

California Buckwheat (*Eriogonum fasciculatum*) Alliance: California buckwheat (*Eriogonum fasciculatum*) is one of the most common shrubs in central and southern California. It is a member of stable vegetation communities, including those that exist in valley bottoms and slopes, where it is the dominant species. It also is able to rapidly colonize areas that have been burned or subjected to mechanical removal and disturbance of soils. Because of its ability to colonize disturbed areas, it often is the dominant species on slopes that have open soil and rock from unstable geology. Within Hungry Valley SVRA, California buckwheat is found in various locations with big sagebrush on the somewhat drier slopes and areas recovering from previous disturbances, such as cattle and sheep grazing and cultivation that occurred before the land was acquired by the park.

Chaparral Yucca (*Hesperoyucca whipplei*) Provisional Alliance: Chaparral yucca (*Hesperoyucca whipplei*) occurs in a wide range of habitats within Hungry Valley SVRA, but the greatest concentrations appear in areas on the upper portion of the gently sloping valleys, below the juniper and pinyon habitats. The chaparral yucca within Hungry Valley SVRA represents atypically high concentrations of large specimens. Each chaparral yucca flowers only once - typically between April -June, after which the entire plant dies. Before flowering, a plant may produce smaller plants ("pups") around the base. Thus, the dead stalk of the original plant may leave behind one or more smaller plants, genetically identical to the original.

California Buckwheat–Chaparral Yucca (*Eriogonum fasciculatum* – *Hesperoyucca whipplei*) Association: Within Hungry Valley SVRA, particularly in the valleys on the southwestern portion, big sagebrush is present with California buckwheat and chaparral yucca (*Hesperoyucca whipplei*).

Scale Broom (*Lepidospartum squamatum*) – Shrubland Alliance: Scale broom (*Lepidospartum squamatum*) dominates or characterizes open stands with a variety of native and non-native herbs in the understory. Stands are concentrated along washes – usually larger washes with regular flooding where the substrate texture is coarse sand to small cobbles with gravel.

Black Sage (*Salvia mellifera*) Alliance: Black sage (*Salvia mellifera*) is dominant or co-dominant in the shrub canopy < 2 m; the canopy is continuous or intermittent. The herbaceous layer is variable; grasses and herbs are seasonal. Common on dry slopes with shallow soils. Twigs and leaves are glandular and highly aromatic. They are drought tolerant by leaf curling and yellowing rather than through leaf drop but are still considered to have a suite of drought-deciduous characteristics. Winter- and spring-blooming flowers are a rich source of nectar for native and introduced bees.

Interior Goldenbush – Bladderpod (*Ericameria linearifolia* – *Cleome isomeris*) Shrubland Alliance: Interior goldenbush and bladderpod are co-dominant in the shrub layer. Interior goldenbush (*Ericameria linearifolia*) and bladderpod (*Cleome isomeris* aka *Cleomella arborea*) are widespread species of inland central and southern California. The former species typically blooms in spring and summer and fruits in summer and fall. The latter can bloom and fruit year-round when moisture is available. These two species are common in the upper Mojave Desert and may become abundant following disturbances, including fire, flooding, and grazing.

Cooper's Goldenbush (*Ericameria cooperi*) Provisional Alliance: Cooper's goldenbush (*Ericameria cooperi*) is evenly distributed and widespread across the park's landscape. This type is provisional and is based on *E. cooperi* having a significant presence (generally >40% relative cover) in a stand. Stands show evidence of recent disturbance (typically fire) and are usually adjacent to stands with larger and longer-lived shrubs that belong to other Alliances.

Encelia (*Encelia actoni*) Shrubland Alliance: Acton's encelia (*Encelia actonii*) is dominant or co-dominant in the shrub canopy, with $\geq 2\%$ absolute cover and no other shrub species with greater or equal cover. In the borders of the Transverse and Tehachapi ranges, stands often occur on steep, south-facing slopes associated with *Hesperoyucca whipplei* or *Eriogonum fasciculatum*. Habitats include intermittently flooded arroyos, canyons, alluvial fans, road cuts, and other substrates with recent disturbance. Soils are alluvial with cobble and gravel. Encelias are short-lived, drought-deciduous shrubs that grow to 1.5 m tall. Plants reproduce by seeds that are well adapted to wind and water dispersal and plants establish well from seed during wet years. They are early colonizers of sites such as washes, road cuts, recently cleared or burned land, or other disturbances. As a result, populations increase with disturbance and are replaced in areas lacking recurring disturbance.

Mormon Tea (*Ephedra viridis*) Alliance – Mormon Tea (*Ephedra viridis*) has >2% cover as the dominant or codominant shrub with a mix of other associated shrubs. In Hungry Valley, it is found on steep rocky slopes with chaparral yucca (*Hesperoyucca whipplei*).

Deerweed- Silver Lupine- Yerba Santa (*Lotus scoparius*, *Lupinus albifrons*, *Eriodictyon* spp.)

Shrubland Alliance: Disturbance-related shrubs (*Eriodictyon crassifolium*, *Lupinus* spp., *Lotus scoparius*, or others) dominate the shrub canopy with low to moderate cover. The shrubs reach < 3 m; the canopy is open to intermittent and can be two-tiered. The herbaceous layer is sparse to intermittent. Typical habitats for this Alliance include exposed lower to upper slopes and ridges, moderately steep open settings, and areas with recent disturbance, such as through clearing, fire, or intermittent flooding.

Deerweed (*Lotus scoparius* aka *Acmispon glaber*) is a short-lived shrub that can reach 20 years of age. Bush lupine (*Lupinus albifrons*) is a shrubby lupine with silvery leaves. The flowers are loosely whorled, and the bi-colored purple and white flowers are large and showy. They are relatively short-lived and tend to colonize regularly disturbed, steep and unstable slopes and shifting sands. Both deerweed and bush lupine are nitrogen fixers.

Thick-leaved yerba santa (*Eriodictyon crassifolium*) is a much-branched, evergreen shrub that attains 3 m in height. Branches are tomentose, and the lanceolate leaves are entire to toothed, sparsely hairy to white-tomentose. Seeds collect near plants and form a seed bank; they germinate following disturbance such as fire, and plants die after 20 to 30 years.

Within Hungry Valley SVRA, this vegetation Alliance is expressed as stands dominated by either thick-leaved yerba santa or deerweed. Patches of vegetation dominated by thick-leaved yerba santa are fairly common in the park. Deerweed tends to occur on ridges with thin soils.

Herbaceous Vegetation Types

Arid West Freshwater Emergent Marsh and Warm Temperate Marsh/Seep Groups: Marsh vegetation types are found in permanently wet soils or standing water. Vegetation is dominated by emergent perennial herbs such as rushes (*Juncus* spp.), tules (*Schoenoplectus acutus*), and cattails (*Typha* spp.). There are multiple Alliances and Associations within these groups, and plant assemblages vary annually.

California Annual Forb/Grass Vegetation and Mediterranean California Naturalized Annual and Perennial Grassland Groups: Hungry Valley SVRA supports a large number of grassland species, both native and non-native. Large expanses of grassland comprise the Native Grasslands Management Area and smaller grassland areas are scattered throughout the park. Some stands are strongly dominated by annual non-natives and lack evenly distributed, diagnostic native plants. Other stands are dominated or characterized by annual and perennial grasses and forbs with native herbs being characteristic and evenly distributed across the herbaceous layer, though non-native forbs and grasses may be dominant.

Nonnative grass species include wild oat (*Avena fatua*), slender wild oats (*Avena barbata*), ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), soft chess (*Bromus hordeaceus*), and cheat grass (*Bromus tectorum*). Native grass species include creeping wild rye (*Elymus triticoides*), slender wheatgrass (*Elymus trachycaulus*), nodding needlegrass (*Stipa cernua*), purple needlegrass (*Stipa pulchra*), pine bluegrass (*Poa secunda*), desert needlegrass (*Stipa speciosa*), and Indian rice grass (*Stipa hymenoides*).

Native herbaceous dicots or forbs include California poppy (*Eschscholzia californica*), desert dandelion (*Malacothrix glabrata*), spider lupine (*Lupinus benthamii*), miniature lupine (*Lupinus*

bicolor), baby blue eyes (*Nemophila menziesii*), phacelias (*Phacelia* spp.), fiddleneck (*Amsinckia* spp.), purple owl's clover (*Castilleja exserta*), and many others. Deltoid balsam root (*Balsamorhiza deltoidea*) is a large-flowered herbaceous perennial member of the sunflower family that grows on north-facing grassland slopes within Hungry Valley SVRA near the southern limit of its range, extending northward into Oregon.

The dominant mix of species varies from year to year, depending on rainfall and germination factors. In some years, California poppies may cover extensive areas hundreds of acres in size, visible from long distances. The desert dandelions also create large patches of bright yellow that can be viewed from distant vantage points. All of these native forbs are mixed with native and non-native grasses. However, because the boundaries and mix of the patches of species are highly variable, it is not possible to map them all at the Alliance or Association level using standard mapping methods such as aerial image interpretation, with the exception of the California poppy Alliance.

California poppy (*Eschscholzia californica*) Association: California poppy (*Eschscholzia californica*) is seasonally abundant along with many other native and non-native forbs and grasses such as purple owl's clover (*Castilleja exserta*), miniature lupine (*Lupinus bicolor*), fiddlenecks, (*Amsinckia* sp.), phacelia (*Phacelia* spp.), brome grasses (*Bromus* spp.), wild oats (*Avena* spp.), etc. Our state flower contributes significantly to the iconic vision of the state's wildflower displays and "superblooms". However, these stands can shift radically year-to-year in species composition depending primarily on the amount and timing of precipitation.

Vegetation Key

Hierarchical Field and Mapping Key to Hungry Valley SVRA January 2023

This key is developed by Chico State Geographic Information Center for Hungry Valley SVRA by pulling together the overlapping vegetation community concepts found in the Tehachapi (Klein and Keeler-Wolf, 2014), DRECP (Menke et al., 2013), and Southern Sierra Nevada Foothills (Reyes et al., 2022) mapping projects.

1. Vegetation dominated or characterized by *Juniperus californica* or *Pinus sabiniana*.

Californian Evergreen Coniferous Forest and Woodland Group

1a. *Juniperus californica* is evenly distributed and characterizes the tree or shrub canopy with >4% absolute cover. Oaks are typically absent or much lower in cover than *J. californica* in the overstory. Sites tend to be rocky and/or sandy...

Juniperus californica dominates in an open tree overstory, sometimes with understory shrubs meeting or exceeding *Juniperus* in cover. If co-occurring with *Pinus monophylla* or *Quercus john-tuckeri*, *J. californica* must have >60% relative cover to key to the juniper alliance (i.e., if *J. californica* is co-dominant with *Pinus monophylla* or *Quercus john-tuckeri*, key to one of the latter two alliances, respectively). *Cercocarpus montanus* and/or *Hesperoyucca whipplei* are characteristically present and may be co-dominant. *Artemisia tridentata*, *Ericameria* spp., *Eriogonum fasciculatum*, and/or *Purshia tridentata* may be present.

***Juniperus californica* Alliance**

Juniperus californica / *Eriogonum fasciculatum* Provisional Association

2. *Pinus monophylla* is the dominant tree or is co-dominant (sometimes having <5% absolute cover) with

Quercus chrysolepis, *Q. john-tuckeri* or *Juniperus californica* in open woodlands. Understory shrubs may

include *Artemisia tridentata*, *Eriogonum fasciculatum*, and *Ephedra* spp.

Western Great Basin Montane Conifer Woodland Group

***Pinus monophylla* – (*Juniperus osteosperma*) Alliance** *Pinus monophylla* –

Juniperus californica / *Artemisia tridentata* – *Coleogyne ramosissima* Association

Pinus monophylla / *Quercus john-tuckeri* Provisional Association

3. Riparian vegetation dominated by *Platanus*, *Populus*, or *Salix laevigata* in the tree overstory.

Southwestern North American Riparian Evergreen and Deciduous Woodland Group

3a. *Quercus lobata* is the dominant tree or is co-dominant with *Quercus wislizeni* in upland settings.

If *Q. lobata* stands are found in riparian settings, intermixing with *Salix* spp. or other riparian taxa.

Quercus lobata Alliance

Quercus lobata / grass Association

Quercus lobata – Quercus wislizeni Association

3b. Salix laevigata > 50% relative cover in the tree canopy, or > 30% relative cover with other tree willows and often with S. lasiolepis in the sub-canopy (Evens and San 2005, Klein and Evens 2005).

Salix laevigata Alliance

3c. Salix gooddingii dominates in the tree canopy. Salix exigua is often present in the understory.

Salix gooddingii Alliance

4. Riparian corridors or intermittent watercourses dominated by Baccharis, Celtis, Salix lasiolepis, or Sambucus

Southwestern North American Riparian/Wash Scrub Group

4a. Salix exigua is characteristically present as a dominant or co-dominant shrub, usually with >5% absolute cover and >50% relative cover in the shrub layer. It forms an open to continuous canopy along riparian corridors. It often forms narrow strips along major creeks and rivers and along ditches and reservoir edges. Other willow species may be present as sub-dominants with low cover, and Baccharis salicifolia may occasionally be co-dominant.

Salix exigua Alliance

4b. Salix lasiolepis dominates the shrub overstory. If riparian tree species are present, they must be sub-dominant (generally 60% relative cover).

Salix lasiolepis Alliance

Salix lasiolepis Association

5. Cercocarpus montanus dominates, often with an open shrub canopy and emergent Juniperus californica, Pinus monophylla, and/or Pinus sabiniana. Artemisia tridentata, Arctostaphylos viscida, and Eriogonum fasciculatum are some of the shrubs that may intermix.

Californian Mesic Chaparral Group

Cercocarpus montanus (betuloides) Alliance

Cercocarpus montanus (betuloides) / Juniperus californica Association

Cercocarpus montanus (betuloides) – Eriogonum fasciculatum Association

6. Stands are dominated by drought-deciduous shrubs, though at times they can have characteristic (constant but not dominant) resprouting, deep-rooted, sclerophyllous shrubs. Stands include mixed coastal shrublands from central California south into Baja, Mexico. The most predominant shrubs include Eriogonum fasciculatum, Eriogonum wrightii, and Hesperoyucca whipplei. On recently disturbed sites, such as after fire, Corethrogyne filaginifolia, Ericameria linearifolia, Gutierrezia californica, Isocoma acradenia, Peritoma (Isomeris) arborea, and Lupinus albifrons can be dominant.

Central and South Coastal California Seral Scrub Group

6a. Ericameria linearifolia, Cleome isomeris, or Eastwoodia elegans are dominant or co-dominant in the shrub layer. Typically found on north-facing, steep slopes in the southern Sierra Nevada Foothills in the Tehachapi Mountains... Ericameria linearifolia, Cleome isomeris and/or Eastwoodia elegans > 30% relative cover in the shrub canopy (Buck-Diaz et al. 2011, Buck-Diaz and Evens 2012, VegCAMP and AIS 2013).

Ericameria linearifolia – Cleome isomeris Shrubland Alliance

6a1. *Cleome isomeris* is dominant in the shrub overstory. Found often on steep slopes and in washes...

Cleome isomeris Provisional Association

6a2. *Ericameria linearifolia* is primarily dominant or co-dominant with other shrubs in the shrub overstory...

Ericameria linearifolia Association

6b. *Eriodictyon californicum*, *E. crassifolium*, *Lupinus* spp., *Lotus scoparius*, or other disturbance related shrubs dominate the shrub canopy with low to moderate cover. *Adenostoma fasciculatum* is typically absent...

***Lotus scoparius* – *Lupinus albifrons* – *Eriodictyon* spp. Shrubland Alliance**

7. Stands are characterized by the presence of *Eriogonum fasciculatum*, *E. wrightii* or *Hesperoyucca whipplei*, without significant cover of the previous group of seral scrubs.

Central and South Coastal Californian Coastal Sage Scrub Group

7a. *Eriogonum fasciculatum* is typically $\geq 2\%$ absolute cover or $>50\%$ relative cover in the shrub canopy, but read full description for exceptions. These stands tend to have substantially higher shrub cover and usually do not co-dominate with many species. In the desert hills and mountains $>1000\text{m}$ (3000ft) elevation, *Eriogonum fasciculatum* co-occurs with many other semidesert shrubs; if *Ambrosia dumosa*, *Artemisia tridentata*, *Ephedra viridis*, *Ericameria teretifolia*, *Purshia tridentata*, or *Ericameria linearifolia* are equal or higher in cover, key stands to those alliances. *Ambrosia salsola*, *Ericameria nauseosa* or *Hesperoyucca whipplei* may have higher cover than *E. fasciculatum* and still be in the *E. fasciculatum* Alliance.

***Eriogonum fasciculatum* Alliance**

Eriogonum fasciculatum Association

Eriogonum fasciculatum – *Salvia melifera*

Eriogonum fasciculatum – *Hesperoyucca whipplei* Association

7b. *Hesperoyucca whipplei* is the sole dominant or may be co-dominant with semi-desert shrubs such as *Atriplex polycarpa* or *Ephedra* spp. *Eriogonum fasciculatum* is noticeably absent

from these stands; if *E. fasciculatum* has a minor to significant presence, key to the *Eriogonum fasciculatum* Alliance.

***Hesperoyucca whipplei* Provisional Alliance**

8. *Ephedra californica*, *Lepidospartum squamatum*, or *Prunus fasciculata* characterizes the shrub overstory.

Mojavean semi-desert wash scrub

8a. *Lepidospartum squamatum* dominates or characterizes open stands with a variety of native and non-native herbs in the understory, in either desert or cismontane settings. Stands are concentrated along washes - usually larger washes with regular flooding where the substrate texture is coarse sand to small cobbles to gravel.

Lepidospartum squamatum $> 1\%$ cover in alluvial environments (Barbour and Wirka 1997, AECOM 2019).

Lepidospartum squamatum Alliance

9. *Artemisia tridentata* is the dominant shrub or may be co-dominant with *Ericameria nauseosa* or *Eriogonum fasciculatum*. Stands with co-dominance of *Prunus fasciculata* or *Ephedra viridis* key to *Prunus* or *Ephedra*, respectively. Stands with >2% cover and even distribution of *Juniperus californica* or *Yucca brevifolia* (regardless of height) key to *Juniperus* or *Yucca*, respectively.

Inter-Mountain West Mesic Tall Sagebrush Shrubland and Steppe Group

***Artemisia tridentata* Alliance**

Artemisia tridentata – *Ericameria nauseosa* Association

10. Vegetation dominated by taxa that are relatively small and/or short-lived plants that colonize uplands following natural or unnatural disturbance such as clearing or fire, including *Encelia*, *Ericameria*, or *Gutierrezia*.

Intermontane Seral Shrubland Group

10a. *Encelia virginensis* has $\geq 2\%$ cover and no other shrub species with greater or equal cover. In the borders of the Transverse and Tehachapi ranges, stands often occur on steep, south-facing slopes associated with *Hesperoyucca whipplei* or *Eriogonum fasciculatum*. Stands may have relatively high cover of *Achnatherum* (*Stipa*) *speciosum* and *Salazaria* (*Scutellaria*) *mexicana*.

***Encelia* (*actoni*, *virginensis*) Alliance**

Encelia virginensis Association

10b. *Ericameria cooperi* is evenly distributed and dominant across the landscape (stands may be too small to map). Stands show evidence of recent disturbance (typically fire) and are usually adjacent to stands with larger and longer-lived shrubs that are more easily keyed to *Grayia spinosa*, *Ericameria teretifolia* or *Larrea tridentata* – *Ambrosia dumosa*. This type is provisional based on *E. cooperi* having a significant presence (generally >40% relative cover) in a stand. This alliance is unusual and most stands with co-dominant *E. cooperi* can be better placed in the *Ambrosia dumosa*, *Grayia spinosa*, or *Ambrosia salsola* alliances. Stands with co-dominant *E. nauseosa* or *E. teretifolia* usually key to those alliances, respectively. *E. cooperi* is spring-flowering and a shorter-lived species that is more of a disturbance responder than *Ericameria teretifolia*.

***Ericameria cooperi* Provisional Alliance**

10c. *Ericameria nauseosa* typically dominates the shrub overstory. If *E. nauseosa* is co-dominant with *Eriogonum fasciculatum*, key to the *E. fasciculatum* Alliance. If present, *Juniperus californica* has trace cover. Several subspecies are included in this type (e.g., *E. nauseosa* var. *mohavensis* in the cismontane or desert sides of the study area, or *E. nauseosa* var. *hololeuca* in some semi-riparian stands towards the eastern side).

***Ericameria nauseosa* Alliance**

11. Stands with diagnostic species such as *Grayia*, *Ephedra nevadensis*, *E. viridis*, and *Lycium*. These vegetation types merge with the upper edge of the *Larrea tridentata* – *Ambrosia dumosa* belt and are usually seen on north-facing slopes at lower elevations.

Intermontane Deep or Well-drained Soil Scrub Group

11a. *Ephedra viridis* $\geq 2\%$ cover as the dominant shrub or co-dominant with other shrubs such as *Artemisia tridentata*, *Ericameria teretifolia*, *Grayia spinosa*, *Salazaria* (*Scutellaria*) *mexicana*, *Krascheninnikovia lanata*, *Ericameria cuneatus*, or *Eriogonum fasciculatum*. Associated with steep talus or rock outcrops except at the highest elevations, when it can occur on more moderate slopes.

***Ephedra viridis* Alliance**

12. *Adenostoma fasciculatum* is dominant in the shrub canopy with *Adenostoma sparsifolium*, *Arctostaphylos glandulosa*, *Arctostaphylos manzanita*, *Arctostaphylos viscida*, *Ceanothus* spp., *Diplacus aurantiacus*, *Eriodictyon californicum*, *Eriogonum fasciculatum*, *Hesperoyucca whipplei*, *Heteromeles arbutifolia*, *Quercus berberidifolia*, *Quercus wislizeni*, *Salvia apiana*, *Salvia leucophylla*, *Salvia mellifera* and *Toxicodendron diversilobum*. Emergent trees may be present at low cover.

Adenostoma fasciculatum > 50% relative cover in the shrub canopy (cf. Keeler-Wolf et al. 1998b); codominance of *A. fasciculatum* with the following species are classified in alliances of these other character species: *Adenostoma sparsifolium*, *Arctostaphylos glauca*, *A. glandulosa*, *Ceanothus crassifolius*, *C. cuneatus*, and *C. greggii*.

Californian xeric chaparral Group

***Adenostoma fasciculatum* Alliance**

13. *Quercus john-tuckeri* is dominant or co-dominant with *Juniperus californica* (*Q. john-tuckeri* is recognized as a shrub in the USNVC, while *J. californica* is recognized as a tree, but both species often share similar stature and height). In this mapping effort *Quercus john-tuckeri* was mapped as a tree. *Pinus monophylla* and/or *P. sabiniana* are often present with lower cover than *Quercus*. *Cercocarpus*, *Ephedra*, *Ericameria linearifolia*, *Eriogonum fasciculatum* and other shrubs may be found in the understory.

Western Mojave and Western Sonoran Desert Borderland Chaparral Group

***Quercus john-tuckeri* Alliance**

***Quercus john-tuckeri* / *Pinus monophylla* – *Pinus sabiniana* Provisional**

Association

Quercus john-tuckeri* / *Juniperus californica* / *Ericameria linearifolia

Association

14. *Ceanothus greggii* dominates or co-dominates with *Adenostoma fasciculatum* in the shrub overstory.

Mogollan Rim Chaparral Group

14a. *Ceanothus greggii* var. *perplexans*, *Ceanothus greggii* var. *vestitus* and/or *Fremontodendron californicum* is dominant or co-dominant in the shrub canopy with *Adenostoma fasciculatum*, *Adenostoma sparsifolium*, *Arctostaphylos glauca*, *Artemisia tridentata*, *Cercocarpus montanus*, *Dendromecon rigida*, *Ericameria nauseosa*, *Eriogonum fasciculatum*, *Fallugia paradoxa*, *Garrya veatchii*, *Hesperoyucca whipplei*, *Lotus scoparius*, *Prunus fasciculata*, *Prunus fremontii*, *Purshia glandulosa*, *Purshia stansburiana*, *Quercus berberidifolia*, *Quercus cornelius-mulleri*, *Quercus john-tuckeri*, *Quercus palmeri*, *Quercus wislizeni*, *Rhus ovata*, *Salvia apiana* and *Salvia mellifera*. Emergent trees may be present at low cover, including *Juniperus californica* or *Pinus monophylla*.

Ceanothus greggii > 30% relative cover in the shrub canopy with *Fremontodendron californicum* or other shrubs (Reyes et al. 2020a).

Both *Adenostoma fasciculatum* and *Ceanothus greggii* have between 30% and 60% relative cover in the shrub canopy (cf. Evens and San 2005, Gordon and White 1994).

Fremontodendron californicum > 50% relative cover in the shrub canopy (Reyes et al. 2020a).

***Ceanothus greggii* - *Fremontodendron californicum* Shrubland Alliance**

15. *Xanthium* and/or *Persicaria* characterize stands, though a number of naturalized species, such as *Polypogon monspeliensis*, *Apium graveolens*, and *Veronica* spp. may be present with significant cover. Naturalized Warm-Temperate Riparian and Wetland Group

Arid West Freshwater Emergent Marsh Group

***Persicaria lapathifolia* – *Xanthium strumarium* Provisional Alliance**

16. Vegetation is dominated by or characterized by *Carex densa*, *Juncus arcticus*, *Leymus triticoides*, or *Mimulus guttatus*.

Californian Warm Temperate Marsh/Seep Group

17. Vegetation is dominated by tall emergent perennial herbs such as species of *Schoenoplectus* and *Typha* found in permanently wet soil or standing water.

Arid West Freshwater Emergent Marsh Group

17.a *Schoenoplectus acutus*, the tall, emergent tule, dominates where ponds and sluggish, permanently flowing water exist.

***Schoenoplectus acutus* Alliance**

***Schoenoplectus acutus* Association**

17.b A species of *Typha* dominates in the tall herb layer.

***Typha* (*angustifolia*, *domingensis*, *latifolia*) Alliance**

18. Vegetation characterized by native and non-native grasses and herbs adapted to Mediterranean climates. Shrubs, if present, are not >10% absolute cover and/or not evenly distributed across a stand.

California Annual and Perennial Grassland Macrogroup

18a. Stands are dominated or characterized by mostly annual grasses and forbs. Native herbs are characteristic and evenly distributed across the herbaceous layer, though non-native forbs and grasses may be dominant. Cover and composition vary year to year, but indicators are usually present in sufficient amounts to differentiate from non-native stands. Diagnostic species include *Amsinckia* spp., *Artemisia dracunculus*, *Eschscholzia* spp., *Holocarpha* spp., *Lasthenia* spp., *Phacelia* spp., *Plantago erecta* and *Vulpia microstachys*.

California Annual Forb/Grass Vegetation Group

18a1.. *Eschscholzia californica* is seasonally dominant on upland slopes or flats with well-drained sandy to loamy soils. *Amsinckia*, *Avena*, *Bromus*, *Castilleja exserta*, *Erodium cicutarium*, *Lupinus bicolor*, *Lupinus microcarpus*, *Uropappus lindleyi* and a variety of other native and non-native forbs and grasses may be present.

***Eschscholzia* (*californica*) Alliance**

18b. Stands are strongly dominated by non-natives and lack evenly distributed, diagnostic native plants (usually <5% relative cover). Annual Avena, Bromus, Schismus, Brassica and other

non-native herbaceous taxa are strongly dominant. Because very few surveys were collected in

non-native stands for this project, most polygons will be mapped broadly at the Group Level.

Mediterranean California Naturalized Annual and Perennial Grassland Group

References

Link to GIS data files

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CDFW b. Survey of California Vegetation Classification and Mapping Standards Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=102342&inline>

CDFW-CNPS. CDFW-CNPS Protocol for the Combined Vegetation Rapid Assessment and Relevé Field Form Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18599&inline>

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Appendices

Appendix A: Map Figures

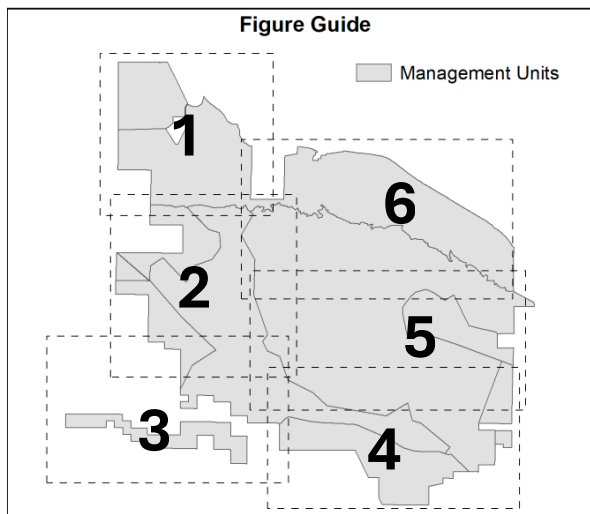
Hungry Valley SVRA

Vegetation Communities

Vegetation Community (common name)

- | | |
|--|---|
| 1. Singleleaf pinyon woodland | 23. Cooper's goldenbush scrub (Provisional) |
| 2. California juniper woodland | 24. Mormon tea scrub |
| 3. Valley oak woodland | 25. Rubber rabbitbrush scrub |
| 4. Fremont cottonwood woodland | 26. Big sagebrush scrub |
| 5. Fremont cottonwood - red willow woodland | 27. Big sagebrush - rubber rabbitbrush scrub |
| 6. Red willow woodland | 28. Ceanothus - flannelbush chaparral |
| 7. Sandbar willow thickets | 29. Intermontane Deep or Well-drained Soil Scrub Group |
| 8. Arroyo willow thickets | 30. Mediterranean California Naturalized Annual and Perennial Grassland Group |
| 9. Chamise chaparral | 31. California Annual Forb/Grass Vegetation |
| 10. Bigberry manzanita chaparral | 32. California poppy fields |
| 11. Tucker oak chaparral | 33. Arid West Freshwater Emergent Marsh |
| 12. Tucker oak/California juniper/Interior goldenbush chaparral | 34. Californian Warm Temperate Marsh/Seep Group |
| 13. Tucker oak/Singleleaf pinyon chaparral | 35. Naturalized Warm-Temperate Riparian and Wetland Group |
| 14. Deerweed - silver lupine - yerba santa scrub | 36. Cliff, Scree, Rock outcrop |
| 15. Interior goldenbush - bladderpod scrub | 37. Urban |
| 16. Central and South Coastal Californian Coastal Sage Scrub Group | 38. Water |
| 17. California buckwheat scrub | |
| 18. California buckwheat - chaparral yucca scrub | |
| 19. Chaparral yucca scrub (Provisional) | |
| 20. Black sage scrub | |
| 21. Scale broom scrub | |
| 22. Brittle brush scrub | |

Figure Guide



Hungry Valley SVRA
Vegetation Communities

2015 Acquisition
Native Grasslands

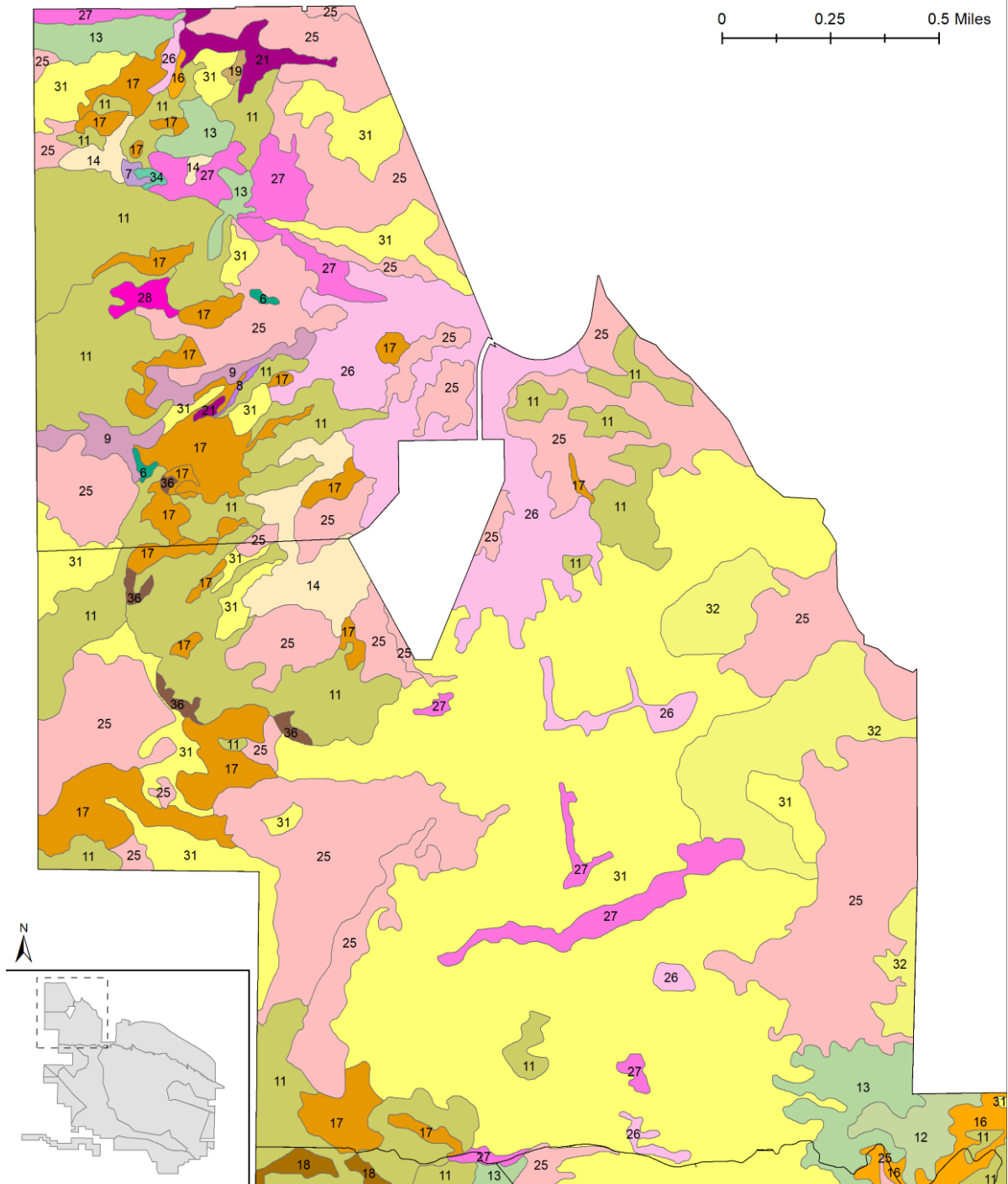


Figure 1. *Vegetation communities in the 2015 Acquisition and Native Grasslands MUs*

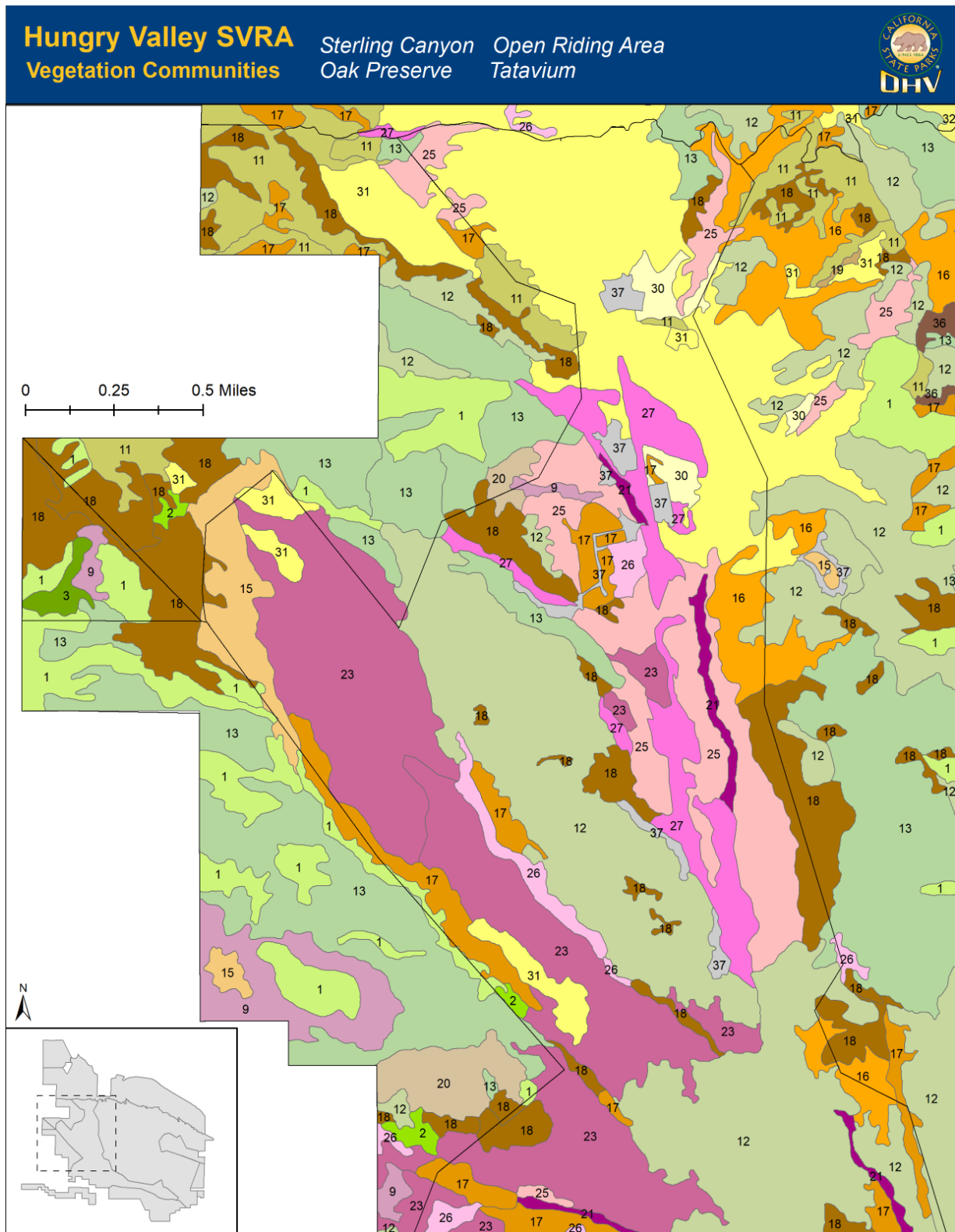


Figure 2. Vegetation communities in the Sterling Canyon, Oak Preserve, Open Riding Area, and Tatavium MUs

Hungry Valley SVRA

Vegetation Communities EMW Acquisition

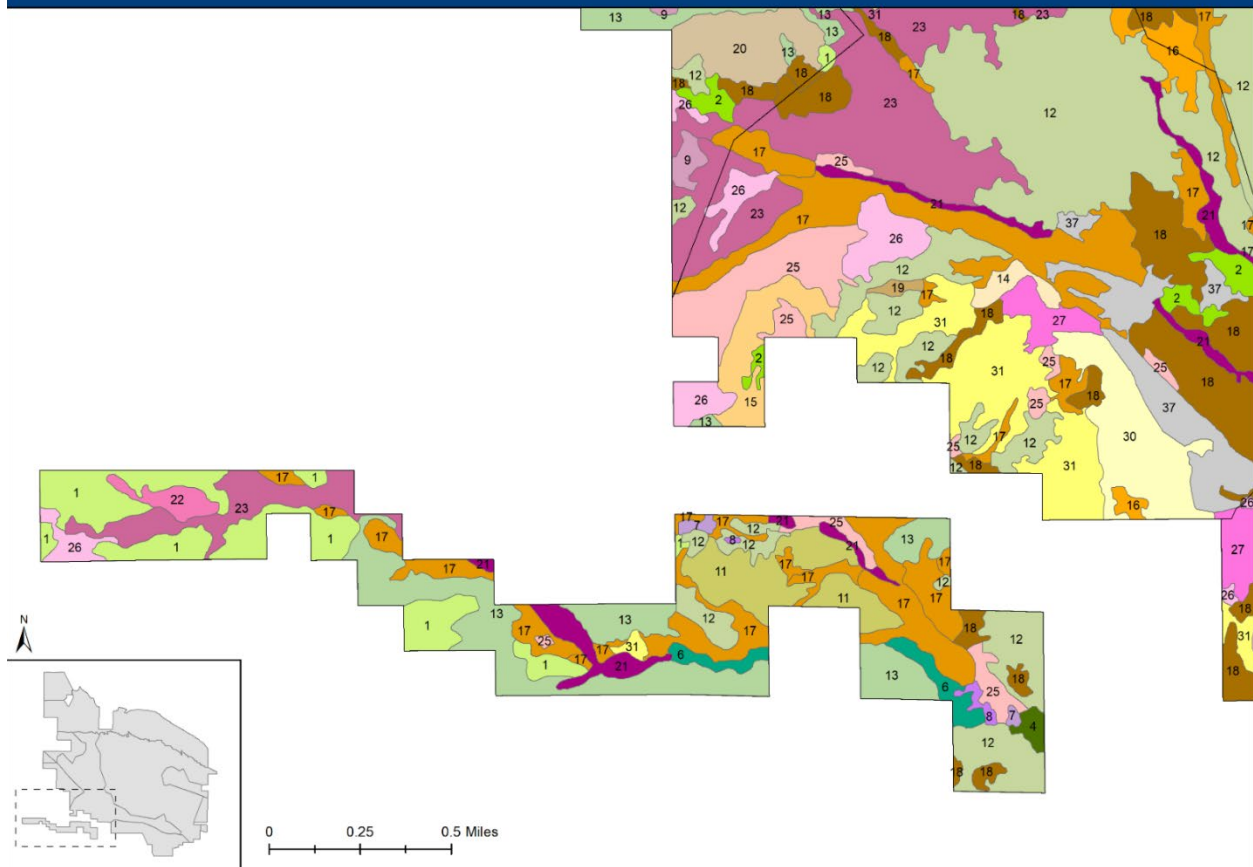


Figure 3. *Vegetation communities in the EMW Acquisition*

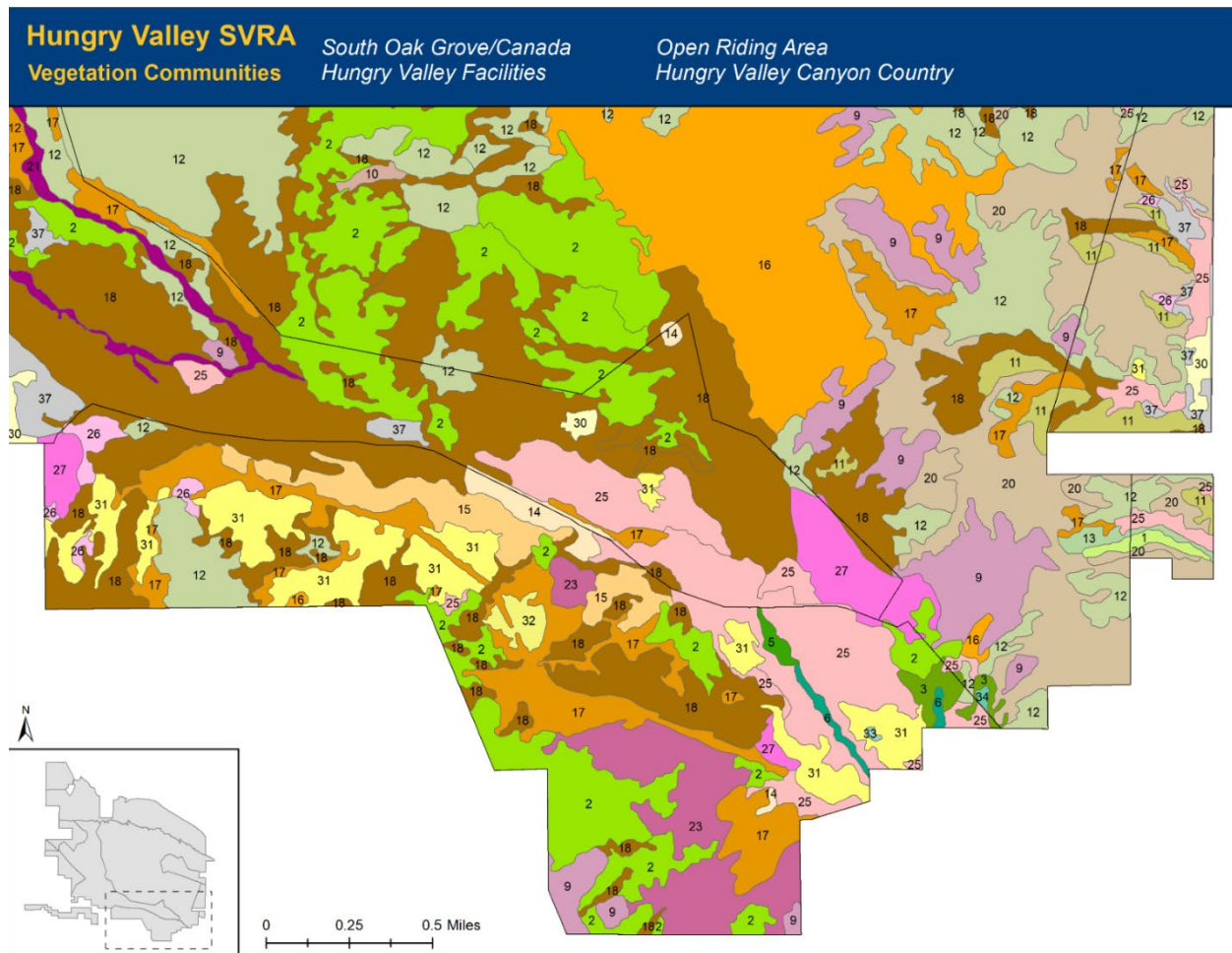


Figure 4. Vegetation communities in the South Oak Grove/Canada, Hungry Valley Facilities, Open Riding Area, and Hungry Valley Canyon Country MUs

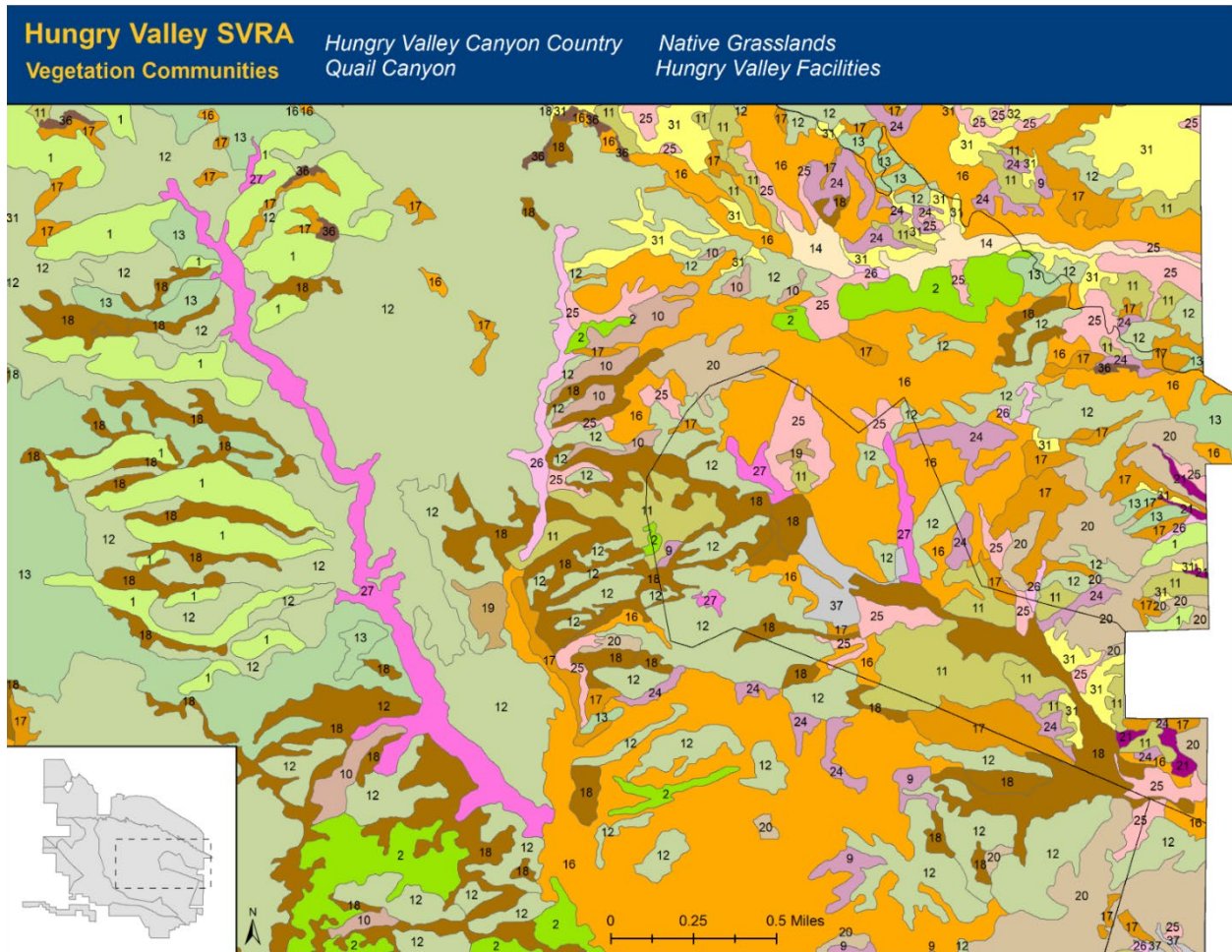


Figure 5. Vegetation communities in the Hungry Valley Canyon Country, Quail Canyon, Native Grasslands, and Hungry Valley Facilities MUs

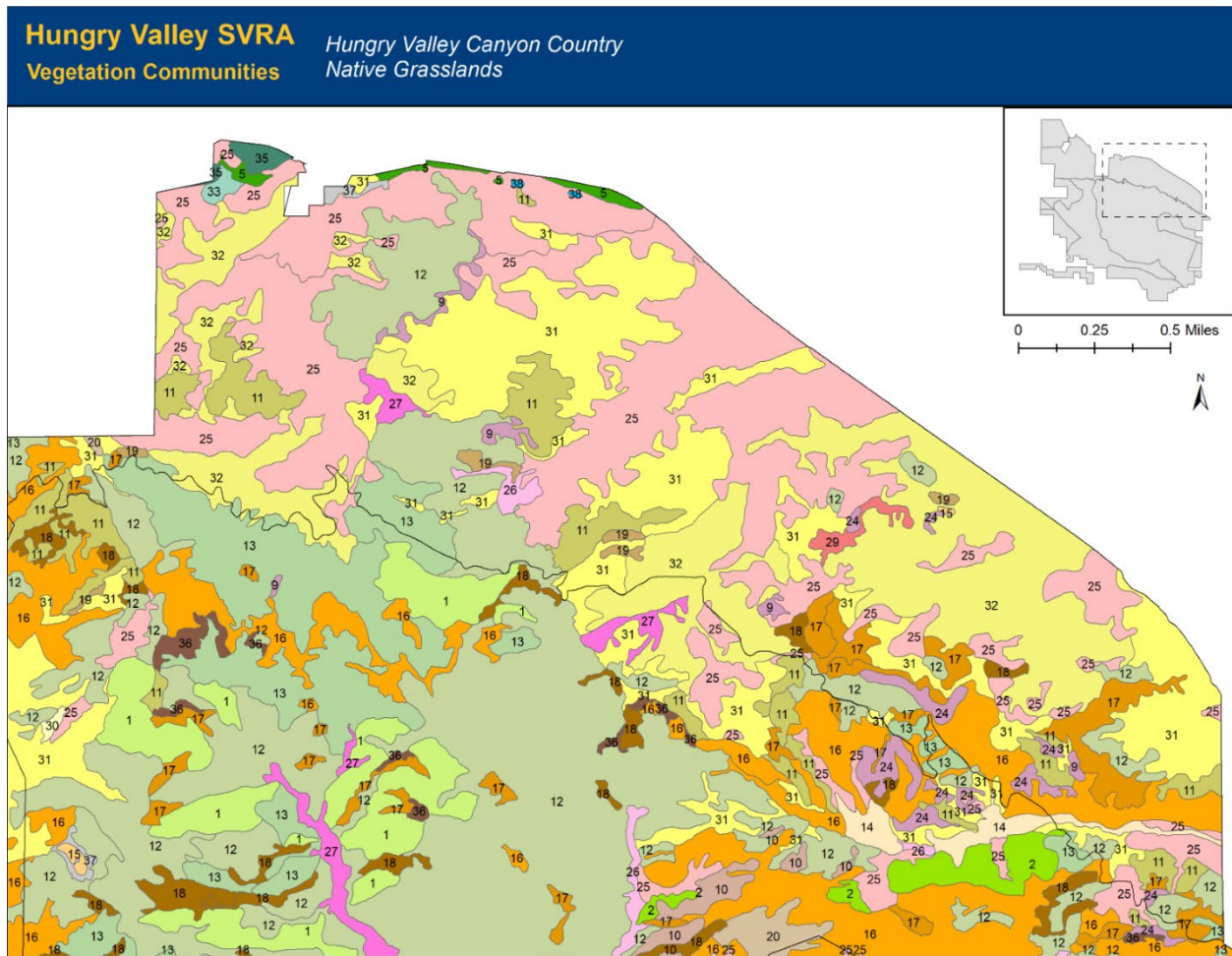


Figure 6. *Vegetation communities in the Hungry Valley Canyon Country, and Native Grasslands MUs*

Appendix B: Field datasheets

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MVP Other Surveyors: LG, Jessi, AJ Date: 4-5-21 Return? ☐

Waypoint ID: GPS Name MVP phone Projected? ☒ No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: HV001 If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./m./ PDOP 26
 UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.759929 LONG - 118.906722

Stand Size: (1) 1-5 >5 Camera: Photos: MVP phone View Radius _____

Exposure, Actual °: (NE) NW SE SW (Flat) Variable | Steepness, Actual °: _____ 0° (1-5) >5-25° >25

Field Alliance name: *Artemesia tridentata*

Comments: Open rabbitbrush/buckwheat scrub meadow, adjacent to Valley Oak stand, Piñon pine stand. Bunch of old rusted tin cans

% Cover: Conifer		Hardwood		Total Tree		Regen Tree		Shrub		Herb		Total Veg		Exotics (L,M,H)	
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata
S	<i>Eriogonum fasciculatum</i>	2	H	<i>Erodium cicutarium</i>	5	H	<i>Penstemon</i>	<1	S	<i>Ephedra viridis</i>	<1	S	<i>Hesperoyucca whipplei</i>	<1	
S	<i>Artemesia tridentata</i>	10	S	<i>Ribes sp.</i>	<1	S	<i>Ribes quercetorum</i>	<1	S	<i>Ribes quercetorum</i>	<1	S	<i>Ribes quercetorum</i>	<1	

Recorder: MVP Other Surveyors: LG, Jessi, AJ Date: 4-5-21 Return? ☐

Recorder: MVP Other Surveyors: LG, Jessi, AJ Date: 4-5-21 Return? ☐

Waypoint ID: GPS Name MVP phone Projected? ☒ No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: HV002 If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP _____
 UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.760281 LONG - 118.906749

Stand Size: <1 1-5 >5 Camera: MVP phone Photos: (N) View Radius _____

Exposure, Actual °: (NE) NW SE SW (Flat) Variable | Steepness, Actual °: _____ 0° (1-5) >5-25° >25

Field Alliance name: *Quercus lobata*

Comments: Valley Oak stand. Not leafed out yet. Narrow. Rose & willows in understory, plus a few grasses

% Cover: Conifer		Hardwood		Total Tree		Regen Tree		Shrub		Herb		Total Veg		Exotics (L,M,H)	
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata
T	Valley Oak	10	S	<i>Lonicera subsp. var. den.</i>	<1	T	<i>Pinus monophylla</i>	<1	S	<i>E. nauseosus</i>	<1	S	<i>E. nauseosus</i>	<1	
S	<i>Rosa californica</i>	5	S	<i>Salix spp.</i>	3	S	<i>Hesperoyucca whipplei</i>	<1	H	<i>M. rigens</i>	<1	H	<i>M. rigens</i>	<1	

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: <u>MVP</u>		Other Surveyors: <u>LG, Jessi, AJ</u>		Date: <u>4-5-21</u> Return? <input type="checkbox"/>	
Waypoint ID: <u>HV 003</u>		GPS Name _____ Projected? <input checked="" type="checkbox"/> / Yes / Base / Digitized			
UID: _____		If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____			
Location Name: <u># just outside park boundary oops!</u>		If Yes or Digitized, enter: Base Waypoint ID: _____			
		Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP <u>19</u>			
		UTMs: UTM _____ UTMN _____			
		Decimal degrees: LAT <u>34.759662</u> LONG <u>-118.909032</u>			
Stand Size: <1 <input checked="" type="checkbox"/> 1-5 <input checked="" type="checkbox"/> >5		Camera: <u>MVP</u> Photos: <u>24</u>		View Radius _____	
Exposure, Actual °: _____		NE NW SE SW <input checked="" type="checkbox"/> Flat Variable		Steepness, Actual °: _____ 0° <input checked="" type="checkbox"/> 1-3° >5-25° >25	
Field Alliance name: <u>Pinus monophylla</u>					
Comments: <u>Flatish sloping gently upward. Mix of pines, oaks, juniper, with sage + rabbitbrush understory. Saw too late is slightly outside park</u>					
% Cover: Conifer		Hardwood		Total Tree	
Strata Species		% cover		Strata Species	
T P. monophylla		10		S Juniperus sp. ^{californica}	
T Quercus ^{chrysolepis} sp		5		S E. nauseosa	
S A. tridentata		3		S Q. Sohn-Tucker	
				Herb	
				% cover	
				Strata Species	
				S H. whipplei	
				S E. fasc. var. pol.	
				S Ribes ^{quercifolium} sp.	
				% cover	

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:		Final database #:	Final vegetation type:	Alliance
			Association	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION				
Database #: <u>HV 004</u>	Date: <u>4-7-21</u>	Name of recorder: <u>Melissa, Leah, AJ, Jessi</u>	circle: Relevé or <u>RA</u>	
<u>Wetland</u> <u>renamed</u>	UID:	Other surveyors:		
		Location Name: <u>Hungry Valley</u>		
GPS name: <u>Melissa's phone</u>		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side		
UTME _____ UTMN _____		Zone: 11 NAD83 GPS error: ft/ m/ PDOP _____		
Decimal degrees: LAT <u>34.807635</u>		LONG <u>118.89379</u>		
GPS within stand? <u>Yes</u> / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____				
and record: Base point ID _____		Projected UTM: UTM _____ UTMN _____		
Camera Name: <u>Melissa's phone</u>		Cardinal photos at ID point: <u>N</u>		
Other photos: _____				
Stand Size (acres): <1, <u>1-5</u> , >5 Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius <u>120</u> m				
Exposure, Actual °: ____ NE NW <u>SE</u> SW Flat Variable Steepness, Actual °: ____ 0° <u>1-5°</u> >5-25° >25				
Topography: Macro: top <u>upper</u> mid lower bottom Micro: <u>convex</u> flat concave undulating				
Geology code: _____ Soil Texture code: <u>CLS</u> <u>Upland</u> or Wetland/Riparian (circle one)				
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)				
H ₂ : 0 BA Stems: <u>2</u> Litter: <u>10</u> Bedrock: 0 Boulder: 0 Stone: 0 Cobble: <1 Gravel: <u>80</u> Fines: <u>8</u> =100%				
% Current year bioturbation <u><1</u> Past bioturbation present? Yes / No <u>31</u> % Hoof punch <u>0</u>				
Fire evidence: Yes / <u>No</u> (circle one) If yes, describe in Site history section, including date of fire, if known.				
Site history, stand age, comments: <u>- Rabbitbrush, Ericameria shrubs, non-OHV, 2015 acquisition, gently sloping, flat area nearby may be part of stand, veg transect w/in stand, this is 1st year monitoring, near Frasier High School. Park road adjacent to stand.</u>				
Disturbance code / Intensity (L,M,H): <u>05/L 15/L</u> / ____ / ____ / ____ "Other" ____ / ____				
II. HABITAT DESCRIPTION				
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)				
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead)				
Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.)				
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)				
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)				
III. INTERPRETATION OF STAND				
Field-assessed vegetation Alliance name: <u>Ericameria nauseosa</u> - <u>Tetradlepi + DRCP</u>				
Field-assessed Association name (optional): <u>NA</u>				
Adjacent Alliances/direction: <u>Tree adjacent - Pinyon / scrub oak</u>				
Confidence in Alliance identification: L <u>M</u> H Explain: <u>not perfectly aligned in way</u>				
Phenology (E,P,L): Herb <u>E</u> Shrub <u>E</u> Tree <u>/</u> Other identification or mapping information:				

(Revised March 27, 2018)

SPECIES SHEET

IV. VEGETATION DESCRIPTION

% Cover - Conifer tree / Hardwood tree: _____ / _____

Height Class - Conifer tree / Hardwood tree: _____ / _____
 Height classes: 1= ≤ 1.2 m, 2=1.2-1.9m, 3=1.9-2.5m, 4=2.5-3.1m, 5=3.1-3.7m, 6=3.7-4.3m, 7=4.3-4.9m, 8=4.9-5.5m, 9=5.5-6.1m, 10=6.1-6.7m, 11=6.7-7.3m, 12=7.3-7.9m, 13=7.9-8.5m, 14=8.5-9.1m, 15=9.1-9.7m, 16=9.7-10.3m, 17=10.3-10.9m, 18=10.9-11.5m, 19=11.5-12.1m, 20=12.1-12.7m, 21=12.7-13.3m, 22=13.3-13.9m, 23=13.9-14.5m, 24=14.5-15.1m, 25=15.1-15.7m, 26=15.7-16.3m, 27=16.3-16.9m, 28=16.9-17.5m, 29=17.5-18.1m, 30=18.1-18.7m, 31=18.7-19.3m, 32=19.3-19.9m, 33=19.9-20.5m, 34=20.5-21.1m, 35=21.1-21.7m, 36=21.7-22.3m, 37=22.3-22.9m, 38=22.9-23.5m, 39=23.5-24.1m, 40=24.1-24.7m, 41=24.7-25.3m, 42=25.3-25.9m, 43=25.9-26.5m, 44=26.5-27.1m, 45=27.1-27.7m, 46=27.7-28.3m, 47=28.3-28.9m, 48=28.9-29.5m, 49=29.5-30.1m, 50=30.1-30.7m, 51=30.7-31.3m, 52=31.3-31.9m, 53=31.9-32.5m, 54=32.5-33.1m, 55=33.1-33.7m, 56=33.7-34.3m, 57=34.3-34.9m, 58=34.9-35.5m, 59=35.5-36.1m, 60=36.1-36.7m, 61=36.7-37.3m, 62=37.3-37.9m, 63=37.9-38.5m, 64=38.5-39.1m, 65=39.1-39.7m, 66=39.7-40.3m, 67=40.3-40.9m, 68=40.9-41.5m, 69=41.5-42.1m, 70=42.1-42.7m, 71=42.7-43.3m, 72=43.3-43.9m, 73=43.9-44.5m, 74=44.5-45.1m, 75=45.1-45.7m, 76=45.7-46.3m, 77=46.3-46.9m, 78=46.9-47.5m, 79=47.5-48.1m, 80=48.1-48.7m, 81=48.7-49.3m, 82=49.3-49.9m, 83=49.9-50.5m, 84=50.5-51.1m, 85=51.1-51.7m, 86=51.7-52.3m, 87=52.3-52.9m, 88=52.9-53.5m, 89=53.5-54.1m, 90=54.1-54.7m, 91=54.7-55.3m, 92=55.3-55.9m, 93=55.9-56.5m, 94=56.5-57.1m, 95=57.1-57.7m, 96=57.7-58.3m, 97=58.3-58.9m, 98=58.9-59.5m, 99=59.5-60.1m, 100=60.1-60.7m, 101=60.7-61.3m, 102=61.3-61.9m, 103=61.9-62.5m, 104=62.5-63.1m, 105=63.1-63.7m, 106=63.7-64.3m, 107=64.3-64.9m, 108=64.9-65.5m, 109=65.5-66.1m, 110=66.1-66.7m, 111=66.7-67.3m, 112=67.3-67.9m, 113=67.9-68.5m, 114=68.5-69.1m, 115=69.1-69.7m, 116=69.7-70.3m, 117=70.3-70.9m, 118=70.9-71.5m, 119=71.5-72.1m, 120=72.1-72.7m, 121=72.7-73.3m, 122=73.3-73.9m, 123=73.9-74.5m, 124=74.5-75.1m, 125=75.1-75.7m, 126=75.7-76.3m, 127=76.3-76.9m, 128=76.9-77.5m, 129=77.5-78.1m, 130=78.1-78.7m, 131=78.7-79.3m, 132=79.3-79.9m, 133=79.9-80.5m, 134=80.5-81.1m, 135=81.1-81.7m, 136=81.7-82.3m, 137=82.3-82.9m, 138=82.9-83.5m, 139=83.5-84.1m, 140=84.1-84.7m, 141=84.7-85.3m, 142=85.3-85.9m, 143=85.9-86.5m, 144=86.5-87.1m, 145=87.1-87.7m, 146=87.7-88.3m, 147=88.3-88.9m, 148=88.9-89.5m, 149=89.5-90.1m, 150=90.1-90.7m, 151=90.7-91.3m, 152=91.3-91.9m, 153=91.9-92.5m, 154=92.5-93.1m, 155=93.1-93.7m, 156=93.7-94.3m, 157=94.3-94.9m, 158=94.9-95.5m, 159=95.5-96.1m, 160=96.1-96.7m, 161=96.7-97.3m, 162=97.3-97.9m, 163=97.9-98.5m, 164=98.5-99.1m, 165=99.1-99.7m, 166=99.7-100.3m, 167=100.3-100.9m, 168=100.9-101.5m, 169=101.5-102.1m, 170=102.1-102.7m, 171=102.7-103.3m, 172=103.3-103.9m, 173=103.9-104.5m, 174=104.5-105.1m, 175=105.1-105.7m, 176=105.7-106.3m, 177=106.3-106.9m, 178=106.9-107.5m, 179=107.5-108.1m, 180=108.1-108.7m, 181=108.7-109.3m, 182=109.3-109.9m, 183=109.9-110.5m, 184=110.5-111.1m, 185=111.1-111.7m, 186=111.7-112.3m, 187=112.3-112.9m, 188=112.9-113.5m, 189=113.5-114.1m, 190=114.1-114.7m, 191=114.7-115.3m, 192=115.3-115.9m, 193=115.9-116.5m, 194=116.5-117.1m, 195=117.1-117.7m, 196=117.7-118.3m, 197=118.3-118.9m, 198=118.9-119.5m, 199=119.5-120.1m, 200=120.1-120.7m, 201=120.7-121.3m, 202=121.3-121.9m, 203=121.9-122.5m, 204=122.5-123.1m, 205=123.1-123.7m, 206=123.7-124.3m, 207=124.3-124.9m, 208=124.9-125.5m, 209=125.5-126.1m, 210=126.1-126.7m, 211=126.7-127.3m, 212=127.3-127.9m, 213=127.9-128.5m, 214=128.5-129.1m, 215=129.1-129.7m, 216=129.7-130.3m, 217=130.3-130.9m, 218=130.9-131.5m, 219=131.5-132.1m, 220=132.1-132.7m, 221=132.7-133.3m, 222=133.3-133.9m, 223=133.9-134.5m, 224=134.5-135.1m, 225=135.1-135.7m, 226=135.7-136.3m, 227=136.3-136.9m, 228=136.9-137.5m, 229=137.5-138.1m, 230=138.1-138.7m, 231=138.7-139.3m, 232=139.3-139.9m, 233=139.9-140.5m, 234=140.5-141.1m, 235=141.1-141.7m, 236=141.7-142.3m, 237=142.3-142.9m, 238=142.9-143.5m, 239=143.5-144.1m, 240=144.1-144.7m, 241=144.7-145.3m, 242=145.3-145.9m, 243=145.9-146.5m, 244=146.5-147.1m, 245=147.1-147.7m, 246=147.7-148.3m, 247=148.3-148.9m, 248=148.9-149.5m, 249=149.5-150.1m, 250=150.1-150.7m, 251=150.7-151.3m, 252=151.3-151.9m, 25

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A=Sapling, E=Seedling, S=Shrub, H=Herb, N=Non-vascular
 Intervals for reference: 5 = trees, 1 = saplings, 1 = seedlings, 1 = shrubs, 1 = herbs, 1 = non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #: HV005	Date: 4-5-21	Name of recorder: M. Pailan	circle: Relevé or RA
	UID:	Other surveyors: LG, AJ, Jessie	
Location Name:			
GPS name: MP Phone		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side	
UTME _____		UTMN _____ Zone: 11 NAD83 GPS error: ft/ m/ PDOP _____	
Decimal degrees: LAT 34.776052 LONG 118.896031			
GPS within stand? Yes / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____			
and record: Base point ID _____		Projected UTM: UTM _____ UTMN _____	
Camera Name: MP Phone Cardinal photos at ID point: N			
Other photos:			
Stand Size (acres): <1, 1.5 , >5 Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius ____ m			
Exposure, Actual °: ____ NE NW SE SW Flat Variable Steepness, Actual °: ____ 0° 1-5° >5-25° > 25			
Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating			
Geology code: _____ Soil Texture code: _____ Upland or Wetland/Riparian (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: 0 BA Stems: 2 Litter: 5 Bedrock: <1 Boulder: 0 Stone: <1 Cobble: 25 Gravel: 15 Fines: 50 =100%			
% Current year bioturbation <1 Past bioturbation present? Yes / No % Hoof punch 2			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: Slope surrounded by steeper slopes at different angles. Imagery shows this as greyer area - almost looks like a drainage. Fire history - burned dead oak trees. Clump of scrub oak in center. John-tucker oaks, also present.			
Excluding dense clump of oak resprouts for cover estimates. See later if it should be mapped separately. Averaged cover across all hill slopes.			
Some sandstone? looking bedrock exposed			
Disturbance code / Intensity (L,M,H): Fire / H / Invaded / M / ____ / ____ "Other" ____ / ____			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead) dead oaks present but not counted			
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: Tucker-oak chaparral - DRECP			
Field-assessed Association name (optional): ?			
Adjacent Alliances/direction: ____ / ____ / ____			
Confidence in Alliance identification: L (M) H Explain: might not fit perfectly			
Phenology (E,P,L): Herb E Shrub E Tree ____ Other identification or mapping information:			
"HV105" because 105 is existing plot name for park			

(Revised March 27, 2018)

SPECIES SHEET

IV. VEGETATION DESCRIPTION

% Cover - Conifer tree / Hardwood tree: / Regenerating Tree: Shrub: 20 Herbaceous: 21
Height Class - Conifer tree / Hardwood tree: / Regenerating Tree: Shrub: 3 Herbaceous: 1
 Height classes: 1= $\leq 1/2$ m, 2= $1/2$ -1m, 3= 1 -2m, 4= 2 -5m, 5= 5 -10m, 6= 10 -15m, 7= 15 -20m, 8= 20 -35m, 9= 35 -50m, 10= ≥ 50 m
 Stratum categories: T=Tree, A=Shrub, E=Herbaceous

Stratum categories: T=Tree, A = Sapling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular
r Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-100%

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Unusual species:

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MVP Other Surveyors: _____ Date: 4-6-21 Return? ☐

Waypoint ID: _____ GPS Name MVP phone Projected? ☒ Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____

UID: HV006 If Yes or Digitized, enter: Base Waypoint ID: _____

Location Name: _____ Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error (ft) m / PDOP 20
 UTM's: UTM E _____ UTM N _____
 Decimal degrees: LAT 34.756673 LONG -118.836896

Stand Size: <1 (5) >5 Camera: MVP phone Photos: (N) View Radius 50m

Exposure, Actual °: _____ NE NW SE (SW) Flat Variable | Steepness, Actual °: _____ 0° (1-5°) >5-25° >25

Field Alliance name: Ericameria nauseosa

Comments: Sandy wash, lots of bare ground. Lighter color on map.
- Oak stand adjacent on hills to SE.
↑ Junco tuckeri

% Cover: Conifer		Hardwood	Total Tree	Regen Tree	Shrub <u>18</u>	Herb	Total Veg	Exotics (L,M,H)
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
S	<u>A. tridentata</u> <u>var. tridentata</u>	<u>15</u>	S	<u>Er. sp. fasc.</u> <u>viridifolium</u>	<u>2</u>	S	<u>Ephedra</u> <u>viridis</u>	<u><1</u>
S	<u>E. nauseosa</u>	<u>7</u>	S	<u>H. whipplei</u>	<u><1</u>	H	<u>Bromus tectorum</u>	<u><1</u>
S	<u>Lepidospartum</u> <u>viridifolium</u>	<u>5</u>	S	<u>Bladderpod</u>	<u><1</u>			

E. naus = 35% Lep. = 25%
A. trident = 25%

Recorder: MVP Other Surveyors: _____ Date: 4-6-21 Return? ☐

Waypoint ID: _____ GPS Name MVP phone Projected? ☒ Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____

UID: HV007 If Yes or Digitized, enter: Base Waypoint ID: _____

Location Name: _____ Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error (ft) m / PDOP 26
 UTM's: UTM E _____ UTM N _____
 Decimal degrees: LAT 34.756988 LONG -118.836483

Stand Size: <1 (5) >5 Camera: MVP phone Photos: (N) View Radius _____

Exposure, Actual °: _____ NE NW SE (SW) Flat Variable | Steepness, Actual °: _____ 0° (1-5°) >5-25° >25

Field Alliance name: Ericameria nauseosa

Comments: Slightly darker zone on map. Veg thicker, plus some
dead shrub - fire? Look like dead yerba santa

% Cover: Conifer		Hardwood	Total Tree	Regen Tree	Shrub <u>25</u>	Herb <u>1</u>	Total Veg	Exotics (L,M,H)
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
S	<u>A. tridentata</u>	<u>6</u>	S	<u>A. palmieri</u>	<u>2</u>	H	<u>Erodium cir.</u>	<u>11</u>
S	<u>E. nauseosa</u>	<u>10</u>	S	<u>Ephedra</u> <u>viridis</u>	<u>2</u>	H	<u>Grass</u>	<u><1</u>
S	<u>Eriodictyon</u> <u>crassifolium</u>	<u>3</u>	S	<u>L. squamatum</u>	<u>3</u>	S	<u>Er. fasc. var</u> <u>pol</u>	<u><1</u>

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MVP		Other Surveyors:		Date: 4-6-21 Return? <input type="checkbox"/>																																																																																																																																																	
Waypoint ID: HV008		GPS Name _____		Projected? No / Yes / Base / Digitized																																																																																																																																																	
UID:		If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____																																																																																																																																																			
Location Name:		If Yes or Digitized, enter: Base Waypoint ID: _____																																																																																																																																																			
		Base / Projected (circle one) Record either UTM's or Decimal Degrees		GPS error: <u>11</u> m / PDOP <u>26</u>																																																																																																																																																	
		UTMs: UTM _____ UTMN _____																																																																																																																																																			
		Decimal degrees: LAT <u>34.789619</u> LONG <u>-118.848036</u>																																																																																																																																																			
Stand Size: <1 1-5 <u>>5</u>		Camera: <u>phone</u> Photos: <u>0</u>		View Radius _____																																																																																																																																																	
Exposure, Actual °: _____		NE NW SE SW Flat <u>Variable</u> Steepness, Actual °: <u>0°</u> <u>1-5°</u> <u>>5-25°</u> <u>>25°</u>																																																																																																																																																			
Field Alliance name: <u>Quercus John-Tuckeri</u>																																																																																																																																																					
Comments: <u>Variable sloping aspect + steepness</u> <u>former + current OHV trails through stand. Soil is v. dry, code MCL. Lots of bare soil in</u> <u>Lower cover of non-natives, just some of the browse. Some browsing of grasses, some herb</u> <u>punches</u>																																																																																																																																																					
<table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <thead> <tr> <th colspan="3">% Cover: Conifer</th> <th colspan="3">Hardwood</th> <th colspan="3">Total Tree</th> <th colspan="3">Regen Tree</th> <th colspan="3">Shrub</th> <th colspan="3">Herb</th> <th colspan="3">Total Veg</th> <th colspan="3">Exotics (L,M,H)</th> </tr> <tr> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> <th>Strata</th> <th>Species</th> <th>% cover</th> </tr> </thead> <tbody> <tr> <td>S</td> <td><u>Quercus John-Tuckeri</u></td> <td><u>25</u></td> <td></td> <td></td> <td></td> <td>S</td> <td><u>Arctostaphylos glauca</u></td> <td><u>2</u></td> <td>S</td> <td><u>Rhamnus illicifolia</u></td> <td><u><1</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>S</td> <td><u>Juniper</u></td> <td><u>1</u></td> <td></td> <td></td> <td></td> <td>S</td> <td><u>Ericameria linearifolia</u></td> <td><u><1</u></td> <td>S</td> <td><u>Ribes quercitorum</u></td> <td><u><1</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>S</td> <td><u>E. nauseosa</u></td> <td><u><1</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>S</td> <td><u>Eriogonum fasciculatum</u></td> <td><u>10</u></td> <td>H</td> <td><u>Poa Secunda</u></td> <td><u><1</u></td> <td></td> <td></td> <td></td> <td>H</td> <td><u>Bromus sp.</u></td> <td><u><1</u></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						% Cover: Conifer			Hardwood			Total Tree			Regen Tree			Shrub			Herb			Total Veg			Exotics (L,M,H)			Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	S	<u>Quercus John-Tuckeri</u>	<u>25</u>				S	<u>Arctostaphylos glauca</u>	<u>2</u>	S	<u>Rhamnus illicifolia</u>	<u><1</u>													S	<u>Juniper</u>	<u>1</u>				S	<u>Ericameria linearifolia</u>	<u><1</u>	S	<u>Ribes quercitorum</u>	<u><1</u>													S	<u>E. nauseosa</u>	<u><1</u>																						S	<u>Eriogonum fasciculatum</u>	<u>10</u>	H	<u>Poa Secunda</u>	<u><1</u>				H	<u>Bromus sp.</u>	<u><1</u>												
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<u>H prickly phlox</u>																																																																																																																																																					

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MVP		Other Surveyors: <u>LG, AJ, Jessi</u>		Date: 4-7-21 Return? <input type="checkbox"/>																																																																																																																																																	
Waypoint ID: HV009		GPS Name <u>MVP Phone</u>		Projected? <u>No</u> / Yes / Base / Digitized																																																																																																																																																	
UID:		If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____																																																																																																																																																			
Location Name: <u>near 109</u>		If Yes or Digitized, enter: Base Waypoint ID: _____																																																																																																																																																			
		Base / Projected (circle one) Record either UTM's or Decimal Degrees		GPS error: <u>12</u> m / PDOP <u>19</u>																																																																																																																																																	
		UTMs: UTM _____ UTMN _____																																																																																																																																																			
		Decimal degrees: LAT <u>34.745035</u> LONG <u>-118.898414</u>																																																																																																																																																			
Stand Size: <1 1-5 <u>>5</u>		Camera: _____ Photos: <u>0</u>		View Radius _____																																																																																																																																																	
Exposure, Actual °: _____		NE NW <u>SE</u> SW Flat <u>Variable</u> Steepness, Actual °: _____		0° <u>1-5°</u> >5-25° >25°																																																																																																																																																	
Field Alliance name: <u>Ericameria linearifolia - Cleome isomeris</u>																																																																																																																																																					
Comments: <u>New historic "sheep shed" - history of grazing, look into history.</u> <u>Open clearing in chaparral, with E. linearifolia, scattered P. monophylla,</u> <u>backwheat, some tin cans. Most P. monophylla are young, 0-2 m</u>																																																																																																																																																					
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Towards SW: <u>Pinus / Juniper on slopes</u>																																																																																																																																																					

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: AS Other Surveyors: MVP, LG, JV Date: 4-7-21 Return? ☐

Waypoint ID: HV012 GPS Name: MP (PHONE) Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): 240-13 Distance (m): 75-40 Inclination (°): _____
 UID: _____ If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: HUNGARY VALLEY Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: 20 ft. / m. / PDOP 20
SURA UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.725165 LONG -118.814039

Stand Size: <1 1-5 >5 Camera: _____ Photos: _____ View Radius _____

Exposure, Actual °: _____ NE NW SE SW Flat Variable | Steepness, Actual °: _____ 0° 1-5° >5-25° >25

Field Alliance name: Eriogonum fasciculatum

Comments: BEDROCK EXPOSED / ROCKY / STEEP HILLS w/ VARIABLE SLOPE & ASPECT / PATCHY J. TUCKERII / ADJACENT TO FLAT "ERFA"
Recon is up hill area - not flatland. Projected. Imagery - 6/5/56 white ground

% Cover: Conifer			Hardwood			Total Tree			Regen Tree			Shrub			Herb			Total Veg			Exotics (L,M,H)		
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
T	<u>Q. J. TUCKERII</u>	<u>5</u>	S	<u>E. COOPERII</u>	<u>r</u>				H	<u>UNK RUNCH GRASS</u>	<u>r</u>												
S	<u>E. FASCICULATUM</u>	<u>12</u>	S	<u>A. GLAUCA</u>	<u><1</u>				H	<u>OPUNTA BASILIFERA</u>	<u>r</u>												
S	<u>H. WHIPPLEII</u>	<u>1</u>	S	<u>S. MALIFERA</u>	<u>1</u>																		
S	<u>E. VERIDIS</u>	<u>r</u>	S	<u>E. VIRGINIENSIS</u>	<u>r</u>																		

Recorder: MVP Other Surveyors: LG, AS, JV Date: 4-7-21 Return? ☐

Waypoint ID: HV013 GPS Name: MVP PHONE Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: _____ If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: near 108 Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft. / m. / PDOP _____
 UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.716437 LONG -118.895511

Stand Size: <1 1-5 >5 Camera: MVP phone Photos: YN View Radius 50m

Exposure, Actual °: _____ NE NW SE SW Flat Variable | Steepness, Actual °: _____ 0° 1-5° >5-25° >25

Field Alliance name: Lepidospartum squamatum

Comments: Braided wash, dominated by L. squamatum. Rockier, with larger rocks than upland. Historic garbage - cans, shredded rubber - tires?

% Cover: Conifer			Hardwood			Total Tree			Regen Tree			Shrub			Herb			Total Veg			Exotics (L,M,H)		
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
S	<u>Lepidospartum squamatum</u>	<u>20</u>	S	<u>Juniper</u>	<u>r</u>				S	<u>Coffe berry</u>	<u>r</u>												
S	<u>E. fasc. var. pol.</u>	<u>18</u>	S	<u>Cercocarpus betuloides</u>	<u>r</u>				S	<u>R. illici folia</u>	<u>r</u>												
S	<u>H. whippleii</u>	<u><1</u>	H	<u>Erodium c.</u>	<u><1</u>				H	<u>Briar</u>	<u><1</u>												

H Datwa Wrightii r T P. monophylla r S Sambucus nigra
S. carulea r
 S E. cooperi r H Gallium sp. r

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: Jessi V Other Surveyors: MP, LG, AJ Date: 04/08/21 Return? ☐

Waypoint ID: HV014 GPS Name MP Phone Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): SW Distance (m): 10 Inclination (°): _____
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: near plot 117 Base / Projected (circle one) Record either UTM or Decimal Degrees GPS error: ft m./ PDOP 20
 UTM: UTME _____ UTMN _____
 Decimal degrees: LAT 34.769685 LONG - 118.852458

Stand Size: <1 (1-5) >5 Camera: mp phone Photos: _____ View Radius 30m

Exposure, Actual °: _____ NE NW SE SW Flat Variable Steepness, Actual °: _____ 0° 1-5° >5-25° >25

Field Alliance name: Quercus john tuckeri

Comments: Several native & non-native grass species, approx. 1 acre, a few dead P. monophylla, more Pinon than we saw at lower elevations, steep hill by wash, juniper & scrub only same height so putting in tree layer

% Cover: Conifer 5 Hardwood 18 Total Tree 23 Regen Tree 1 Shrub 1 Herb 30 Total Veg 37 Exotics (L,M,H) L								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
S	<i>Q. john tuckeri</i>	18	S	<i>A. glauca</i>	1	S	<i>R. giliphotia</i>	r
+	<i>P. monophylla</i>	3	S	<i>L. subpicotida</i> ^{deciduous}	r			
S	<i>J. californicus</i>	2	h	<i>unk grass</i>	30			

Recorder: MP Other Surveyors: LG, AJ, JV Date: 4-8-21 Return? ☐

Waypoint ID: HV015 GPS Name MP Phone Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): from N to E Distance (m): 270 Inclination (°): _____
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: off of meadows trail Base / Projected (circle one) Record either UTM or Decimal Degrees GPS error: ft m./ PDOP 20
 UTM: UTME _____ UTMN _____
 Decimal degrees: LAT 34.749685 LONG - 118.883171

Stand Size: <1 1-5 >5 Camera: mp phone Photos: _____ View Radius 300m

Exposure, Actual °: _____ NE NW SE SW Flat Variable Steepness, Actual °: _____ 0° 1-5° >5-25° >25

Field Alliance name: Quercus john tuckeri

Comments: recording from a distance, can't see herbs other than bunch grass

% Cover: Conifer 3 Hardwood 17 Total Tree 20 Regen Tree 0 Shrub 13 Herb 6 Total Veg 30 Exotics (L,M,H) L								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
+	<i>Q. john tuckeri</i>	17	S	<i>E. fasciculatum</i>	4			
S	<i>A. glauca</i>	7	S	<i>H. whippeli</i>	2			
+	<i>P. monophylla</i>	1						
+	<i>J. californicus</i>	2						

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MP Other Surveyors: LG, AS, JV Date: 4-11-22 Return? ☐

Waypoint ID: HV017 GPS Name MP Phone Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): 196 Distance (m): 30 Inclination (°): 17
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./m/ PDOP 7
 UTM's: UTM _____ UTMN _____
 Decimal degrees: LAT 34.792014 LONG -118.837445

Stand Size: <1 1-5 >5 Camera: MP Phone Photos: facing south View Radius _____

Exposure, Actual °: 10 NE NW SE SW Flat Variable | Steepness, Actual °: 26 0° 1-5° >5-25° >25

Field Alliance name: Ericameria nauseosa

Comments: Hillside, shrubs in bloom, very green + grassy.

% Cover: Conifer <u>r</u> Hardwood <u>0</u> Total Tree <u>r</u> Regen Tree <u>1</u> Shrub <u>23</u> Herb <u>40</u> Total Veg <u>50</u> Exotics (L,M,H) <u>M</u>								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
	Bladderpod	8		Juniper	r		Poa secunda	<1
	Ericameria nauseosa	15		Elymus condensatus	r		claytonia sp.	12
	Lupinus exaltatus	1		Lupinus bicolor	r		non nat. introduced Bromus sp. mod.	30
	Marah macrocarpa	r		Erodium cicutarium	2		Cryptantha sp.	r
<u>lomatium intricatum</u>								

Recorder: MP, LG Other Surveyors: _____ Date: 4-11-22 Return? ☐

Waypoint ID: HV020 GPS Name _____ Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./m/ PDOP _____
 UTM's: UTM _____ UTMN _____
 Decimal degrees: LAT 34.767898 LONG -118.870906

Stand Size: <1 1-5 >5 Camera: _____ Photos: _____ View Radius _____

Exposure, Actual °: _____ NE NW SE SW Flat Variable | Steepness, Actual °: _____ 0° 1-5° >5-25° >25

Field Alliance name: _____

Comments: Dry looking John-tucker Oak. Drought stressed?
OHV roads through. Understory mostly non-native grass

% Cover: Conifer <u>3</u> Hardwood _____ Total Tree _____ Regen Tree _____ Shrub <u>16</u> Herb <u>20</u> Total Veg <u>25</u> Exotics (L,M,H) <u>M</u>								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
	Q. John-tuckeri	15		Sysimbrium altissimum	5		Amsinckia	r
	Juniper	3		claytonia parviflora	1		Bromus spp.	15
	Ericameria laevis	1		Poa secunda	1			

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: <u>MP</u>		Other Surveyors: <u>LG, AS, SV</u>		Date: <u>4-2-22</u> Return? <input type="checkbox"/>	
Waypoint ID: <u>HV022</u> UID: Location Name:	GPS Name <u>MP phone</u> Projected? <input checked="" type="radio"/> No / Yes / Base / Digitized				
	If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____				
	If Yes or Digitized, enter: Base Waypoint ID: _____				
	Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./m./PDOP <u>5</u>				
UTMs: UTM _____ UTMN _____		Decimal degrees: LAT <u>34.717467</u> LONG- <u>118.824328</u>			
Stand Size: <1 1-5 <input checked="" type="radio"/> >5		Camera: <u>MP phone</u> Photos: <u>2N</u>		View Radius <u>200m</u>	
Exposure, Actual °: <u>180</u> NE NW SE <input checked="" type="radio"/> SW Flat Variable Steepness, Actual °: <u>2</u> 0° <input checked="" type="radio"/> 1-5° >5-25° >25					
Field Alliance name: <u>A. tridentata may be most appropriate, but no perfect fit</u>					
Comments: <u>E. fasc., E. Nauseosa, A. triden. all co-dominant. Flatish, sandy loam. Patches throughout valley where bladderpod, yerba santa, have higher cover. Shrubs are mature → decadent.</u>					
% Cover: Conifer <input type="checkbox"/> Hardwood <input type="checkbox"/> Total Tree <input type="checkbox"/> Regen Tree <input type="checkbox"/> Shrub <u>22</u> Herb <u>1</u> Total Veg <u>25</u> Exotics (L,M,H) <u>L</u>					
Strata	Species	% cover	Strata	Species	% cover
	<u>Eriogonum fasciculatum</u>	<u>8</u>		<u>Gutierrezia</u>	<u>r</u>
	<u>Ericameria nauseosa</u>	<u>7</u>		<u>Juniper</u>	<u>r</u>
	<u>Artemisia tridentata</u>	<u>7</u>		<u>Cryptantha sp.</u>	<u><1</u>
				<u>Bromus spp.</u>	<u><1</u>
				<u>Muhlenbergia</u>	<u>r</u>
				<u>Eriodictyon crassifolium</u>	<u>r</u>
<u>H. whipplei on edges near Juniper. (r)</u>					

Recorder: MP Other Surveyors: LG Date: 4-12-22 Return? ☐

Waypoint ID: HV023 GPS Name _____ Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP _____
 UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.731075 LONG - 118.805594

Stand Size: <1 1-5 >5 Camera: _____ Photos: 3N View Radius _____

Exposure, Actual °: 25 (NE) NW SE SW Flat Variable | Steepness, Actual °: 26 0° 1-5° >5-25° (25)

Field Alliance name: _____

Comments: Hard to characterize this hillside - QSTs only on one edge, Alliance not obvious. See imagery - only map QST on edge.

% Cover: Conifer		Hardwood		Total Tree		Regen Tree		Shrub		Herb		Total Veg		Exotics (L,M,H)	
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata
	<i>Q. John-Tuckeri</i>	7		<i>Salvia mellifera</i>	<1		<i>S. nigra</i>	r							
	<i>A. glauca</i>	5		<i>Eric. linearifolia</i>	r		<i>Ceanothus sp?</i>	4							
	<i>Adenostema fasc.</i>	2		<i>Poa secunda</i>	4		<i>H. whipplei</i>	r							
	<i>Cephaelis</i>	2		<i>A. tridentata</i>	r		<i>E. fasciculatum</i>	r							

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MP Other Surveyors: _____ Date: 4-13-22 Return? ☐

Waypoint ID: HV024 GPS Name _____ Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 UID: If Yes or Digitized, enter: Base Waypoint ID: _____
 Location Name: near #79 Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP _____
 UTM's: UTME _____ UTMN _____
 Decimal degrees: LAT 34.761898 LONG - 118.850894

Stand Size: <1 (1-5) >5 Camera: MP phone Photos: _____ View Radius _____

Exposure, Actual °: _____ (NE) NW SE SW Flat Variable | Steepness, Actual °: _____ 0° 1-5° >5-25° (25)

Field Alliance name: Pinus monophylla

Comments: steep slope opposite #79. Pinon is consistent. Leah is checking manzanita ID. Photo taken from #79

% Cover: Conifer		Hardwood		Total Tree		Regen Tree		Shrub		Herb		Total Veg		Exotics (L,M,H)	
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata
	<i>P. monophylla</i>	4		<i>E. linearifolia</i>	1										
	<i>Q. John-Tuckeri</i>	10		<i>S. californicus</i>	r										
	<i>A. glauca</i>	7		<i>herbaceous</i>	20										

too far to see. Bromes

Recorder: MP Other Surveyors: Date: 4-13-22 Return? ☐

Waypoint ID: HV025
 UID:
 Location Name:

GPS Name _____ Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 If Yes or Digitized, enter: Base Waypoint ID: _____
 Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft/ m/ PDOP _____
 UTM's: UTM _____ UTMN _____
 Decimal degrees: LAT 34.766002 LONG - 118.860556

Stand Size: ☒ 1-5 >5 Camera: Photos: No from point, facing SE → SW View Radius _____

Exposure, Actual °: 120 NE NW ☒ SE SW Flat Variable | Steepness, Actual °: _____ 0° ☒ 1-5° > 5-25° > 25

Field Alliance name: Cottonwood stand

Comments: Tiny wetland/riparian area. Spring fed w/ cottonwoods, a few shrubby willows. Shrubs from adjacent hills, plus P. monophylla, QST, monzonita.

% Cover: Conifer			Hardwood			Total Tree 5			Regen Tree			Shrub 15			Herb			Total Veg 22			Exotics (L,M,H) L		
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover			
	P. fremontii	5		A. tridentata	5		L. subspicata	<1															
	Salix sp. (c)	10		A. palmieri	<1		E. nauseosa	<1															
	Juniper sp.	1		A. glauca	<1																		

RECON FIELD FORM (March 6, 2019, with slope/aspect)

Recorder: MP Other Surveyors: LG Date: 4-15-22 Return? ☐

Waypoint ID: HV028
 UID:
 Location Name:

GPS Name _____ Projected? No / Yes / Base / Digitized
 If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____
 If Yes or Digitized, enter: Base Waypoint ID: _____
 Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft/ m/ PDOP _____
 UTM's: UTM _____ UTMN _____
 Decimal degrees: LAT 34.759123 LONG - 118.898613

Stand Size: <1 1-5 ☒ >5 Camera: MP Photos: ☒ View Radius _____

Exposure, Actual °: 170 NE NW ☒ SE SW Flat Variable | Steepness, Actual °: 3 0° ☒ 1-5° > 5-25° > 25

Field Alliance name:

Comments: Gently sloping valley. Alliances + shrubs composition varies throughout valley + isn't always obvious on imagery. Gravelly, Yucca mixed in on W side of road. Escholtzia cal.

% Cover: Conifer			Hardwood			Total Tree			Regen Tree			Shrub 21			Herb 2			Total Veg 22			Exotics (L,M,H) L		
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover			
S	E. linearifolia	8	T	Juniper (young)	1	H	Bromus tectorum	<1															
S	E. fasciculata	7	H	Lasthenia fremontii	1	H	Stipa pulchra	r															
S	E. cooperi	5	H	Layia glandulosa	<1	H	Amsinckia tessellata	r															
S	E. nauseosa	1	H	E. cicutarium	<1	H	Plagiobotrys arizonica	r															
S	Gutierrezia	<1		Carex prorepens	r		red mud vein on underside																

Date: ? ☐

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			circle: Relevé or RA
Database #:	Date:	Name of recorder:	
HV027	4-14-22	MP	
		Other surveyors: LB - JV - LD	
	UID:	Location Name:	
GPS name: MP Phare		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side	
UTME _____		UTMN _____ Zone: 11 NAD83 GPS error: ft/ m/ PDOP _____	
Decimal degrees: LAT 39.808564		LONG 118.903397	
GPS within stand? Yes / No If No, cite from GPS to stand: distance (m) 60 bearing° 140 inclination° 6			
and record: Base point ID see field maps Projected UTM: UTM _____ UTMN _____			
Camera Name: MP Phare Cardinal photos at ID point: view across valley			
Other photos:			
Stand Size (acres): <1, 1-5, >5 Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius _____ m			
Exposure, Actual °: varies NE NW SE SW Flat Variable Steepness, Actual °: varies 0° 1-5° >5-25° >25			
Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating			
Geology code: _____ Soil Texture code: sandy Upland or Wetland/Riparian (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H2: 0 BA Stems: 3 Litter: 5 Bedrock: 0 Boulder: 0 Stone: r Cobble: 2 Gravel: 13 Fines: 80 =100%			
% Current year bioturbation _____ Past bioturbation present? Yes / No % Hoof punch _____			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: *check date of last fire, 2015 - AS			
steep slopes with flannelbush - only spot in the park we've seen so many, burned snags of some oak, probably QJT. very diverse mix, unique. Not sure how far stand extends over ridge - see notes in field maps. Road cuts through stand, wash/drainage below - has more yerba Santa, south facing slope to the north is Erigeron fasciculatus alliance			
Disturbance code / Intensity (L,M,H): none except road / _____ / "Other" _____ / _____			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)			
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: Ceanothus greggii - Fremontodendron cal.			
Field-assessed Association name (optional): Fremontodendron cal. fornicum - C. greggii Assoc.			
Adjacent Alliances/direction: 4 fasc. to north on sparse, S facing slope			
Confidence in Alliance identification: L M (H) Explain: _____			
Phenology (E,P,L): Herb E Shrub E Tree - Other identification or mapping information: _____			

(Revised March 27, 2018)
SPECIES SHEET

SPECIES SHEET

% NonVasc cover: ____ Total % Vasc Veg cover: 18

Regenerating Tree: _____ Shrub: 12 Herbaceous: 9

Regenerating Tree: 3 Shrub: 4 Herbaceous: 1

Height classes: 1= $\leq 1/2$ m, 2= $1/2-1$ m, 3= $1-2$ m, 4= $2-3$ m, 5= $3-10$ m, 6= $10-15$ m, 7= $15-20$ m, 8= $20-30$ m, 9= $30-40$ m, 10= $40-50$ m, 11= $50-60$ m, 12= $60-70$ m, 13= $70-80$ m, 14= $80-90$ m, 15= $90-100$ m, 16= $100-110$ m, 17= $110-120$ m, 18= $120-130$ m, 19= $130-140$ m, 20= $140-150$ m, 21= $150-160$ m, 22= $160-170$ m, 23= $170-180$ m, 24= $180-190$ m, 25= $190-200$ m, 26= $200-210$ m, 27= $210-220$ m, 28= $220-230$ m, 29= $230-240$ m, 30= $240-250$ m, 31= $250-260$ m, 32= $260-270$ m, 33= $270-280$ m, 34= $280-290$ m, 35= $290-300$ m, 36= $300-310$ m, 37= $310-320$ m, 38= $320-330$ m, 39= $330-340$ m, 40= $340-350$ m, 41= $350-360$ m, 42= $360-370$ m, 43= $370-380$ m, 44= $380-390$ m, 45= $390-400$ m, 46= $400-410$ m, 47= $410-420$ m, 48= $420-430$ m, 49= $430-440$ m, 50= $440-450$ m, 51= $450-460$ m, 52= $460-470$ m, 53= $470-480$ m, 54= $480-490$ m, 55= $490-500$ m, 56= $500-510$ m, 57= $510-520$ m, 58= $520-530$ m, 59= $530-540$ m, 60= $540-550$ m, 61= $550-560$ m, 62= $560-570$ m, 63= $570-580$ m, 64= $580-590$ m, 65= $590-600$ m, 66= $600-610$ m, 67= $610-620$ m, 68= $620-630$ m, 69= $630-640$ m, 70= $640-650$ m, 71= $650-660$ m, 72= $660-670$ m, 73= $670-680$ m, 74= $680-690$ m, 75= $690-700$ m, 76= $700-710$ m, 77= $710-720$ m, 78= $720-730$ m, 79= $730-740$ m, 80= $740-750$ m, 81= $750-760$ m, 82= $760-770$ m, 83= $770-780$ m, 84= $780-790$ m, 85= $790-800$ m, 86= $800-810$ m, 87= $810-820$ m, 88= $820-830$ m, 89= $830-840$ m, 90= $840-850$ m, 91= $850-860$ m, 92= $860-870$ m, 93= $870-880$ m, 94= $880-890$ m, 95= $890-900$ m, 96= $900-910$ m, 97= $910-920$ m, 98= $920-930$ m, 99= $930-940$ m, 100= $940-950$ m, 101= $950-960$ m, 102= $960-970$ m, 103= $970-980$ m, 104= $980-990$ m, 105= $990-1000$ m, 106= $1000-1010$ m, 107= $1010-1020$ m, 108= $1020-1030$ m, 109= $1030-1040$ m, 110= $1040-1050$ m, 111= $1050-1060$ m, 112= $1060-1070$ m, 113= $1070-1080$ m, 114= $1080-1090$ m, 115= $1090-1100$ m, 116= $1100-1110$ m, 117= $1110-1120$ m, 118= $1120-1130$ m, 119= $1130-1140$ m, 120= $1140-1150$ m, 121= $1150-1160$ m, 122= $1160-1170$ m, 123= $1170-1180$ m, 124= $1180-1190$ m, 125= $1190-1200$ m, 126= $1200-1210$ m, 127= $1210-1220$ m, 128= $1220-1230$ m, 129= $1230-1240$ m, 130= $1240-1250$ m, 131= $1250-1260$ m, 132= $1260-1270$ m, 133= $1270-1280$ m, 134= $1280-1290$ m, 135= $1290-1300$ m, 136= $1300-1310$ m, 137= $1310-1320$ m, 138= $1320-1330$ m, 139= $1330-1340$ m, 140= $1340-1350$ m, 141= $1350-1360$ m, 142= $1360-1370$ m, 143= $1370-1380$ m, 144= $1380-1390$ m, 145= $1390-1400$ m, 146= $1400-1410$ m, 147= $1410-1420$ m, 148= $1420-1430$ m, 149= $1430-1440$ m, 150= $1440-1450$ m, 151= $1450-1460$ m, 152= $1460-1470$ m, 153= $1470-1480$ m, 154= $1480-1490$ m, 155= $1490-1500$ m, 156= $1500-1510$ m, 157= $1510-1520$ m, 158= $1520-1530$ m, 159= $1530-1540$ m, 160= $1540-1550$ m, 161= $1550-1560$ m, 162= $1560-1570$ m, 163= $1570-1580$ m, 164= $1580-1590$ m, 165= $1590-1600$ m, 166= $1600-1610$ m, 167= $1610-1620$ m, 168= $1620-1630$ m, 169= $1630-1640$ m, 170= $1640-1650$ m, 171= $1650-1660$ m, 172= $1660-1670$ m, 173= $1670-1680$ m, 174= $1680-1690$ m, 175= $1690-1700$ m, 176= $1700-1710$ m, 177= $1710-1720$ m, 178= $1720-1730$ m, 179= $1730-1740$ m, 180= $1740-1750$ m, 181= $1750-1760$ m, 182= $1760-1770$ m, 183= $1770-1780$ m, 184= $1780-1790$ m, 185= $1790-1800$ m, 186= $1800-1810$ m, 187= $1810-1820$ m, 188= $1820-1830$ m, 189= $1830-1840$ m, 190= $1840-1850$ m, 191= $1850-1860$ m, 192= $1860-1870$ m, 193= $1870-1880$ m, 194= $1880-1890$ m, 195= $1890-1900$ m, 196= $1900-1910$ m, 197= $1910-1920$ m, 198= $1920-1930$ m, 199= $1930-1940$ m, 200= $1940-1950$ m, 201= $1950-1960$ m, 202= $1960-1970$ m, 203= $1970-1980$ m, 204= $1980-1990$ m, 205= $1990-2000$ m, 206= $2000-2010$ m, 207= $2010-2020$ m, 208= $2020-2030$ m, 209= $2030-2040$ m, 210= $2040-2050$ m, 211= $2050-2060$ m, 212= $2060-2070$ m, 213= $2070-2080$ m, 214= $2080-2090$ m, 215= $2090-2100$ m, 216= $2100-2110$ m, 217= $2110-2120$ m, 218= $2120-2130$ m, 219= $2130-2140$ m, 220= $2140-2150$ m, 221= $2150-2160$ m, 222= $2160-2170$ m,

Intervals for reference: \pm = $\leq 1\%$ 1-5% >5-15% >15-25% >25-50% >50-75%

% Cover Intervals for Reference: 1 = trace, 2 = 1-5%, 3 = 6-10%, 4 = 11-20%, 5 = 21-30%, 6 = 31-40%, 7 = 41-50%, 8 = 51-60%, 9 = 61-70%, 10 = 71-80%, 11 = 81-90%, 12 = 91-100%			
Species	% cover	C	Final species determination

[illegible]

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
		circle: Relevé or RA	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date: 04/11/2022	Name of recorder: JV	
		Other surveyors: AH, LG, MP	
	UID: 7	Location Name: HVSVRA	
GPS name:		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side	
UTME ____		UTMN ____ Zone: 11 NAD83 GPS error: ft./ m./ PDOP ____	
Decimal degrees: LAT 34.769194		LONG 118.871567	
GPS within stand? Yes / No		If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____	
and record: Base point ID ____		Projected UTM: UTM ____ UTMN ____	
Camera Name: AJ Phone		Cardinal photos at ID point: NESW	
Other photos:			
Stand Size (acres): <1, 1-5 , >5		Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius 10.6 m	
Exposure, Actual °: 200 NE NW SE SW		Flat Variable Steepness, Actual °: 3.6 0° 1-5° >5-25° >25	
Topography: Macro: top upper mid lower bottom		Micro: convex flat concave undulating	
Geology code: ____		Soil Texture code: ____ Upland or Wetland/Riparian (circle one)	
% Surface cover: ____		(Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)	
H ₂ O: 0 BA Stems: 10 Litter: 4 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 1 Gravel: 4 Fines: 85 =100%			
% Current year bioturbation ____		Past bioturbation present? Yes / No % Hoof punch ____	
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: In a relatively flat bowl w/ lots of ridges surrounded by oak stands			
Disturbance code / Intensity (L,M,H): 05/M 0HV/H ____ / ____ / ____ "Other" ____ / ____			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)			
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Ericameria</u>			
Field-assessed Association name (optional): <u>Nauyasana alliance</u>			
Adjacent Alliances/direction: ____ / ____ / ____			
Confidence in Alliance identification: L M H Explain: ____			
Phenology (E,P,L): Herb <input type="checkbox"/> Shrub <input type="checkbox"/> Tree <input checked="" type="checkbox"/> Other identification or mapping information: ____			

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SPECIES SHEET

SPECIES SHEET

IV. VEGETATION DESCRIPTION

% Cover - Conifer tree / Hardwood tree: 41 / - Regenerating Tree: - Shrub: 26 Herbaceous: 31

Height Class - Conifer tree / Hardwood tree: 4 / 1 - — **Regenerating Tree:** — **Shrub:** 2 **Herbaceous:** 1

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

Plot 45
- shrubs = Early
- get rid of association

For Office Use:		Final database #:	Final vegetation type:	Alliance
			Association	
circle: Relevé or (RA)				
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION				
Database #:	Date:	Name of recorder: JV		
	04/12/22	Other surveyors: AH, LG, MP		
UID: 14		Location Name: HUSVRA		
GPS name:		For Relevé only: Bearing°, left axis at ID point of Long / Short side		
UTME		Zone: 11 NAD83 GPS error: ft./ m./ PDOP		
Decimal degrees: LAT 34.720723		LONG 118.822621		
GPS within stand? Yes / No		If No, cite from GPS to stand: distance (m) bearing° inclination°		
and record: Base point ID		Projected UTM: UTM UTMN		
Camera Name: AH Phone		Cardinal photos at ID point: NESW		
Other photos:				
Stand Size (acres): <1, 1-5, >5		Plot Area (m²): 100 / Plot Dimensions x m RA Radius 50 m		
Exposure, Actual°:		NE NW SE SW Flat Variable Steepness, Actual°: 0° 1-5° >5-25° >25		
Topography: Macro: top upper mid lower bottom		Micro: convex flat concave undulating		
Geology code:		Soil Texture code: MESA Upland or Wetland/Riparian (circle one)		
% Surface cover:		(Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)		
H20: 0 BA Stems: 3 Litter: 2 Bedrock: 0 Boulder: 0 Stone: <1 Cobble: 1 Gravel: 40 Fines: 54 = 100%				
% Current year bioturbation		Past bioturbation present? Yes/ No % Hoof punch		
Fire evidence: Yes/ No (circle one)		If yes, describe in Site history section, including date of fire, if known.		
Site history, stand age, comments: historic fire				
undulating hills around plot center but chamise & scrub oaks are the edge				
Disturbance code / Intensity (L,M,H): 05 / L / / / / / "Other" /				
II. HABITAT DESCRIPTION				
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)				
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)				
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)				
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)				
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)				
III. INTERPRETATION OF STAND				
Field-assessed vegetation Alliance name: <i>Eriogonum fasciculatum</i>				
Field-assessed Association name (optional): <i>Eriogonum fasciculatum - Hesperoyucca whipplei</i>				
Adjacent Alliances/direction:				
Confidence in Alliance identification: L M (H) Explain:				
Phenology (E,P,L): Herb P Shrub E Tree Other identification or mapping information:				

Survey ID is SVRA_HV029²

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SPECIES SHEET

SPECIES SHEET

IV. VEGETATION DESCRIPTION

Height classes: 1= $\leq 1/2$ m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10= ≥ 50 m

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Unusual species: _____

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type: Alliance Association	circle: Relevé or <u>(RA)</u>
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date: 4-12-22	Name of recorder: AH	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	UID: 18	Other surveyors: JV, LG, MP	
		Location Name: HVSRA	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
GPS name: S9 GALAXY			
UTME		UTMN	Zone: 11 NAD83 GPS error: ft./m./PDOP
Decimal degrees: LAT 34.717946 LONG -118.824867			
GPS within stand? <u>Yes</u> No If No, cite from GPS to stand: distance (m) bearing ° inclination °			
and record: Base point ID Projected UTM: UTM UTMN			
Camera Name: A3 S9 Cardinal photos at ID point: NESW			
Other photos:			
Stand Size (acres): <1, <u>1-5</u> , >5 Plot Area (m²): 100 / Plot Dimensions x m RA Radius 40 m			
Exposure, Actual °: 165 NE NW <u>SE</u> SW Flat Variable Steepness, Actual °: 1 0° <u>1-5°</u> >5-25° >25			
Topography: Macro: top upper mid <u>lower</u> bottom Micro: convex <u>flat</u> concave undulating			
Geology code: Soil Texture code: MESA Upland or Wetland/Riparian (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: 0 BA Stems: 3 Litter: 2 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 1 Gravel: 30 Fines: 64=100%			
% Current year bioturbation 1 Past bioturbation present? <u>Yes</u> / No % Hoof punch 1			
Fire evidence: Yes <u>No</u> (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: WASH, VERBA SANTA ISLAND AT PLOT CENTER BUT VARIED 10M OUT, NEW VOLUNTEER MX TRAILS			
Disturbance code / Intensity (L,M,H): DS/L 02/M 1 1 1 "Other" 1			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)			
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>(decid.) Lotus scoparius - Lupinus albus - Eriodictyon spp</u>			
Field-assessed Association name (optional): <u>Eriodictyon crassifolium</u>			
Adjacent Alliances/direction:			
Confidence in Alliance identification: L <u>M</u> H Explain: <u>doesn't fit perfectly into alliance</u>			
Phenology (E,P,L): Herb E Shrub E Tree Other identification or mapping information:			

(Revised March 27, 2018)
SPECIES SHEET

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% NonVasc cover: _____ Total % Vasc Veg cover: 20

333

Stratum categories: T=Tree, A = Sapling, E = SEedling, S = Shrub, H= Herb, N= Non-Vascular
% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
I. LOCATION/ENVIRONMENTAL DESCRIPTION			circle: Relevé or <u>RA</u>
Database #:	Date: <u>04/13/22</u>	Name of recorder: <u>JV</u>	
	UID: <u>24</u>	Other surveyors: <u>AH, LG, MP, LD</u>	
		Location Name: <u>HVSVRA</u>	
GPS name: _____		For Relevé only: Bearing°, left axis at ID point _____ of Long / Short side	
UTME _____ UTMN _____		Zone: 11 NAD83 GPS error: ft./ m./ PDOP _____	
Decimal degrees: LAT <u>34.761785</u> LONG <u>118.865838</u>			
GPS within stand? <u>Yes</u> No If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____			
and record: Base point ID _____ Projected UTM: UTME _____ UTMN _____			
Camera Name: <u>AirPhone</u> Cardinal photos at ID point: <u>NESW</u>			
Other photos: _____			
Stand Size (acres): <1, <u>1-5</u> , >5 Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius <u>30</u> m			
Exposure, Actual °: <u>46</u> <u>NE</u> NW SE SW Flat <u>Variable</u> Steepness, Actual °: <u>11.3</u> 0° 1-5° <u>> 5-25°</u> > 25			
Topography: Macro: top <u>upper</u> mid lower bottom Micro: convex flat <u>concave</u> undulating			
Geology code: _____ Soil Texture code: <u>MELS</u> Upland or Wetland/Riparian (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: <u>0</u> BA Stems: <u>3</u> Litter: <u>10</u> Bedrock: <u>0</u> Boulder: <u>0</u> Stone: <u>0</u> Cobble: <u>0</u> Gravel: <u>4</u> Fines: <u>87</u> =100%			
% Current year bioturbation <u>1</u> Past bioturbation present? <u>Yes</u> / No % Hoof punch <u>1</u>			
Fire evidence: Yes <u>No</u> (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: <u>area around plot center w/ junipers, scrub oaks, & pines.</u> <u>Vantage point up above plot center</u>			
Disturbance code / Intensity (L,M,H): <u>05/L</u> _____ / _____ / _____ / _____ "Other" _____ / _____			
II. HABITAT DESCRIPTION			
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead)			
Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: <u>1</u> (<2ft. stem ht.), <u>2</u> (2-10ft. ht.), <u>3</u> (10-20ft. ht.), <u>4</u> (>20ft. ht.)			
Desert Palm/Joshua Tree: <u>1</u> (<1.5" base diameter), <u>2</u> (1.5-6" diam.), <u>3</u> (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Quercus johnstuckeri</u>			
Field-assessed Association name (optional): _____			
Adjacent Alliances/direction: _____ / _____ / _____			
Confidence in Alliance identification: L <u>M</u> H Explain: _____			
Phenology (E,P,L): Herb <u>E</u> Shrub <u>E</u> Tree _____ Other identification or mapping information: _____			

Database #: 24

% NonVasc cover: 0 Total % Vasc Veg cover: 13

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75-100%

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Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:		Final database #:	Final vegetation type:	Alliance Association
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION circle: Relevé or <u>RA</u>				
Database #:	Date:	Name of recorder: <u>JV</u>		
	<u>04/11/22</u>	Other surveyors: <u>AH LG, MP</u>		
	UID: <u>41</u>	Location Name: <u>HVSVRA</u>		
GPS name: _____ For Relevé only: Bearing°, left axis at ID point _____ of <u>Long</u> / <u>Short</u> side UTM _____ UTMN _____ Zone: <u>11</u> NAD83 GPS error: ft./ m./ PDOP _____ Decimal degrees: LAT <u>34.734853</u> LONG <u>118.867180</u>				
GPS within stand? <u>Yes</u> <input checked="" type="checkbox"/> No <input type="checkbox"/> If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____ and record: Base point ID _____ Projected UTM: UTM _____ UTMN _____				
Camera Name: <u>Air Phase</u> Cardinal photos at ID point: <u>NESW</u> Other photos: _____				
Stand Size (acres): <u><1</u> , 1-5, >5 Plot Area (m²): <u>100</u> / _____ Plot Dimensions _____ x _____ m RA Radius <u>20</u> m Exposure, Actual °: _____ NE NW SE SW Flat <u>Variable</u> Steepness, Actual °: <u>7</u> 0° 1-5° <u>>5-25°</u> >25				
Topography: Macro: top upper mid <u>lower</u> bottom Micro: <u>convex</u> flat <u>concave</u> undulating Geology code: _____ Soil Texture code: _____ <u>Upland</u> or Wetland/Riparian (circle one)				
% Surface cover: _____ (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) H ₂ O: 0 BA Stems: 3 Litter: 0 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 4 Gravel: 25 Fines: 64 =100%				
% Current year bioturbation <u>2</u> Past bioturbation present? <u>Yes</u> No % Hoof punch <u>1</u> Fire evidence: Yes <u>No</u> (circle one) If yes, describe in Site history section, including date of fire, if known.				
Site history, stand age, comments: <u>@ plot center looking out on bowl & characterizing that.</u>				
Disturbance code / Intensity (L,M,H): <u>05/L OHV/L</u> / _____ / _____ / _____ "Other" _____ / _____				
II. HABITAT DESCRIPTION				
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover) Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead) Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.) Desert Riparian Tree/Shrub: <u>1</u> (<2ft. stem ht.), <u>2</u> (2-10ft. ht.), <u>3</u> (10-20ft. ht.), <u>4</u> (>20ft. ht.) Desert Palm/Joshua Tree: <u>1</u> (<1.5" base diameter), <u>2</u> (1.5-6" diam.), <u>3</u> (>6" diam.)				
III. INTERPRETATION OF STAND				
Field-assessed vegetation Alliance name: <u>Juniper</u>				
Field-assessed Association name (optional): _____				
Adjacent Alliances/direction: _____ / _____ / _____				
Confidence in Alliance identification: L M <u>H</u> Explain: <u>should be juniper yucca association</u>				
Phenology (E,P,L): Herb <u>0</u> Shrub <u>0</u> Tree <u>X</u> Other identification or mapping information: _____				

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SPECIES SHEET

IV. VEGETATION DESCRIPTION

☐
☐
☐

Height Class - Conifer tree / Hardwood tree: 4 / - **Regenerating Tree:** 2 **Shrub:** 2 **Herbaceous:** 1

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Unusual species: _____

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Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
		circle: Relevé or (RA)	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date: 04/12/22	Name of recorder: SV	
	UID: 45	Other surveyors: AH, LG, MP	
		Location Name: HVSVRA	
For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side			
GPS name: _____		Zone: 11 NAD83 GPS error: ft./ m./ PDOP ____	
UTME _____		UTMN _____	
Decimal degrees: LAT 34.726571 LONG 118.837874			
GPS within stand? (Yes) / No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____			
and record: Base point ID ____ Projected UTMs: UTME ____ UTMN ____			
Camera Name: AH Phone		Cardinal photos at ID point: NESW	
Other photos: _____			
Stand Size (acres): <1, (1.5) , >5 Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius 30 m			
Exposure, Actual °: 146 NE NW (SE) SW Flat Variable Steepness, Actual °: 3.8 0° (1.5) >5-25° >25			
Topography: Macro: top upper mid (lower) bottom Micro: convex flat (concave) undulating			
Geology code: ____ Soil Texture code: COLS (Upland or Wetland/Riparian (circle one))			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: 0 BA Stems: 2 Litter: 4 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: <1 Gravel: 40 Fines: 54 =100%			
% Current year bioturbation 2 Past bioturbation present? (Yes) / No % Hoof punch ____			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: in the valley @ pbt 45 w/ hillsides on either side as boundary.			
Disturbance code / Intensity (L,M,H): 05 / L ____ / ____ / ____ "Other" ____ / ____			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), (S3) mature (1-25% dead) S4 decadent (>25% dead)			
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: Eriogonum fasciculatum			
Field-assessed Association name (optional): _____			
Adjacent Alliances/direction: _____			
Confidence in Alliance identification: L M (H) Explain: _____			
Phenology (E,P,L): Herb P Shrub E Tree X Other identification or mapping information: _____			

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SPECIES SHEET

IV. VEGETATION DESCRIPTION

333

Height Class - Conifer tree / Hardwood tree: — / — Regenerating Tree: — Shrub: 3 Herbaceous: 1

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

Unusual species:

For Office Use: Final database #: Final vegetation type: Alliance Association circle: Relevé or RA

I. LOCAL/ENVIRONMENTAL DESCRIPTION

Database #: Date: 4-11-22 Name of recorder: AH Other surveyors: JV, MP, LG UID: 57 Location Name: HUSRA

GPS name: For Relevé only: Bearing°, left axis at ID point of Long / Short side
UTME UTMN Zone: 11 NAD83 GPS error: ft./ m./ PDOP
Decimal degrees: LAT 34.786424 LONG 118.885091

GPS within stand? Yes / No If No, cite from GPS to stand: distance (m) bearing° inclination°
and record: Base point ID Projected UTM: UTM UTMN

Camera Name: AS PHONE Cardinal photos at ID point: NESW (NW OF PLOT CENTER)
Other photos:

Stand Size (acres): 1 1-5, >5 | Plot Area (m²): 100 / | Plot Dimensions 10 x 10 m | RA Radius m
Exposure, Actual °: NE NW SE SW Flat Variable | Steepness, Actual °: 0° 1-5° > 5-25° > 25

Topography: Macro: top upper mid lower bottom | Micro: convex flat concave undulating
Geology code: Soil Texture code: MELO | Upland or Wetland/Riparian (circle one)

% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)
H₂O: 0 BA Stems: 2 Litter: 1 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 0 Gravel: 4 Fines: 93 = 100%

% Current year bioturbation 1 Past bioturbation present? Yes / No | % Hoof punch 1
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.

Site history, stand age, comments:
FIRE: BURNED AREA JULY 31ST 2021
NATIVE GRASSLANDS, ON TOP OF A HILL WITH MODERATE SLOPES,
Alliances vary throughout. Patchwork of pappys, fiddleneck, & Phacelia

Disturbance code / Intensity (L,M,H): 05 / M / / / / / "Other" FIRE / M

II. HABITAT DESCRIPTION

Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)
Herbaceous: H1 (<12" plant ht.) H2 (>12" ht.)
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)

III. INTERPRETATION OF STAND

Field-assessed vegetation Alliance name: Amsinckia - Phacelia spp.
Field-assessed Association name (optional):
Adjacent Alliances/direction: / / / /
Confidence in Alliance identification: L M H Explain:
Phenology (E,P,L): Herb 0 Shrub 0 Tree X Other identification or mapping information:

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SPECIES SHEET

IV. VEGETATION DESCRIPTION

% NonVasc cover: Total % Vasc Veg cover:

% Cover - Conifer tree / Hardwood tree: — / — Regenerating Tree: — Shrub: 1 Herbaceous: 20

Height Class - Conifer tree / Hardwood tree: / Regenerating Tree: Shrub: Herbaceous:

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

*right brane -
gives resistance
if rub backwards
B. diandres*

For Office Use:		Final database #:	Final vegetation type:	Alliance Association	circle: Relevé or RA
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION					
Database #:	Date:	Name of recorder: JV			
	04/12/22	Other surveyors: AH, LG, MP			
	UID: 72	Location Name: HUSVRA			
For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side					
GPS name: _____		Zone: 11 NAD83 GPS error: ft./ m./ PDOP ____			
UTME _____		UTMN _____			
Decimal degrees: LAT 34.709655		LONG 118.816461			
GPS within stand? Yes No If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____					
and record: Base point ID _____ Projected UTMs: UTME _____ UTMN _____					
Camera Name: AltPhone Cardinal photos at ID point: NESW					
Other photos: 13139					
Stand Size (acres): <1, 1-5, >5 Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius 60m					
Exposure, Actual °: 156 NE NW SE SW Flat Variable Steepness, Actual °: 2 0° 1-5° >5-25° >25					
Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating					
Geology code: _____ Soil Texture code: CLS Upland or Wetland/Riparian (circle one)					
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)					
H ₂ O: 0 BA Stems: 3 Litter: 75 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 0 Gravel: 2 Fines: 20 = 100%					
% Current year bioturbation ____ Past bioturbation present? Yes No % Hoof punch ____					
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.					
Site history, stand age, comments: long strip along roadway starting from plot center zone & stretching SE includes oaks @ beginning & end.					
enhance stand → by planting oaks					
Disturbance code / Intensity (L,M,H): 05/M ____ / ____ / ____ "Other" road / L					
II. HABITAT DESCRIPTION					
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), T3 (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)					
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)					
Herbaceous: H1 (<12" plant ht.), H2 (>12" ht.)					
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)					
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)					
III. INTERPRETATION OF STAND					
Field-assessed vegetation Alliance name: Quercus lobata Woodland/Forest					
Field-assessed Association name (optional): _____					
Adjacent Alliances/direction: _____					
Confidence in Alliance identification: L M H Explain: _____					
Phenology (E,P,L): Herb E Shrub E Tree E Other identification or mapping information: _____					

Database #:

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% NonVasc cover: 0 Total % Vasc Veg cover: 17

Stratum categories: T=Tree, A=Sapling, E=Seedling, S=Shrub, H=Herb, N=Non-vascular
% Cover Intervals for reference: r=trace, +=<1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
		circle: Relevé or RA	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date:	Name of recorder: AH	
	04/13/22	Other surveyors: JV, MP, LG, LV	
	UID: 97	Location Name: HVSURA	
GPS name: S9 AJ		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side	
UTME		Zone: 11 NAD83 GPS error: ft./ m./ PDOP ____	
Decimal degrees: LAT 34.768176		LONG 118.852292	
GPS within stand? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No		If No, cite from GPS to stand: distance (m) ____ bearing ° ____ inclination ° ____	
and record: Base point ID		Projected UTM: UTM ____ UTMN ____	
Camera Name: AT59		Cardinal photos at ID point: NESW 1100AM	
Other photos: DATASHEET PHOTO TAKEN AFTER NESW			
Stand Size (acres): <1, <u>1.5</u> , >5		Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius 30 m	
Exposure, Actual °: 343 NE <u>NW</u> SE SW Flat Variable		Steepness, Actual °: 0.5 0° 1-5° >5-25° >25	
Topography: Macro: top upper mid <u>lower</u> bottom		Micro: convex flat <u>concave</u> undulating	
Geology code: ____		Soil Texture code: MESN <u>Upland</u> or Wetland/Riparian (circle one)	
% Surface cover: ____		(Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)	
H ₂ O: 0 BA Stems: 2 Litter: 3 Bedrock: 0 Boulder: 0 Stone: 5 Cobble: 3 Gravel: 35 Fines: 57 =100%			
% Current year bioturbation: 1		Past bioturbation present? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No % Hoof punch: 1	
Fire evidence: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: by plot center in lowlands of wash, not up hillside. dead mesquites & one dead piñon. dry wash but not active currently.			
Disturbance code / Intensity (L,M,H): 051 1 1 1 1 1 "Other" 1			
II. HABITAT DESCRIPTION			
Tree DBH: T1 (<1" dbh), T2 (1-6" dbh), <u>T3</u> (6-11" dbh), T4 (11-24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: S1 seedling (<3 yr. old), S2 young (<1% dead), <u>S3</u> mature (1-25% dead), S4 decadent (>25% dead)			
Herbaceous: <u>H1</u> (<12" plant ht.) <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Arctostaphylos glauca shrubland</u>			
Field-assessed Association name (optional): ____			
Adjacent Alliances/direction: ____			
Confidence in Alliance identification: L M <input checked="" type="checkbox"/> H Explain: ____			
Phenology (E,P,L): Herb E Shrub E Tree ____ Other identification or mapping information: ____			

(Revised March 27, 2018)

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IV. VEGETATION DESCRIPTION

% NonVasc cover: ☒ Total % Vasc Veg cover: 17

Regenerating Tree: — Shrub: 18 Herbaceous: —

Height Class - Conifer tree / Hardwood tree: 4 / 2

Height Class - Conifer tree / Hardwood tree: 1-5m 5-10m 10-15m 15-20m 20-35m 35-50m >50m

Site 4: F = Foliage S = Shrub H = Herb N = Non-vascular

Stratum categories: T=Tree, A=SAPling, E=SEedling, S=Shrub, H=Herb, N=Non-vascular

[illegible]

SHAVE -
BROOME

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

For Office Use:	Final database #:	Final vegetation type:	Alliance Association
		circle: Relevé or RA	
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date: 04/13/22	Name of recorder: JV	
		Other surveyors: AH, MP, LG, LO	
	UID: 179	Location Name: HUSVRA	
GPS name: _____ For Relevé only: Bearing°, left axis at ID point _____ of Long / Short side			
UTME _____		Zone: 11 NAD83 GPS error: ft./ m./ PDOP _____	
Decimal degrees: LAT 34.762410 LONG 118.850797			
GPS within stand? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____			
and record: Base point ID _____ Projected UTMs: UTME _____ UTMN _____			
Camera Name: AH Phone Cardinal photos at ID point: NESW			
Other photos: _____			
Stand Size (acres): <1, <u>1.5</u> >5 Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius <u>25</u> m			
Exposure, Actual °: <u>258</u> NE NW SE <u>SW</u> Flat <u>Variable</u> Steepness, Actual °: <u>13</u> 0° 1-5° <u>>5-25°</u> >25			
Topography: Macro: top upper <u>mid</u> lower bottom Micro: convex flat concave <u>undulating</u>			
Geology code: _____ Soil Texture code: <u>MCSL</u> <u>Upland or Wetland/Riparian</u> (circle one)			
% Surface cover: _____ (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H ₂ O: 0 BA Stems: 3 Litter: 2 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 1 Gravel: 45 Fines: 49 =100%			
% Current year bioturbation <u>1</u> Past bioturbation present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No % Hoof punch <u>1</u>			
Fire evidence: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: <u>climbed up steep hill on backside & looked out at bowl/valley. Hillside marked edges. Juniper yucca stand, not piñon hillside.</u>			
Disturbance code / Intensity (L,M,H): <u>05/L</u> _____ / _____ / _____ / _____ "Other" _____ / _____			
II. HABITAT DESCRIPTION			
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead)			
Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>Juniperus californica woodland</u>			
Field-assessed Association name (optional): <u>Juniperus californica (Cercocarpus montanus-Fraxinus dipetula)</u>			
Adjacent Alliances/direction: _____ / _____ / _____			
Confidence in Alliance identification: L M <u>H</u> Explain: _____			
Phenology (E,P,L): Herb <u>E</u> Shrub <u>E</u> Tree <u>E</u> Other identification or mapping information: _____			

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Database #: _____

IV. VEGETATION DESCRIPTION

% NonVasc cover: 0 Total % Vasc Veg cover: 13

% Cover - Conifer tree / Hardwood tree: 17 - Regenerating Tree: 0 Shrub: 8 Herbaceous: 1
 Conifer tree / Hardwood tree: 17 - Regenerating Tree: 1 Shrub: 3 Herbaceous: 1

Height Class - Conifer tree / Hardwood tree: 41 Regenerating Tree: 7 Shrub: 3 Herbaceous: 4
1=0-1.2m, 2=1.2-2m, 3=2-2.5m, 4=2.5-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

Stratum categories: T=Tree, A=Sapling, E=Seedling, S=Shrub, H=Herb, N=Non-vascular
% Cover Intervals for reference: r=trace, +=<1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

[illegible]

Unusual species:

Combined Vegetation Rapid Assessment and Relevé Field Form
(Revised March 27, 2018)

*Range Finder
Compass
Camera
Water Bottle
Compass*

For Office Use:	Final database #:	Final vegetation type: Alliance	Association
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			
Database #:	Date: 04/11/2022	Name of recorder: Jessi Varnatta	circle: Relevé or <u>RA</u>
	UID: 101	Other surveyors: A.J. Heredia, Leah Gardner, Melissa Patton	
		Location Name: Hungry Valley SVRA	
GPS name: _____		For Relevé only: Bearing°, left axis at ID point _____ of Long / Short side	
UTME _____ UTMN _____		Zone: 11 NAD83 GPS error: ft./ m./ PDOP _____	
Decimal degrees: LAT _____		LONG _____	
GPS within stand? <u>Yes</u> / No If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____			
and record: Base point ID _____		Projected UTM: UTM _____ UTMN _____	
Camera Name: <u>AH Phone</u> Cardinal photos at ID point: <u>08:59</u>			
Other photos: <u>photos taken just above cottonwood by plot center</u>			
Stand Size (acres): <1, <u>1.5</u> , >5 Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius <u>40</u> m			
Exposure, Actual °: <u>110</u> NE NW SE SW Flat Variable Steepness, Actual °: _____ 0° 1-5° >5-25° >25			
Topography: Macro: top upper mid <u>lower bottom</u> Micro: convex flat <u>concave</u> undulating			
Geology code: _____ Soil Texture code: <u>MFCL</u> Upland or <u>Wetland/Riparian</u> (circle one)			
% Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)			
H20: 5 BA Stems: 5 Litter: 99 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: < Gravel: 1 Fines: 0 =100%			
% Current year bioturbation <u>3</u> Past bioturbation present? <u>Yes</u> / No % Hoof punch <u>0</u>			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known.			
Site history, stand age, comments: <u>in flat area where creek is but steep slopes ~45° on each side</u>			
<u>Cottonwood & willow stand w/ an abundance of pepperwood. Road on one side & freeway on other. Riparian area, wind has affected trees. More upland plant species on slopes. Downed & damaged cottonwoods</u>			
<u>wind damage</u>			
Disturbance code / Intensity (L,M,H): <u>05/H</u> <u>13/M</u> <u>15/L</u> _____ / _____ / _____ "Other" _____ / _____			
II. HABITAT DESCRIPTION			
Tree DBH: <u>T1</u> (<1" dbh), <u>T2</u> (1-6" dbh), <u>T3</u> (6-11" dbh), <u>T4</u> (11-24" dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)			
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<T% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadent (>25% dead)			
Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.)			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: <u>11B.6 Populus fremontii Cottonwood - Willow</u>			
Field-assessed Association name (optional): _____			
Adjacent Alliances/direction: _____ / _____ / _____			
Confidence in Alliance identification: L M <u>H</u> Explain: <u>NOT AN ASSOCIATION FOR SITE</u> <u>WILL</u>			
Phenology (E,P,L): Herb <u>P</u> Shrub <u>P</u> Tree <u>P</u> Other identification or mapping information: _____			

(Revised March 27, 2018)

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SPECIES SHEET

% NonVasc cover: 0 Total % Vasc Veg cover: 60

Height Class - Conifer tree / Hardwood tree: - / 5 Regenerating Tree: 0 Shrub: 2 Herbaceous: 1

Height classes: 1= $\leq 1/2$ m, 2= $1/2$ -1m, 3=1-2m, 4=2-5m, 5=5-10m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10= ≥ 50 m

Stratum categories: T=Tree, A = SApling, E = SEedling, S = Shrub, H= Herb, N= Non-vascular

% Cover Intervals for reference: r = trace, + = <1%, 1-5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%

☐
☐
☐

Unusual species:

Appendix C: Plant species list

Hungry Valley Plant Species List by Family

(updated May 2023 by Leah Gardner)

*=non-native **=invasive

Family	Scientific Name	Common Name
Adoxaceae	<i>Sambucus nigra ssp. caerulea</i>	Blue Elderberry
Agavaceae	<i>Hesperoyucca whipplei</i>	Chaparral Yucca
Agavaceae	<i>Yucca brevifolia</i>	Joshua Tree
Anacardiaceae	<i>Rhus aromatica</i>	Fragrant Sumac
Apiaceae	<i>Anthriscus caucalis</i>	Bur chervil*
Apiaceae	<i>Apium graveolens</i>	Celery*
Apiaceae	<i>Berula erecta</i>	Cut leaved water parsnip
Apiaceae	<i>Lomatium mohavense</i>	Mojave Desert Parsley
Apiaceae	<i>Lomatium utriculatum</i>	Hog fennel
Apocynaceae	<i>Asclepias erosa</i>	Desert Milkweed
Apocynaceae	<i>Asclepias fascicularis</i>	Narrow Leaf Milkweed
Asteraceae	<i>Agoseris retrorsa</i>	Spear-leaved Agoseris
Asteraceae	<i>Ambrosia dumosa</i>	Burro Weed, White Bursage
Asteraceae	<i>Ambrosia psilostachya</i>	Western Ragweed
Asteraceae	<i>Ancistrocarphus filagineus</i>	Wooly fishhooks
Asteraceae	<i>Artemisia californica</i>	California Sagebrush
Asteraceae	<i>Artemisia palmeri</i>	San Diego Sagewort
Asteraceae	<i>Artemisia tridentata</i>	Great Basin Sagebrush
Asteraceae	<i>Baccharis salicifolia</i>	Mulefat
Asteraceae	<i>Baileya multiradiata</i>	Desert Marigold
Asteraceae	<i>Balsamorhiza deltoidea</i>	Deltoid Balsam Root
Asteraceae	<i>Brickellia californica</i>	California Bricklebush
Asteraceae	<i>Centaurea benedicta</i>	Blessed Thistle**
Asteraceae	<i>Centaurea solstitialis</i>	Yellow Star Thistle**
Asteraceae	<i>Chaenactis fremontii</i>	Fremont Pincushion
Asteraceae	<i>Chaenactis glabriuscula</i>	Yellow Pincushion
Asteraceae	<i>Chaenactis stevioides</i>	Desert pincushion
Asteraceae	<i>Chaenactis xantiana</i>	Fleshy Pincushion
Asteraceae	<i>Cirsium mohavense</i>	Mohave Thistle
Asteraceae	<i>Cirsium occidentale</i>	Cobwebby Thistle, Western Thistle
Asteraceae	<i>Cirsium occidentale var. venustum</i>	Cobwebby Thistle, Venus Thistle
Asteraceae	<i>Corethrogyne filaginifolia</i>	California Sandaster
Asteraceae	<i>Encelia actoni</i>	Acton's Encelia

Asteraceae	<i>Encelia virginensis</i>	Virginia River Encelia
Asteraceae	<i>Ericameria cooperi</i>	Cooper's Goldenbush
Asteraceae	<i>Ericameria linearifolia</i>	Linear-leaved Goldenbush
Asteraceae	<i>Ericameria nauseosa</i>	Rubber Rabbitbrush
Asteraceae	<i>Ericameria parryi</i>	Parry's Rabbitbrush
Asteraceae	<i>Erigeron foliosus</i>	Leafy Fleabane
Asteraceae	<i>Eriophyllum confertiflorum</i>	Golden Yarrow
Asteraceae	<i>Eriophyllum pringlei</i>	Pringle's Woolly Sunflower
Asteraceae	<i>Grindelia sp.</i>	Gumplant
Asteraceae	<i>Gutierrezia sarothrae</i>	Matchweed
Asteraceae	<i>Helianthus annuus</i>	Common Sunflower
Asteraceae	<i>Heterotheca grandiflora</i>	Telegraph Weed
Asteraceae	<i>Lagophylla ramosissima</i>	Common Hareleaf
Asteraceae	<i>Lasthenia californica</i>	Goldfields
Asteraceae	<i>Lasthenia gracilis</i>	Cal. Goldfields
Asteraceae	<i>Layia glandulosa</i>	White Tidy Tips
Asteraceae	<i>Layia platyglossa</i>	Coastal Tidy Tips
Asteraceae	<i>Lepidospartum squamatum</i>	Scalebroom
Asteraceae	<i>Leptosyne californica</i>	California Coreopsis
Asteraceae	<i>Leptosyne douglasii</i>	Douglas' Coreopsis
Asteraceae	<i>Leptosyne bigelovii</i>	Bigelow's Coreopsis
Asteraceae	<i>Lessingia glandulifera</i>	Valley Lessingia
Asteraceae	<i>Malacothrix californica</i>	California Desert Dandelion
Asteraceae	<i>Malacothrix glabrata</i>	Desert Dandelion
Asteraceae	<i>Matricaria discoidea</i>	Pineapple Weed
Asteraceae	<i>Monolopia lanceolata</i>	Common Monolopia
Asteraceae	<i>Monoptilon bellidiforme</i>	Desert Star
Asteraceae	<i>Packera breweri</i>	Brewer's Ragwort
Asteraceae	<i>Pseudognaphalium sp.</i>	Cudweed
Asteraceae	<i>Rafinesquia neomexicana</i>	Desert Chicory
Asteraceae	<i>Senecio flaccidus</i>	Shrubby Ragwort
Asteraceae	<i>Solidago sp.</i>	Goldenrod
Asteraceae	<i>Stephanomeria pauciflora</i>	Brownplume wirelettuce, Desert Straw
Asteraceae	<i>Stephanomeria virgata ssp. pleurocarpa</i>	Wand Wirelettuce
Asteraceae	<i>Stylocline gnaphaloides</i>	Everlasting neststraw
Asteraceae	<i>Tragopogon porrifolius</i>	Purple Salsify*
Asteraceae	<i>Uropappus lindleyi</i>	Silver Puffs
Asteraceae	<i>Wyethia ovata</i>	Southern Mule Ears
Asteraceae	<i>Xylorhiza tortifolia</i>	Mojave Aster

Boraginaceae	<i>Amsinckia menziesii</i> var. <i>intermedia</i>	Common fiddleneck
Boraginaceae	<i>Amsinckia tessellata</i>	Fiddleneck
Boraginaceae	<i>Cryptantha circumscissa</i>	Western Forget-me-not
Boraginaceae	<i>Cryptantha pterocarya</i>	Wingnut Cryptantha
Boraginaceae	<i>Emmenanthe penduliflora</i>	Whispering Bells
Boraginaceae	<i>Eriodictyon crassifolium</i>	Thickleaf Yerba Santa
Boraginaceae	<i>Eriodictyon parryi</i>	Poodle-dog Bush
Boraginaceae	<i>Eucrypta chrysanthemifolia</i>	Spotted Eucrypta
Boraginaceae	<i>Heliotropium curassavicum</i>	Alkali Heliotrope
Boraginaceae	<i>Nama demissum</i>	Purple Mat
Boraginaceae	<i>Nemophila menziesii</i>	Baby Blue Eyes
Boraginaceae	<i>Pectocarya penicillata</i>	Winged Combseed
Boraginaceae	<i>Pectocarya setosa</i>	Moth Combseed
Boraginaceae	<i>Phacelia ciliata</i>	Great Valley Phacelia
Boraginaceae	<i>Phacelia distans</i>	Distant Phacelia
Boraginaceae	<i>Phacelia egena</i>	Rock Phacelia
Boraginaceae	<i>Phacelia fremontii</i>	Fremont's Phacelia
Boraginaceae	<i>Phacelia imbricata</i>	Imbricate Phacelia
Boraginaceae	<i>Phacelia tanacetifolia</i>	Lacy Phacelia
Boraginaceae	<i>Plagiobothrys arizonicus</i>	Arizona Popcorn Flower
Brassicaceae	<i>Boechera pulchra</i>	Beautiful Rockcress
Brassicaceae	<i>Brassica nigra</i>	Black Mustard**
Brassicaceae	<i>Caulanthus coulteri</i>	Coulter's Jewel Flower
Brassicaceae	<i>Erysimum capitatum</i>	Western Wallflower
Brassicaceae	<i>Hirschfeldia incana</i>	Short-podded Mustard**
Brassicaceae	<i>Lepidium fremontii</i>	Desert Pepperweed
Brassicaceae	<i>Lepidium latifolium</i>	Perennial Pepperweed**
Brassicaceae	<i>Lepidium perfoliatum</i>	Shield Cress, Claspig Pepperweed*
Brassicaceae	<i>Nasturtium officinale</i>	Watercress
Brassicaceae	<i>Sisymbrium altissimum</i>	Tumble Mustard*
Brassicaceae	<i>Stanleya pinnata</i>	Prince's Plume
Brassicaceae	<i>Thysanocarpus curvipes</i>	Fringe Pod
Brassicaceae	<i>Tropidocarpum gracile</i>	Dobie Pod, Slender Keep Fruit
Cactaceae	<i>Cylindropuntia californica</i>	California Cholla
Cactaceae	<i>Opuntia basilaris</i>	Beavertail Cactus
Cactaceae	<i>Opuntia phaeacantha</i>	Brown-spined Prickly Pear
Campanulaceae	<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i>	Robbins' Nemacladus
Caprifoliaceae	<i>Lonicera subspicata</i> var. <i>denudata</i>	Johnston's Honeysuckle
Chenopodiaceae	<i>Atriplex canescens</i>	Fourwing Saltbush

Chenopodiaceae	<i>Atriplex lentiformis</i>	Big Saltbush
Chenopodiaceae	<i>Bassia hyssopifolia</i>	Five Horn Bassia**
Chenopodiaceae	<i>Chenopodium californicum</i>	California Goosefoot
Chenopodiaceae	<i>Krascheninnikovia lanata</i>	Winter Fat
Chenopodiaceae	<i>Salsola paulsenii</i>	Barbwire Russian Thistle**
Cleomaceae	<i>Peritoma arborea</i>	Bladderpod
Convolvulaceae	<i>Calystegia occidentalis ssp. fulcrata</i>	Sonora Morning Glory
Convolvulaceae	<i>Convolvulus arvensis</i>	Bindweed*
Convolvulaceae	<i>Cuscuta californica</i>	California Dodder
Convolvulaceae	<i>Calystegia collina ssp. venusta</i>	So. Coast Range Morning Glory (4.3)
Crassulaceae	<i>Dudleya lanceolata</i>	Lance-leaved Liveforever
Cucurbitaceae	<i>Cucurbita foetidissima</i>	Buffalo Gourd
Cucurbitaceae	<i>Marah horrida</i>	Sierra Man-root
Cucurbitaceae	<i>Marah macrocarpa</i>	Chilicothe
Cupressaceae	<i>Hesperocyparis nevadensis</i>	Piute Cypress
Cupressaceae	<i>Juniperus californica</i>	California Juniper
Cyperaceae	<i>Carex simulata</i>	Short-beaked Sedge
Ephedraceae	<i>Ephedra viridis</i>	Green Ephedra
Equisetaceae	<i>Equisetum sp.</i>	Horsetail
Ericaceae	<i>Arctostaphylos glauca</i>	Big Berry Manzanita
Ericaceae	<i>Arctostaphylos parryana</i>	Parry Manzanita
Euphorbiaceae	<i>Croton setiger</i>	Turkey-mullein, Dove Weed
Euphorbiaceae	<i>Euphorbia albomarginata</i>	Whitemargin Sandmat
Fabaceae	<i>Acmispon brachycarpus</i>	Short-podded Lotus
Fabaceae	<i>Acmispon glaber</i>	Deerweed
Fabaceae	<i>Acmispon procumbens</i>	Silky Cal. Broom
Fabaceae	<i>Acmispon strigosus</i>	Strigose Lotus
Fabaceae	<i>Astragalus douglasii</i>	Douglas' Milkvetch
Fabaceae	<i>Astragalus gambelianus</i>	Gambel's milkvetch
Fabaceae	<i>Astragalus pachypus</i>	Thickpod Milkvetch
Fabaceae	<i>Astragalus purshii</i>	Pursh's Milkvetch
Fabaceae	<i>Astragalus trichopodus</i>	Santa barbara milkvetch
Fabaceae	<i>Lathyrus vestitus</i>	Pacific Pea
Fabaceae	<i>Lotus corniculatus</i>	Bird's Foot Lotus*
Fabaceae	<i>Lupinus benthamii</i>	Bentham Lupine
Fabaceae	<i>Lupinus bicolor</i>	Miniature Lupine
Fabaceae	<i>Lupinus concinnus</i>	Bajada Lupine
Fabaceae	<i>Lupinus excubitus</i>	Grape Soda Lupine
Fabaceae	<i>Lupinus microcarpus var. densiflorus</i>	Chick lupine

Fabaceae	<i>Melilotus sp.</i>	Sweetclover*
Fabaceae	<i>Trifolium albopurpureum</i>	Rancheria Clover
Fabaceae	<i>Trifolium gracilentum</i>	Pin Point Clover
Fabaceae	<i>Trifolium wilddenovii</i>	Tomcat Clover
Fabaceae	<i>Vicia americana</i>	American Vetch
Fagaceae	<i>Quercus chrysolepis</i>	Canyon Live Oak
Fagaceae	<i>Quercus john-tuckeri</i>	Tucker's Oak
Fagaceae	<i>Quercus lobata</i>	Valley Oak
Garryaceae	<i>Garrya flavescens</i>	Ashy Silk Tassel
Geraniaceae	<i>Erodium cicutarium</i>	Filaree**
Grossulariaceae	<i>Ribes divaricatum</i>	Spreading Gooseberry
Grossulariaceae	<i>Ribes malvaceum</i>	Chaparral Currant
Grossulariaceae	<i>Ribes quercetorum</i>	Oak Gooseberry
Juncaceae	<i>Juncus balticus</i>	Baltic Rush
Juncaceae	<i>Juncus xiphioides</i>	Irisleaf Rush
Lamiaceae	<i>Marrubium vulgare</i>	White Horehound**
Lamiaceae	<i>Melissa officinalis</i>	Bee Balm*
Lamiaceae	<i>Monardella breweri</i>	Mustang Mint
Lamiaceae	<i>Salvia apiana</i>	White Sage
Lamiaceae	<i>Salvia carduacea</i>	Thistle Sage
Lamiaceae	<i>Salvia columbariae</i>	Chia Sage
Lamiaceae	<i>Salvia dorrii</i>	Purple Sage, Dorr's Sage
Lamiaceae	<i>Salvia mellifera</i>	Black Sage
Lauraceae	<i>Umbellularia californica</i>	California Bay Laurel
Liliaceae	<i>Bloomeria crocea</i>	Golden Stars
Liliaceae	<i>Calochortus clavatus</i>	Clubhair Mariposa Lily
Liliaceae	<i>Calochortus kennedyi</i>	Desert Mariposa Lily
Liliaceae	<i>Calochortus palmeri</i>	Palmer's Mariposa Lily
Liliaceae	<i>Calochortus striatus</i>	Alkali Mariposa Lily
Liliaceae	<i>Calochortus venustus</i>	Butterfly Mariposa Lily
Loasaceae	<i>Mentzelia albicaulis</i>	Whitestem Blazing Star, Whitestem stickleaf
Loasaceae	<i>Mentzelia veatchiana</i>	Veatch's Blazingstar
Malvaceae	<i>Fremontodendron californicum</i>	Flannel Bush
Malvaceae	<i>Malacothamnus fremontii</i>	Fremont's Bush Mallow
Malvaceae	<i>Malacothamnus orbiculatus</i>	Tehachapi Bush Mallow, Round-leaved b
Malvaceae	<i>Sphaeralcea ambigua</i>	Desert Mallow, Apricot Mallow
Montiaceae	<i>Calandrinia menziesii</i>	Redmaids
Montiaceae	<i>Calyptridium monandrum</i>	Common Pussypaws
Montiaceae	<i>Claytonia exigua</i>	Little Spring Beauty

Montiaceae	<i>Claytonia parviflora</i>	Narrow-leaved Miner's Lettuce
Montiaceae	<i>Claytonia perfoliata</i>	Miner's Lettuce
Nyctaginaceae	<i>Mirabilis laevis</i>	Desert Wishbone Bush
Onagraceae	<i>Camissonia campestris</i>	Mojave Suncup
Onagraceae	<i>Camissonia strigulosa</i>	Strigose Sun Cup
Onagraceae	<i>Camissoniopsis ignota</i>	Jurupa Hills Sun Cup
Onagraceae	<i>Clarkia cylindrica</i>	Speckled Clarkia
Onagraceae	<i>Clarkia purpurea</i>	Winecup Clarkia
Onagraceae	<i>Epilobium canum</i>	California Fuschia
Onagraceae	<i>Eremothera boothii</i>	Booth's Evening Primrose
Onagraceae	<i>Eulobus californicus</i>	California Primrose
Onagraceae	<i>Oenothera californica</i>	California Evening Primrose
Onagraceae	<i>Oenothera deltoides</i>	Dune Primrose
Onagraceae	<i>Oenothera elata</i>	Hooker's Evening Primrose
Onagraceae	<i>Oenothera primiveris</i>	Yellow Desert Evening Primrose
Onagraceae	<i>Tetrapteron palmeri</i>	Palmer's Sun Cup
Orchidaceae	<i>Epipactis gigantea</i>	Stream Orchid
Orobanchaceae	<i>Castilleja chromosa</i>	Desert Indian Paintbrush
Orobanchaceae	<i>Castilleja exserta</i>	Owl's Clover
Orobanchaceae	<i>Castilleja foliolosa</i>	Wooly Indian Paintbrush
Orobanchaceae	<i>Castilleja subinclusa</i> var. <i>jepsonii</i>	Longleaf Paintbrush
Orobanchaceae	<i>Cordylanthus rigidus</i>	Rigid Bird's Beak
Papaveraceae	<i>Argemone munita</i>	Prickly Poppy
Papaveraceae	<i>Eschscholzia californica</i>	California Poppy
Papaveraceae	<i>Eschscholzia minutiflora</i>	Pygmy Gold Poppy
Papaveraceae	<i>Platystemon californicus</i>	Cream Cups
Phrymaceae	<i>Erythranthe guttata</i>	Yellow Monkey Flower
Pinaceae	<i>Pinus monophylla</i>	Single-leaf Pinyon Pine
Plantaginaceae	<i>Collinsia bartsiiifolia</i>	White collinsia
Plantaginaceae	<i>Keckiella ternata</i>	Blue-stemmed Keckiella
Plantaginaceae	<i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Dalmation Toadflax**
Plantaginaceae	<i>Penstemon centranthifolius</i>	Scarlet Bugler
Plantaginaceae	<i>Penstemon grinnellii</i>	Grinnell's Beardtongue
Plantanaceae	<i>Platanus racemosa</i>	California Sycamore
Poaceae	<i>Arundo donax</i>	Giant Reed**
Poaceae	<i>Avena barbata</i>	Slender Wild Oat**
Poaceae	<i>Avena fatua</i>	Wild Oat**
Poaceae	<i>Bromus carinatus</i>	California Brome Grass
Poaceae	<i>Bromus diandrus</i>	Ripgut Brome**

Poaceae	<i>Bromus hordeaceus</i>	Soft Chess**
Poaceae	<i>Bromus madritensis</i>	Foxtail Brome**
Poaceae	<i>Bromus rubens</i>	Red Brome*
Poaceae	<i>Bromus tectorum</i>	Cheat Grass**
Poaceae	<i>Cortaderia jubata</i>	Pampas Grass**
Poaceae	<i>Elymus condensatus</i>	Giant Rye Grass
Poaceae	<i>Elymus elymoides</i>	Big Squirreltail
Poaceae	<i>Elymus trachycaulus</i>	Slender Wheatgrass
Poaceae	<i>Elymus triticoides</i>	Creeping Wild Rye
Poaceae	<i>Festuca myuros</i>	Rat Tail Fescue**
Poaceae	<i>Hordeum brachyantherum</i>	Meadow barley
Poaceae	<i>Hordeum murinum ssp.leporinum</i>	Foxtail Barley*
Poaceae	<i>Melica imperfecta</i>	Small-flowered Melic
Poaceae	<i>Muhlenbergia rigens</i>	Deergrass
Poaceae	<i>Poa annua</i>	Annual Bluegrass*
Poaceae	<i>Poa secunda</i>	Pine Bluegrass
Poaceae	<i>Schismus barbatus</i>	Old Han Schismus**
Poaceae	<i>Secale cereale</i>	Cereal rye*
Poaceae	<i>Stipa cernua</i>	Nodding Needle Grass
Poaceae	<i>Stipa hymenoides</i>	Indian Rice Grass
Poaceae	<i>Stipa pulchra</i>	Purple Needle Grass
Poaceae	<i>Stipa speciosa</i>	Desert Needle Grass
Polemoniaceae	<i>Allophyllum glutinosum</i>	Sticky False Gilia
Polemoniaceae	<i>Eriastrum densifolium</i>	Giant Woollystar
Polemoniaceae	<i>Eriastrum diffusum</i>	Miniature Woollystar
Polemoniaceae	<i>Gilia brecciarum</i>	Nevada Gilia
Polemoniaceae	<i>Gilia capitata</i>	Globe Gilia
Polemoniaceae	<i>Gilia latiflora</i>	Broad Flowered Gilia
Polemoniaceae	<i>Gilia transmontana</i>	Transmontane Gilia
Polemoniaceae	<i>Langlosia setosissima</i>	Bristly langloisia
Polemoniaceae	<i>Leptosiphon aureus</i>	Golden Linanthus
Polemoniaceae	<i>Leptosiphon brevicaulis</i>	Mojave Linanthus
Polemoniaceae	<i>Leptosiphon parviflorus</i>	Variable linanthus
Polemoniaceae	<i>Linanthus bigelovii</i>	Bigelow's Linanthus
Polemoniaceae	<i>Linanthus californicus</i>	California Prickly Phlox
Polemoniaceae	<i>Linanthus dichotomous</i>	Evening Snow
Polemoniaceae	<i>Linanthus parryae</i>	Parry's Linanthus
Polemoniaceae	<i>Loeseliastrum schottii</i>	Schott's calico
Polemoniaceae	<i>Microsteris gracilis</i>	Slender Phlox

Polygonaceae	<i>Centrostegia thurberi</i>	Red Triangles
Polygonaceae	<i>Chorizanthe brevicornu</i>	Brittle spineflower
Polygonaceae	<i>Chorizanthe parryi</i>	Parry's Spineflower
Polygonaceae	<i>Chorizanthe staticoides</i>	Turkish Rugging
Polygonaceae	<i>Eriogonum angulosum</i>	Angle-stemmed Buckwheat
Polygonaceae	<i>Eriogonum elongatum</i>	Longstem buckwheat
Polygonaceae	<i>Eriogonum fasciculatum</i>	California Buckwheat
Polygonaceae	<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>	Eastern Mojave Buckwheat
Polygonaceae	<i>Eriogonum inflatum</i>	Desert Trumpet
Polygonaceae	<i>Eriogonum nudum</i>	Nude Buckwheat
Polygonaceae	<i>Eriogonum pusillum</i>	Yellow Turban
Polygonaceae	<i>Eriogonum roseum</i>	Wand Buckwheat
Polygonaceae	<i>Mucronea perfoliata</i>	Desert saucers
Polygonaceae	<i>Pterostegia drymarioides</i>	Fairy Mist
Polygonaceae	<i>Rumex hymenosepalus</i>	Wild Rhubarb, Canaigre
Ranunculaceae	<i>Delphinium gypsophilum</i>	Gypsum-loving Larkspur
Ranunculaceae	<i>Delphinium parryi</i> ssp. <i>purpureum</i>	Mt. Pinos Larkspur
Rhamnaceae	<i>Ceanothus cueatus</i>	Buckbrush
Rhamnaceae	<i>Ceanothus leucodermis</i>	Chaparral whitethorn
Rhamnaceae	<i>Ceanothus pauciflorus</i>	Mojave Ceanothus
Rhamnaceae	<i>Frangula californica</i>	Coffeeberry
Rhamnaceae	<i>Rhamnus ilicifolia</i>	Hollyleaf Redberry
Rosaceae	<i>Adenostoma fasciculatum</i>	Chamise
Rosaceae	<i>Cercocarpus betuloides</i>	Birchleaf Mountain Mahogany
Rosaceae	<i>Potentilla</i> sp.	Cinquefoil
Rosaceae	<i>Prunus ilicifolia</i>	Hollyleaf Cherry
Rosaceae	<i>Purshia stansburryana</i>	Stansbury's Cliffrose
Rosaceae	<i>Purshia tridentata</i>	Bitterbrush
Rosaceae	<i>Rosa californica</i>	California Wild Rose
Rubiaceae	<i>Galium andrewsii</i>	Phlox Leaved Bedstraw
Rubiaceae	<i>Galium</i> sp.	Bedstraw
Salicaceae	<i>Populus fremontii</i>	Fremont Cottonwood
Salicaceae	<i>Salix gooddingii</i>	Black Willow
Salicaceae	<i>Salix laevigata</i>	Red Willow
Salicaceae	<i>Salix lasiandra</i>	Shining Willow
Salicaceae	<i>Salix lasiolepis</i>	Arroyo Willow
Salicaceae	<i>Salix scouleriana</i>	Scouler's willow
Saururaceae	<i>Anemopsis californica</i>	Yerba Mansa
Solanaceae	<i>Datura wrightii</i>	Jimson Weed

Solanaceae	<i>Lycium cooperi</i>	Peach Thorn
Solanaceae	<i>Solanum xanti</i>	Purple Nightshade
Themidaceae	<i>Diptospermum capitatus</i>	Blue Dicks, Blue Hyacinth
Themidaceae	<i>Muilla maritima</i>	Sea Muilla
Typhaceae	<i>Typha sp.</i>	Cattail
Urticaceae	<i>Urtica dioica ssp. holosericea</i>	Stinging Nettle
Violaceae	<i>Viola pedunculata</i>	Johnny Jump Up
Viscaceae	<i>Phoradendron villosum</i>	Pacific Mistletoe

Appendix D: Reconnaissance protocol and field form

Protocols and blank forms for the “Recon” protocol, a shortened version of the Relevé/Rapid Assessment survey protocol, is included here, since it is not published on the VegCAMP website.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE PROTOCOL FOR
RECON FIELD FORM
(March 30, 2017)

This protocol describes the methodology for the reconnaissance technique as recorded in the Recon Field Form dated March 30, 2017. Reconnaissance surveys (recons) are complementary to relevés and rapid assessments, but collect only a small subset of the data gathered using the more detailed methods. Recons are generally used as an aid to digital vegetation mapping, to determine the boundaries of a stand, or to illustrate a particular vegetation signature. For more background on the relevé and rapid assessment sampling methods, see the relevé and rapid assessment protocol at <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18599>.

Definitions of fields in the form

LOCATIONAL/ENVIRONMENTAL DESCRIPTION

Recorder: The full name of the recorder should be provided for the first field form for the day. On successive forms, initials can be recorded.

Other Surveyors: The full name of each person assisting should be provided for the first field form for the day. On successive forms, initials of each person assisting can be recorded.

Date: Date of the sampling.

Return?: Check this box if team members should return to this spot at a later date to take a recon or RA/relevé. This can be used if the phenology is not conducive to identification of the major species, or if there is not enough time to take the survey.

Waypoint ID: The Waypoint ID in this format: GPS device name + date (yymmdd) + time (hhmm). For example, for a survey taken on iPad "V" on March 27 at 1:45 in the afternoon, the Waypoint ID will be "V1803271345."

UID: The ID number of a reference point or polygon which this reconnaissance describes.

Location Name: The name of the property, park, or the location within large holdings (like USFS or BLM properties).

GPS name: The name/number assigned to the GPS unit.

Projected? Yes / No / Base / Digitized: Circle the appropriate option:

Yes - The point is a projected, or offset point. The surveyor used a bearing and distance to project the point to match what they are describing with the survey.

No - The surveyors are in the vegetation they are describing and the point is where the observer was standing for photographs. This location can also be used as a base location for an offset survey.

Base - Base point only. This is where a surveyor was standing when taking an offset survey to describe vegetation not at that point. No plant data or vegetation descriptions are associated with this location. However, cardinal photos taken at this point will be stored in a directory of this name.

Digitized - An offset point was created on the GPS unit without taking bearing and distance readings. This option should only be used when the imagery on the GPS unit is unique and unmistakable.

Bearing (°): The compass bearing from the Base point to the Projected point.

Distance (m): The distance in meters from the Base point to the Projected point, determined by use of a range finder.

Inclination (°): The vertical offset from the Base point to the Projected point.

Base Waypoint ID: For a projected or digitized point, this is the location where the surveyor was standing when the information was collected. Cardinal photographs will be taken at this point and will be stored on the computer under this ID. Photographs of the stand vegetation will be taken from this point and will be stored on the computer under the Projected point's ID.


Base / Projected UTM's or Decimal degrees: If the point is projected or digitized, circle whether the coordinates of the base point or the offset point have been recorded. These will generally be for the offset point.

GPS error: ft./m./PDOP: The accuracy of the GPS location. Record the error reading and circle the appropriate units.

GPS coordinates: Record either UTM coordinates, easting (**UTME**) and northing (**UTMN**), or decimal degrees, **LAT** (latitude) and **LONG** (longitude). Record this information from a GPS unit.

Stand Size: Estimate the size of the entire stand in which the sample is taken and circle the appropriate range. As a measure, one acre is similar in size to a football field.

View Radius: Enter the radius, in meters, of the viewable area of the stand from the survey point; the radius should be a minimum of 20 meters.

Camera/Photos: Write the name camera, JPG numbers, and direction of photos. Take four photos in the main cardinal directions (N, E, S, W) clockwise from the north, from the GPS location. This symbol can be used to indicate the cardinal photos: . If additional photos are taken in other directions, please note the JPG numbers and a description of each photo.

HABITAT AND VEGETATION DESCRIPTION

Field alliance name: Name of alliance following the most recent Manual of California Vegetation (Sawyer, Keeler-Wolf, and Evens 2009), using scientific nomenclature, *e.g.*, *Quercus agrifolia*. An alliance is based on the dominant or diagnostic species of the stand, and usually reflects the uppermost and/or dominant height stratum. A dominant species covers the greatest area. A diagnostic species is consistently found in some vegetation types but not others.

Please note: The field-assessed alliance name may not exist in the present classification, in which case you can provide a new alliance name in this field.

Comments: Briefly describe the stand age/seral stage, disturbance history, nature and extent of land use, and other site environmental and vegetation factors that will aid in the mapping effort.

% Cover:

Conifer: The total cover of all the conifer trees taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute conifer cover, disregarding the overlap¹² of individual trees.

Hardwood: The total cover of all the hardwood trees taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute hardwood tree cover, disregarding the overlap¹ of individual trees.

¹² Porosity reduces the total cover of the canopy. Overlapping strata should not be included in the total cover percent; for instance, if a shrub is growing under a tree, only the cover of the tree will be added into the total; the cover of the shrub will be disregarded, except for the amount by which it fills in the porosity of the tree canopy.

Total Tree: The total cover of all the trees taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute tree cover, disregarding the overlap¹ of individual trees.

Regen Tree: The total foliar cover of seedlings and saplings, disregarding overlap¹ of individual recruits. See seedling and sapling definitions below.

Shrub: The total cover of all the shrubs taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute shrub cover, disregarding the overlap¹ of individual shrubs.

Herb: The total cover of all the herbs taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute herbaceous cover, disregarding the overlap¹ of individual herbs.

Total Veg: The total cover of all vascular vegetation taking into consideration the porosity, or the holes, in the vegetation. This is an estimate of the absolute vegetation cover, disregarding the overlap¹ of the various tree, shrub, and/or herbaceous layers and species.

Exotics (L,M,H): The extent to which the stand is impacted by exotic/non-native species. Divide the total exotic cover (e.g. 25% *Bromus diandrus* + 8% *Bromus madritensis* + 5% *Centaurea melitensis* = 38% total exotics) by the Total Veg cover (e.g. 80% total) and multiply by 100 to get the % relative cover of exotics (e.g. 38% total exotics / 80% total cover = 48% relative exotic cover). **L** = 0-33% *relative* cover of exotics; **M** = 34-66% relative cover, and **H** = >66% relative cover.

Species List and Coverage

List the species that are dominant or that are characteristically consistent throughout the stand. This list is used if there is some uncertainty in the field-assessed alliance name, so the most common species should be listed. In the interests of time and efficiency, this species list should not be exhaustive.

Strata:

T = Tree. A woody perennial plant that has a single trunk.

A = SApling. 1" - <6" dbh and young in age, OR small trees that are <1" dbh, are clearly of appreciable age, and are kept short by repeated browsing, burning, or other disturbance. Includes trees that are re-sprouting from roots or stumps following fire, logging or other disturbance. These re-sprouts may exhibit a shrubby form, with multiple small trunks, but are species that are generally considered trees. If a majority of the trunks are >6" dbh, then the re-sprouts would be recorded under the "Tree" stratum.

E = SEedling. A tree species clearly of a very young age that is < 1" dbh or has not reached breast height. Applies only to trees propagating from seed; re-sprouts are not recorded here even if they meet the size requirements.

S = Shrub. A perennial, woody plant, that is multi-branched and doesn't die back to the ground every year.

H = Herb. An annual or perennial that dies down to ground level every year.

N = Non-vascular. Includes moss, lichen, liverworts, hornworts, cryptogammic crust, and algae.

When one or more tree species are regenerating, the Tree, Seedling and/or Sapling strata may be noted on the same line, e.g.:

