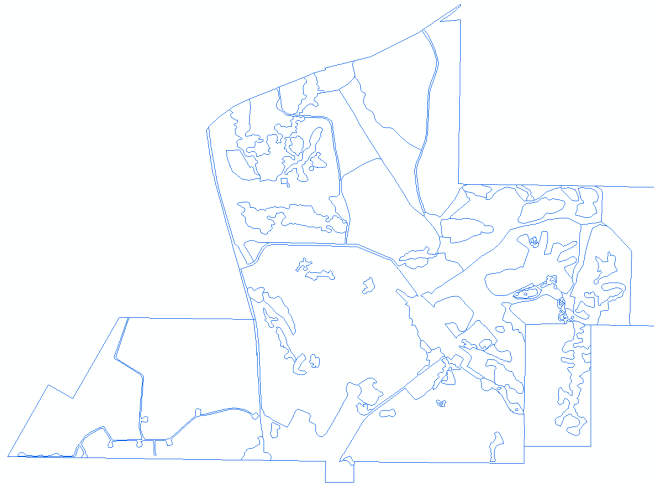


Prairie City SVRA

Vegetation Mapping Report 2021

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 Prairie City SVRA was developed by California State Park staff in 2021. 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

March 2021	Conduct field surveys to sample vegetation types
August 2021	Finalize vegetation types, conduct linework
December 2021	Field check of draft map, finalize map

Description of Prairie City SVRA

Prairie City SVRA is a 1,344 acre park located 20 miles east of Sacramento, in an ecological transition zone between the Central Valley and the Sierra foothills. Parts of the park have a history of dredge mining, and mine tailings form mounds and undulating topography in places. Other portions of the current park were formerly owned by Aerojet and used for a rocket engine program, contaminating groundwater and resulting in modern remediation and groundwater treatment efforts in the park, including monitoring and extraction wells. The park includes an intermittent and several ephemeral streams that drain into Coyote Creek. The vegetation communities include ruderal grasslands, vernal pools, blue oak woodlands, and Fremont cottonwood and willow riparian areas. Several parcels of the park are closed to OHV recreation to protect vernal pool habitat, some parcels allow OHV riding on trails only, and some areas allow open riding anywhere. For more information see the Prairie City Wildlife Habitat Protection Plan (California State Parks, 2022).

Methods

Existing data

Prairie City SVRA is covered by the Great Valley Ecoregion VegCAMP project (Buck-Diaz et al., 2012), however, the mapping in the park area is incorrect in some places where vegetated areas are classified as “urban” (likely due to heavy trail usage) and other areas are less detailed for the park than desired for this project. The park also has a finescale vegetation community map developed for the Prairie City General Plan (CA State Parks 2016), which was created using different methods than typical VegCAMP standards (CDFW b) such as delineating very small patches of vegetation instead of using a ¼ or 1-acre minimum mapping units for stands. State Park staff decided to create an updated map with the appropriate level detail for this project using VegCAMP standards. Past years of vegetation monitoring data from the park was used to supplement the field surveys described below.

Fieldwork

Field surveys were conducted on March 12, 2021 and March 17, 2021. CDFW VegCAMP staff trained State Park staff on field survey methods for conducting Relevé, Rapid Assessment, and Reconnaissance samples (Appendix D, CDFW a, CDFW-CNPS). Seven formal samples were taken,

and informal notes were made while walking through the park. A brief field visit was conducted on December 10th to groundtruth additional parts of the draft map.

Data interpretation and linework

The vegetation classification for the Great Valley EcoRegion (Buck-Diaz et al. 2012) was used to key vegetation alliances. Training and review of data interpretation was provided by CDFW VegCAMP staff.

Linework followed the mapping standards found in the “Survey of California Vegetation Classification and Mapping Standards”(CDFW b) as much as possible. The imagery interpreted was NAIP 2020. 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 3-acre minimum mapping unit break for overstory vegetation, and a 5-acre minimum mapping unit break for understory vegetation. No accuracy assessment was done because almost all polygons were visited in the field.

Vegetation Types and Descriptions

California Vernal Pool and Grassland Matrix mapping unit – 511.1 acres:

This mapping unit comprises upland grasslands, with small vernal pools scattered throughout. The vernal pools vary in size and density both spatially and temporally with variation in annual rainfall. The grassland species and alliances are the same as in the California Annual and Perennial Grassland macrogroup, described below, including native species, sometimes with a high cover of non-natives, including the invasive grass medusahead (*Elymus caput-medusae*). Vernal pools, which may be only a few square meters in size, may vary in species composition annually depending on rainfall. Surveys have found vernal pool alliances *Layia fremontii* - *Achyraea mollis* and *Lasthenia fremontii* - *Downingia (bicornuta)*. Common species at Prairie City in these alliances include Fremont’s goldfields (*Lasthenia fremontii*), downingia (*Downingia spp.*), annual hairgrass (*Deschampsia danthonioides*), pale spikerush (*Eleocharis macrostachya*), stipitate popcorn flower (*Plagiobothrys stipitatus*), and vernal pool buttercup (*Ranunculus bonariensis var. trisepalus*).

California Annual and Perennial Grassland macrogroup – 82.8 acres:

This macrogroup represents grasslands with the characteristic presence of native perennial or annual grasses or forbs, even though non-native species may be significantly high in cover. The polygons are composed of multiple alliances that are patchy and blend such that they cannot be distinguished in aerial imagery but are mapped as one macrogroup. Common species include Mediterranean barley (*Hordeum marinum ssp. gussoneanum*), bromes (*Bromus diandrus*, *B. hordeaceus*), Medusahead (*Elymus caput-medusae*), quaking grass (*Briza maxima*), little rattlesnake grass (*B. minor*), oats (*Avena barbata*, *A. fatua*), nonnative forbs such as filaree (*Erodium botrys*) and hairy vetch (*Vicia villosa ssp. villosa*), native annuals such as miniature lupine (*Lupinus bicolor*), frying pan poppy (*Eschscholzia lobbi*), white meadowfoam (*Limnathes alba*), valley tassels (*Castilleja attenuata*), narrow tarplant (*Holocarpha virgata*) and native perennial forbs such as naked buckwheat (*Eriogonum nudum*), blue dicks (*Dichelostemma capitatum*) and soap plant (*Chlorogalum pomeridianum*). Alliances within this macrogroup surveyed and observed in 2021 include the *Avena spp.* – *Bromus spp.* Semi-Natural Herbaceous Alliance, the *Lasthenia*

californica - *Plantago erecta* - *Vulpia microstachys* Herbaceous Alliance, and the *Corethrogyne filaginifolia* - *Eriogonum (elongatum, nudum)* Herbaceous Alliance, as well as other native annual and perennial herbaceous assemblages that did not fit defined alliances.

Mediterranean California naturalized annual and perennial grassland group – 477.1 acres: These grasslands occur throughout the areas of the park that are open to riding and subject to high degrees of disturbance. They are characterized by a high cover of non-native species.

Californian mixed annual/perennial freshwater vernal pool/swale bottomland group (Vernal pool/Swale) – 6.9 acres: This large vernal pool stand is mapped in the northern part of the park. Other vernal pools are smaller than the minimum mapping unit, so they have not been mapped individually; instead, they are included in the grassland matrix described above.

Baccharis pilularis Shrubland Alliance (Coyote brush scrub) – 15.4 acres: This scrub habitat occurs in small stands and patches throughout the Park. Coyote brush scrub is found in upland locations on open slopes and terraces. Coyote brush (*Baccharis pilularis*) is the dominant species in this vegetation community. Other scrub-like plants in the community include elderberry (*Sambucus nigra ssp. caerulea*), poison-oak (*Toxicodendron diversilobum*) and California coffeeberry (*Frangula californica*).

Populus fremontii - *Fraxinus velutina* - *Salix gooddingii* Forest & Woodland Alliance (Fremont cottonwood forest and woodland) – 55.5 acres: This community is scattered throughout the Park, especially in low-lying areas created by previous dredging operations, along marsh banks, and in the northern portion of the Park. The canopy of the cottonwood/willow stand vegetation community is co-dominated by Fremont cottonwood (*Populus fremontii*) and willows (*Salix spp.*).

Quercus douglasii Forest & Woodland Alliance (Blue oak woodland and forest) – 19.0 acres: Blue oak woodlands are dominated by blue oak (*Quercus douglasii*) mixed with other oak species such as interior live oak and valley oak (*Q. lobata*). Gray pine (*Pinus sabiniana*) is often present as well. These areas are located almost exclusively in the southeast portion of the Park.

Salix gooddingii - *Salix laevigata* Forest & Woodland Alliance (Red willow thickets) – 2.9 acres: These small stands surrounding seasonally-wet ponded areas are characterized by red willow (*Salix laevigata*) and Fremont cottonwood (*Platanus fremontii*).

Salix exigua Shrubland Alliance (Sandbar willow thickets) – 3.2 acres: Several small stands of these willow thickets grow densely with little herb cover. They are characterized by sandbar willow (*Salix exigua*), with some understory of other shrubs such as coyote brush (*Baccharis pilularis*).

Ornamental vegetation – 3.4 acres: A mixture of planted native and non-native species.

Barren – 16.1 acres: Native substrate with less than 2% vegetation cover.

Developed – 140.7 acres: Roads, parking lots, and buildings, including a gravel picnic area with ornamental trees.

References

Link to GIS data files

Finescale Vegetation Mapping at the SVRAs (arcgis.com)

Buck-Diaz, J., S. Batiuk, and J. M. Evens. 2012. Vegetation Alliances and Associations of the Great Valley Ecoregion, California. California Native Plant Society. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=64011&inline>

California State Parks 2016. “Final General Plan: Prairie City State Vehicular Recreation Area.” Available at https://demo2.parks.ca.gov/pages/1170/files/Prairie-City-Final-General-Plan_9_%202016.pdf

California State Parks 2022. “Final 2022 Prairie City State Vehicular Recreation Area Wildlife Habitat Protection Plan.” Available at https://ohv.parks.ca.gov/pages/1170/files/Final%202022%20PCSVRA%20WHPP_ada12212022.pdf

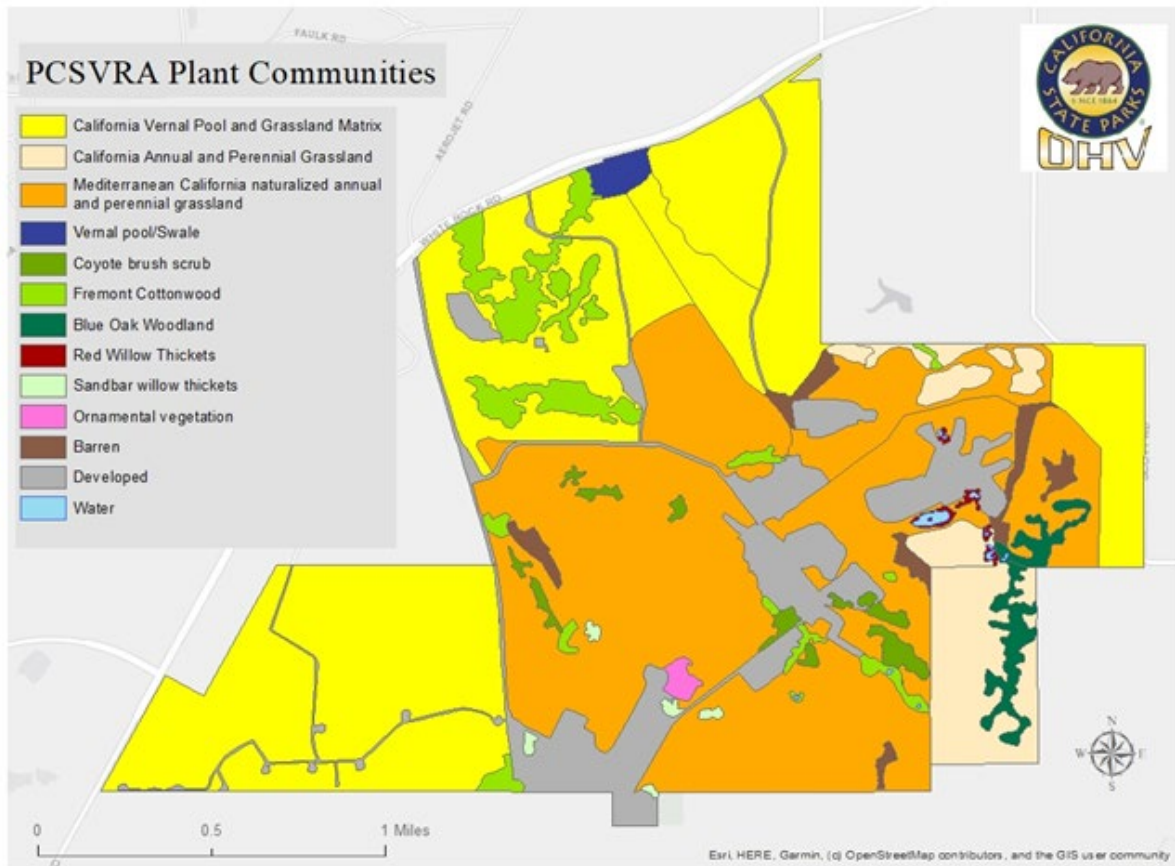
CDFW a. “Combined Vegetation Rapid Assessment and Relevé Field Form”. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18598&inline>

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>

Appendices

Appendix A: Map Figures



Appendix B: Field datasheets

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

1 m solid sq. meter *Moss? Bore*

For Office Use:	Final database #:	Final vegetation type:	Alliance:
I. LOCATIONAL/ENVIRONMENTAL DESCRIPTION		Association:	
Database #:	Date:	Name of recorder:	circle: Relevé or RA
PC001	3-12-21	Melissa Patton	
UID: PC001	Other surveyors: Leann Gardner, Rachelle Burke		
Location Name: PC001			
GPS name: MUP's phone		For Relevé only: Bearing°, left axis at ID point 0° of Long-/Short side	
UTME		UTMN	
Decimal degrees: LAT 38.603890		LONG 121.159726	
GPS within stand? (Yes) / No		If No, cite from GPS to stand: distance (m) bearing° inclination°	
and record: Base point ID PC001		Projected UTM: UTMN	
Camera Name: Danville's		Cardinal photos at ID point: always landscape, get hor. 2 on 4 + K. J. corner across	
Other photos:		Record jpg # 2582-2585	
Stand Size (acres): <1, 1-5, 5		Plot Area (m²): 100	
Exposure, Actual °: 170 NE NW SE SW Flat Variable		Steepness, Actual °: 5° 0° 1-5° >5-25° >25	
Topography: Macro: top upper mid lower bottom		Micro: convex flat concave undulating	
Geology code: MIAL		Soil Texture code: FISA	
% Surface cover:		(Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud)	
H2: 0 BA Stems: 3 Litter: 17 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 41 Gravel: 35 Fines: 40 =100%			
% Current year bioturbation 2		Past bioturbation present? Yes No % Hoof punch 0	
Fire evidence: Yes / No (circle one)		If yes, describe in Site history section, including date of fire, if known.	
Site history, stand age, comments: lots of moss covering soil area under power lines. PC SVRA grassland, slightly sloping, slightly hummocky/mounded, early for herb. phenology, lots of last years dead material. This years new growth just emerging. Adjacent to cottonwood stand, old mine tailings nearby. Check G.P. etc. for site history. Fresh gopher mounds			
Disturbance code / Intensity (L,M,H): 05/14 15/1 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.) Dead standing doesn't count - will be taller 18"			
Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) NA			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.) NA			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: Holocarpha virgata			
Field-assessed Association name (optional):			
Adjacent Alliances/direction: Cottonwood 1 S; NW			
Confidence in Alliance identification: L M H Explain:			
Phenology (E,P,L): Herb E Shrub Tree Other identification or mapping information:			
Species ID difficult + cover values are low bc early			

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

Database #: PC0001

(Revised March 27, 2018)
SPECIES SHEET

IV. VEGETATION DESCRIPTION

% NonVasc cover: 12 Total % Vasc Veg cover: 35

% Cover - Conifer tree / Hardwood tree: + Regenerating Tree: — Shrub: — Herbaceous: 35

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%

Stratum	Species	% cover	C.	Final species determination
H	Hypochaeris (<i>sordida?</i>) ^{tardichata} 2 spp.	2		
	Dicn. Capitatum			
	Erodium botrys	3		
	Glycyx capit-medusa			
	Lupinus bicolor	<1		
	Lotus?			
	Calodortia	1		
	Plantago	2		
	Gallium parisiense	<1		
	Vicia spp			
	Brodiaea sp. (elegans)			
	Unknown bunchgrass			
	Bromus sp.			
	Festuca sp.			
	Achnanthes americana	R		
	Festuca perennis			
	Tripophysaria erianthes	R		
	Plagiobothrys	<1		
	(could be Tritelia sp. here) cover of Lilies ^{bushes} (all)	1		made up of sp. listed above
	Taraxacum	<1		
	Holocarpa / Calochortus	<1		Note presence from last yr
	Grass	25		-nonnative annual grasses - likely lots of medusa head
N	Moss			

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. LOCATIONAL/ENVIRONMENTAL DESCRIPTION				
Database #:	Date:	Name of recorder:		
PC001	3-12-21	L.G.		
	UID:	Other surveyors: Melissa, Beth, Rosie, Rachelle		
		Location Name: PC001		
GPS name: Trimble		For Relevé only: Bearing°, left axis at ID point <u>OK</u> of <u>Long / Short</u> side		
UTME		UTMN		
Decimal degrees: LAT <u>38° 36' 14" N</u>		LONG <u>121° 09' 34.8" W</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: UTMN		
Camera Name: <u>505" Cardinal photos at ID point: N, E, S, W, X order</u>				
Other photos: <u>0582, 0585, 0586 NE across plot</u>				
Stand Size (acres): <1, 1-5, <u>>5</u>		Plot Area (m²): <u>100</u> / Plot Dimensions <u>10 x 10</u> m RA Radius <u>5</u> m		
Exposure, Actual°: <u>170</u> NE NW <u>SE</u> SW Flat Variable		Steepness, Actual°: <u>6</u> 0° 1-5° <u>>5-25°</u> > 25		
Topography: Macro: top <u>upper</u> <u>mid</u> lower bottom		Micro: <u>convex</u> flat concave <u>undulating</u>		
Geology code: <u>MIAL</u> Soil Texture code: <u>FISA</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)				
<u>40</u> BA Stem <u>13</u> Litter: <u>36</u> Bedrock: <u>0</u> Boulder: <u>0</u> Stone: <u>0</u> Cobble: <u>41</u> Gravel: <u>36</u> Fines: <u>46</u> = 100%				
% Current year bioturbation <u>0</u> Past bioturbation present? <u>Yes</u> No % 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>Prairie City SVRA, grassland adjacent cottonwood riparian. Power line, mining & grazing in past, other disturbances in past. Slightly sloping w. some mounding (that influence spp. composition). Early for phenology for sp. ID, & lower cover than later in season. Last year's standing stems; this yrs emerging & only a few inches high. Gopher activity. Close to a road along top of slope.</u>				
Disturbance code / Intensity (L,M,H): <u>05/H</u> <u>15/L</u> / / / / "Other" /				
II. HABITAT DESCRIPTION				
circle appropriate types				
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>Elymus caput-medusae Holocarpha virgata Herbaceous</u>				
Field-assessed Association name (optional): <u>Holocarpha virgata association Alliance</u>				
Adjacent Alliances/direction: <u>Cottonwood</u> / S / <u>Cottonwood</u> / NW				
Confidence in Alliance identification: L <u>M</u> H Explain: <u>due to phenology</u>				
Phenology (E,P,L): Herb <u>E</u> Shrub <u>E</u> Tree <u>E</u> Other identification or mapping information: <u>→</u>				
<u>spp ID difficult & cover values are low</u>				

1 person can do whole top section

can put < MIMV here
May map transition between pts.

1-2 hours

Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised March 27, 2018)

Database #: PC001

SPECIES SHEET

IV. VEGETATION DESCRIPTION			
		% NonVasc cover: 12	Total % Vasc Veg cover: 35
% Cover -	Conifer tree / Hardwood tree: 1	Regenerating Tree: 0	Shrub: 0
	Herbaceous: 1		
Height Class -	Conifer tree / Hardwood tree: 1	Regenerating Tree: 0	Shrub: 0
	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%			
Stratum	Species	% cover	C Final species determination
8	Hypochaeris (glabra) + radicata	2	if collected; Plat Press
	Dichellostema capitatum		
	Holocarpha virgata	<1	dead only from last yr
	Thymus caput-medusae		
	Avena		
	Erodium botrys	3	
	Brickia elegans	1	
	Lupinus bicolor	<1	
	unknown aster, or	1	
	Plantago erecta	2	
	Trifolium sp.	<1	
	Calycadenia spicata	<1	dead only last yr.
	Gallium parisiense	<1	
	Vicia	<1	
	Bromus sp.		
	Festuca sp.		
	moss	12%	
	Acnison americanus	<1	R Rif only 1 or 2
	Festuca perennis	<1	
	Triphasia strianthera	<1	R
	Plagiobotrys sp.	<1	
	Calochortus luteus	1	1 = unknown "Lily" (plentiful)
			25 = grass combined
			non-native annuals
			skeletons mostly Medusa head
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. LOCATIONAL/ENVIRONMENTAL DESCRIPTION			circle: Relevé or <u>RA</u>
Database #: <u>PC002</u>	Date:	Name of recorder: <u>MVP, LG, RB, Beth</u>	
		Other surveyors:	
	UID:	Location Name: <u>PC</u>	
GPS name: <u>Trumble</u> For Relevé only: Bearing°, left axis at ID point _____ of <u>Long</u> / <u>Short</u> side			
UTME _____ UTMN _____ Zone: 11 NAD83 GPS error: ft/ m/ PDOP _____			
Decimal degrees: LAT <u>38.603226</u> LONG <u>121.159687</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>MVP</u> Cardinal photos at ID point: <u>Yes - see attached in Melissa's phone</u>			
Other photos: <u>phone, Rachelle photos</u>			
Stand Size (acres): <1, 1-5, <u>>5</u> Plot Area (m²): 100 / _____ Plot Dimensions _____ x _____ m RA Radius _____ m			
Exposure, Actual °: <u>308</u> NE <u>NW</u> SE SW Flat Variable Steepness, Actual °: <u>1</u> 0° <u>1-5°</u> > 5-25° > 25			
Topography: Macro: top upper mid lower <u>bottom</u> Micro: convex flat concave undulating			
Geology code: <u>MIAL</u> Soil Texture code: <u>FLSA</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)			
H ₂ O: 0 BA Stems: 4 Litter: 72 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: 0 Gravel: 1 Fines: 23 =100%			
% Current year bioturbation <u><1</u> Past bioturbation present? Yes / <u>No</u> % Hoof punch <u>NA</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>Very hummocky + disturbed from old mine tailings. Open understory under cottonwoods EW oriented. Riparian, fairly wide, open, very few shrubs. Lots of grass w/ early phenology. Kind of terraced. Cottonwoods look old/drought stressed. No lvs yet. Lots of mistletoe.</u>			
<u>Mining - dredge tailings = hummocky.</u>			
<u>early phen. means herb ID incomplete, cover low</u>			
Disturbance code / Intensity (L,M,H): <u>05/M 09/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.) <u>will get higher tho (hard to say w/ leaf obs)</u>			
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>Populus fremontii</u>			
Field-assessed Association name (optional): _____			
Adjacent Alliances/direction: <u>Holocarpha</u> / <u>N</u> / _____ / _____			
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: _____			

(Revised March 27, 2018)

SPECIES SHEET

% Cover - Conifer tree / Hardwood tree: 0 / 10 Regenerating Tree: 0 Shrub: 4 Herbaceous: 55
 Height Class - Conifer tree / Hardwood tree: 10 Regenerating Tree: Shrub: 4 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%

STOP
RAS
here

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

Recorder: Melissa Other Surveyors: _____ Date: 3-12-21 Return? ☐

Waypoint ID: PC003-R GPS Name: Trimble Projected? ☒ No / Yes / Base / Digitized

UID: _____ If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____

Location Name: Prairie City If Yes or Digitized, enter: Base Waypoint ID: _____

Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP _____

UTMs: UTME _____ UTMN _____

Decimal degrees: LAT 38.603984 LONG - 121.160254

Stand Size: (1) 1-5 >5 Camera: _____ Photos: 593-596 (N) View Radius _____

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

Field Alliance name: Eriogonum (elegantum, nudum) Alliance 597-SE from point *look online*

Comments: below MMU but repeating at lower band of hummocky mounds w. diff. cover of native forms w. Eriogonum sparsely but consistently throught. (In Imagery, look for darker green of Eriogonum). Discontinuous mounds. Undulating.

% Cover: Conifer <input checked="" type="checkbox"/> Hardwood <input type="checkbox"/> Total Tree <input type="checkbox"/> Regen Tree <input type="checkbox"/> Shrub <input type="checkbox"/> Herb <input checked="" type="checkbox"/> Total Veg <u>40</u> Exotics (L,M,H)								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
	<u>Eriogonum nudum</u>	<u>1</u>		<u>Eriodum lathyrus</u>	<u>4</u>		<u>Thysanocarpus cravipes</u>	<u><1</u>
	<u>Escholtzia lobbiai</u>	<u>1</u>		<u>Lupinus bicolor</u>	<u>2</u>		<u>"Geophytes" unk.</u>	<u><1</u>
	<u>Holocarpha virgata</u>	<u><1</u>		<u>Plantago erecta</u>	<u><1</u>		<u>unknown grasses</u>	<u>1</u>
	<u>Dichostema capitatum</u>	<u><1</u>		<u>Plagiobothrys notabilis</u>	<u>1</u>		<u>Grasses</u>	<u>25</u>
	<u>Brodiaea elegans</u>	<u><1</u>						

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

Recorder: MVP Other Surveyors: _____ Date: 3-7-21 Return? ☒ *for better phenology*

Waypoint ID: PC004 GPS Name: Trimble Projected? ☒ No / Yes / Base / Digitized

UID: _____ If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____

Location Name: PC If Yes or Digitized, enter: Base Waypoint ID: _____

Base / Projected (circle one) Record either UTM's or Decimal Degrees GPS error: ft./ m./ PDOP _____

UTMs: UTME _____ UTMN _____

Decimal degrees: LAT 38.599323 LONG - 121.145473

Stand Size: (1) 1-5 >5 Camera: Mel's phone Photos: collected *last photo 30°* View Radius _____

Exposure, Actual °: _____ NE NW SE SW Flat Variable | Steepness, Actual °: 7 0° 1-5° >5-25° >25

Field Alliance name: Salix (goodingii) Alliance

Comments: stand just a few meters wide, edge of pond. ring-shaped sediment basin that gets scooped out every few years. Willows are not leafed out.

% Cover: Conifer <input type="checkbox"/> Hardwood <input checked="" type="checkbox"/> Total Tree <input checked="" type="checkbox"/> Regen Tree <input checked="" type="checkbox"/> Shrub <input checked="" type="checkbox"/> Herb <input checked="" type="checkbox"/> Total Veg <u>13</u> Exotics (L,M,H) <u>M</u>								
Strata	Species	% cover	Strata	Species	% cover	Strata	Species	% cover
	<u>Populus fremontii</u>	<u>1</u>		<u>Baccharis pilularis</u>	<u>4</u>		<u>(could be Salix lasiolepis)</u>	
	<u>Salix spp.</u>	<u>4</u>		<u>Typha</u>	<u>(+)</u>		<u>Annual Grasses</u>	<u>5</u>
	<u>T. diversilobum</u>	<u>(+)</u>		<u>Q. sp. seedlings</u>				

see Leah's data

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

Recorder: <u>Melissa</u>		Other Surveyors: <u>Peter, Rocio, Kate, Nick, Zoe, Joel</u>		Date: <u>2-11</u>	Return? <input checked="" type="checkbox"/>
Waypoint ID: <u>PC004</u>		GPS Name <u>Trumble</u> Projected? <u>No</u> / Yes / Base / Digitized			
UID:		If Yes, enter: Bearing (°): _____ Distance (m): _____ Inclination (°): _____			
Location Name: <u>Pairie City</u>		If Yes or Digitized, enter: Base Waypoint ID: _____			
		Base / Projected (circle one) Record either UTM's or Decimal Degrees		GPS error: <u>0</u> m / PDOP <u>9</u>	
		UTMs: UTM _____ UTMN _____			
		Decimal degrees: LAT <u>38.599323</u> LONG <u>-121.145473</u>			
Stand Size: <u><1</u> 1-5 >5		Camera: <u>phone</u> Photos: <u>still, cardinal direction, record bearings</u>		View Radius <u>- m</u>	
Exposure, Actual °: _____ NE NW SE SW Flat <u>(Variable)</u> Steepness, Actual °: _____ 0° 1-5° >5-25° >25					
Field Alliance name: <u>Salix goodingii Alliance</u>					
Comments: <u>narrow band around pond. Phenology too early for ID + cover is low. Sediment basin gets scooped out periodically.</u>					
% Cover: Conifer <u>0</u> Hardwood <u>5</u> Total Tree <u>3</u> ^{= tree} Regen Tree <u>+</u> Shrub <u>4</u> Herb <u>5</u> Total Veg <u>13</u> Exotics (L/M/H) <u>0</u>					
Strata	Species	% cover	Strata	Species	% cover
T	Populus fr.	1	S	Quercus douglassii	<1
T+S	Salix sp. ^(lasiolepis) _(goodingii)	4	C	annual grasses undwtr.	5
S	Baccharis pilularis	5	H	Typha sp.	+

eyeball
30m
when
possible

m + trace)

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 #: PC005	Date: 3-17-21	Name of recorder: Leah	
	UID:	Other surveyors: Rosie + Torrance	
		Location Name: Prairie City	
GPS name: Bad Elf		For Relevé only: Bearing°, left axis at ID point ____ of Long / Short side	
UTME _____ UTMN _____		Zone: 11 NAD83 GPS error: 1.2 m / PDOP 15	
Decimal degrees: LAT 38.598846 LONG 121.140861		(160m) (100m)	
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: iphone Cardinal photos at ID point: 1, 2, 3, 4 N, E, S, W			
Other photos:			
Stand Size (acres): <1, 1-5, >5 Plot Area (m²): 100 Plot Dimensions: ____ x ____ m RA Radius 100 m			
Exposure, Actual °: 309 NE NW SE SW Flat Variable Steepness, Actual °: 10 0° 1-5° >5-25 >25			
Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating			
Geology code: SAAL Soil Texture code: MESH 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: 80 Bedrock: 0 Boulder: 0 Stone: 0 Cobble: + Gravel: 1% Fines: 1% =100%			
% Current year bioturbation + Past bioturbation present? Yes / No % Hoof punch 0 little incl. downed			
Fire evidence: Yes / No (circle one) If yes, describe in Site history section, including date of fire, if known. decaying branches			
Site history, stand age, comments: This part of the stand is highly disturbed. Stand continues to SW + is fenced off - no OTV trails. Road disturbance is high N&S 30% cover of the stand (Roads not taken into account for surface cover). Rolling terrain w. various slopes & aspects. A lot of downed branches & woody debris. Phenology is early so ID difficult + cover is low. Oaks are large (= old). Looks like some small oaks have been planted in the fenced-off stand to SW.			
Disturbance code / Intensity (L,M,H): 02/H 05/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) 0			
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.) 0			
Desert Palm/Joshua Tree: 1 (<1.5" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.) 0			
III. INTERPRETATION OF STAND			
Field-assessed vegetation Alliance name: Quercus douglassii Alliance			
Field-assessed Association name (optional): Quercus douglassii/Gross sub-Alliance			
Adjacent Alliances/direction: annual grasses ____ all directions ____			
Confidence in Alliance identification: L M H Explain: can't ID herbs to species			
Phenology (E,P,L): Herb E Shrub NA Tree E Other identification or mapping information: early phenology			

Note - need to standardize what we do with Road cover

(Revised March 27, 2018)

SPECIES SHEET

(would be much more w. leaves)

333

Regenerating Tree: 0 Shrub: 0 Herbaceous: 1

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

17

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 #:	Date:	Name of recorder:	circle: Relevé or <u>RA</u>
<u>PC006</u>		<u>MVP</u>	
	UID:	Other surveyors:	
		<u>Betsy, Leah, McKenzie, Beth, Katie</u>	
		Location Name:	<u>PC006</u>
GPS name: <u>MVP phone</u>		For Relevé only: Bearing°, left axis at ID point ____ of <u>Long</u> / <u>Short</u> side	
UTME _____		UTMN _____	
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 <u>PC006</u>		Projected UTM: UTM _____ UTMN _____	
Camera Name:	Cardinal photos at ID point: <u>NE SW</u> (on phone)		
Other photos:			
Stand Size (acres): <1, 1-5, <u>>5</u> Plot Area (m²): 100 / ____ Plot Dimensions ____ x ____ m RA Radius <u>40</u> m			
Exposure, Actual °: ____ NE NW SE SW Flat <u>Variable</u> Steepness, Actual °: ____ 0° 1-5° >5-25° >25			
Topography: Macro: <u>top</u> upper mid lower bottom Micro: <u>convex</u> flat concave undulating			
Geology code: <u>MIAL</u> Soil Texture code: <u>MCSL</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 O: <u>+</u> BA Stems: <u>1</u> Litter: <u>15</u> Bedrock: <u>0</u> Boulder: <u>0</u> Stone: <u>+</u> Cobble: <u>5</u> Gravel: <u>13</u> Fines: <u>66</u> =100%			
% Current year bioturbation ____ Past bioturbation present? Yes / <u>No</u> % Hoof punch <u>0</u> trace gopher hole			
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>sloped up to 12° but also flat (1-2°) at top of hill, "chase variable" because not typical exposure also variable. Stand spans flat ridge and slopes on either side. Narrow gully/rills from dirt bike trails. Also wide open roads. Fence divides stand. Patchy Baccharis w/ occasional toxicodendron. Patches driven by or associated with activity. Occasional Sarcocolla. Herbaceous cover under + surrounding shrubs, also cut up by activity. Cotton wood @ edge of stand. A few coffee berry inds. + exposed PVC pipe?</u>			
Disturbance code / Intensity (L,M,H): <u>02/H 05/ 30/L 15/M 1/1</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>Baccharis pilularis</u>			
Field-assessed Association name (optional): <u>Baccharis pilularis</u>			
Adjacent Alliances/direction: <u>Annual / per. grassland / all around</u> Willow / Sarcocolla /			
Confidence in Alliance identification: L M <u>H</u> Explain: _____			
Phenology (E,P,L): Herb E Shrub E Tree E Other identification or mapping information: _____			
<u>Baccharis = evergreen, TOD: some lvs. Herbs v. young</u>			

Moving
at edges
along
road

(Revised March 27, 2018)

SPECIES SHEET

% NonVasc cover: 7 Total % Vasc Veg cover: 30

Height Class - Conifer tree / Hardwood tree: NA / 7 Regenerating Tree: NA Shrub: 3 Herbaceous: 1

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

Stratum	Species	% cover	C	Final species determination
	<i>B. p. insularis</i>	18		
	<i>Sambucus</i>	<1		
	<i>Toxicodendron diversilobum</i>	1		
T	<i>P. fremontii</i>	<1		
↑	<i>Fraxinus californica</i> ssp. <i>tumida</i>	<1		
S	<i>Q. wislizenii</i>	<1		
	<i>Heteromeles grandiflora</i>	<1		
	<i>Bromus hordeaceus</i>			
	<i>Geranium</i> spp	<1		
	<i>Torrelis</i>	<1		
	<i>Erodium</i> + <i>secundarium</i> <1			
	<i>Erodium</i> + <i>botrys</i>	10		
	<i>A. Johns</i> Herb	<1		
	<i>Micropus californica</i>	<1		
	<i>Hypochaeris</i>	1		
	<i>Carduus pinnatocephalus</i>	1		
	<i>Crassula erecta</i>	<1		
	<i>Vulpia</i> sp?			
	<i>Amsinkia</i> sp.	<1		
	Yellow star thistle	<1		
	<i>Lomatium</i> sp.	<1		

[illegible]

Page 2

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>PC 006</u>		Date: <u>3/17</u>		Name of recorder: <u>BH, Melissa, McKenzie (PC Staff)</u>	
UID: _____		Other surveyors: _____			
GPS name: <u>Trimbly</u>		Location 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? <input checked="" type="checkbox"/> Yes / No <input type="checkbox"/> If No, cite from GPS to stand: distance (m) _____ bearing ° _____ inclination ° _____					
and record: Base point ID _____ Projected UTMs: UTME _____ UTMN _____					
Camera Name: <u>Melissa</u> Cardinal photos at ID point: <u>NESW</u>					
Other photos: _____					
Stand Size (acres): <u>< 1</u> Plot Area (m²): <u>100</u> Plot Dimensions <u>NA</u> x <u>NA</u> m RA Radius <u>40</u> m					
Exposure, Actual °: <u>NE</u> NW SE SW Flat <u>Variable</u> Steepness, Actual °: <u>10</u> 0° 1-5° <u>> 5-25°</u> > 25					
Topography: Macro: <u>top</u> upper mid lower bottom Micro: <u>convex</u> flat concave undulating					
Geology code: <u>MIA</u> Soil Texture code: <u>MESL</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>T</u> BA Stems: <u>18</u> Litter: <u>15</u> Bedrock: _____ Boulder: _____ Stone: <u>T</u> Cobble: <u>5</u> Gravel: <u>13</u> Fines: <u>66</u> = 100%					
% Current year bioturbation <u>0</u> Past bioturbation present? Yes / <input checked="" type="checkbox"/> No % Hoof punch <u>0</u>					
Fire evidence: Yes / <input checked="" type="checkbox"/> No (circle one) If yes, describe in Site history section, including date of fire, if known.					
Site history, stand age, comments: <u>Off road vehicle impacts prior years on flat area</u> <u>grasses were mowed (exc. 2020). Bearing & slope take - NE Fair</u> <u>on hill slope - top of slope -> very slight slope that are on top</u> <u>then slope to S - 10% on other side of mesa</u> <u>Erosion rills, gullies on slopes. Fence & road divide stand.</u> <u>Patchy BAPI, occasional TDI stands, scattered SAMMEX</u> <u>Herb. cover under & surrounding shrubs</u> <u>2 POPPRE at edge of stand. Coffee berry sparrow, QUWI (rare)</u> <u>Bapi are regenerating in previously mowed area</u>					
Disturbance code / Intensity (L,M,H): <u>02</u> H <u>05</u> M <u>15</u> L <u>36</u> L _____ "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>Baccharis pilularis Shrubland Alliance</u>					
Field-assessed Association name (optional): <u>Baccharis pilularis Association</u>					
Adjacent Alliances/direction: <u>Annual/perennial grassland</u>					
Confidence in Alliance identification: L M H Explain: _____					
Phenology (E,P,L): Herb <u>E</u> Shrub <u>P</u> Tree <u>E</u> Other identification or mapping information: <u>phenology for BAPI is leaf-on (evergreen)</u>					

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 #:	Date:	Name of recorder:		circle: <u>Relevé</u> or RA
<u>PC007</u>		<u>NVP</u>		
		Other surveyors:		
		<u>NVP, Leah, Betsey, Torrance</u>		
UID:		Location Name:		
		<u>PC007 Prairie City</u>		
GPS name:		For Relevé only: Bearing°, left axis at ID point <u>N</u> of <u>Long</u> / <u>Short</u> side		
<u>Bad Elf</u>				
UTME	UTMN	Zone: 11 NAD83 GPS error: ft/ m/ PDOP		
Decimal degrees: LAT		LONG		
<u>38.597406</u>		<u>121.142406</u>		
GPS within stand? <u>Yes</u> / No If No, cite from GPS to stand: distance (m) bearing° inclination°				
and record: Base point ID <u>PC007</u> Projected UTM: UTM UTMN				
Camera Name: <u>Leah's phone</u> Cardinal photos at ID point: <u>N</u> plus one ob plot; NE				
Other photos:				
Stand Size (acres): <u><1, 1-5</u> >5 Plot Area (m²): <u>100</u> Plot Dimensions <u>10 x 10</u> m RA Radius <u> </u> m				
Exposure, Actual °: <u>29</u> NE NW SE <u>SW</u> Flat Variable Steepness, Actual °: <u>13</u> 0° 1-5° <u><5-25</u> >25				
Topography: Macro: top upper mid <u>lower</u> bottom Micro: <u>convex</u> flat concave undulating				
Geology code: <u>MIAL</u> Soil Texture code: <u>MCSL</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)				
H₂O: 0 BA Stems: <1 Litter: <u>20</u> Bedrock: 0 Boulder: 0 Stone: 0 Cobble: <1 Gravel: 15 Fines: <u>65</u> =100%				
% Current year bioturbation <u>4</u> Past bioturbation present? <u>Yes</u> / No % Hoof punch <u>0</u> - grazing allowed in this area				
Fire evidence: <u>Yes</u> No (circle one) If yes, describe in Site history section, including date of fire, if known.				
Site history, stand age, comments:				
<u>Lack of grass is distinctive. Post-fire - grassland under blue oak. Burned fall 2020. Erodium, Dichelostemma, other geophytes, crassula is bright red + stands out. Bioturbation is from mole/gophers/ground. Old cow-pies present from grazing. Soil seems thin - nutrient poor compared to under trees. Surrounded by blue oak. Annual veg prob. driven by recent fire</u>				
Disturbance code / Intensity (L,M,H): <u>04/L 05/H</u> / / / / "Other" <u>Fire</u> / <u>H</u>				
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				
<u>see Sierra Nevada Foothills key</u>				
Field-assessed vegetation Alliance name:				
Field-assessed Association name (optional): <u>Blue Oak, grass</u>				
Adjacent Alliances/direction: / / / /				
Confidence in Alliance identification: L M H Explain:				
Phenology (E,P,L): Herb Shrub Tree Other identification or mapping information:				

(Revised March 27, 2018)

SPECIES SHEET

% NonVasc cover: + Total % Vasc Veg cover: 24

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

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

□
□
□

Appendix C: Plant species list

Plant List - Prairie City SVRA (updated 6/2020 by LG)

Includes plants found in previous years of botanical surveys, not just in surveys from this mapping project.

Family	Taxonomic name	Common Name	Status/Notes
Adoxaceae	Sambucus nigra ssp. caerulea	Blue elderberry	blank
Agavaceae	Chlorogalum angustifolium	Narrowleaf Soap plant	blank
Agavaceae	Chlorogalum pomeridianum	Soap plant	blank
Alismataceae	Alisma triviale	Northern water plantain	blank
Alismataceae	Damasonium californicum	California damasonium	blank
Anacardiaceae	Pistacia chinensis	Chinese pistachio	non-native
Anacardiaceae	Toxicodendron diversilobum	Poison-oak	blank
Apiaceae	Anthriscus caucalis	Bur chervil	non-native
Apiaceae	Daucus pusillus	American wild carrot	blank
Apiaceae	Eryngium castrense	Great valley button celery	blank
Apiaceae	Eryngium vaseyi	Coyote thistle	blank
Apiaceae	Lomatium caruifolium	Caraway leaved lomatium, Alkali parsnip	blank
Apiaceae	Sanicula bipinnatifida	Purple sanicle	blank
Apiaceae	Torilis arvensis	Sock Destroyer, Field hedgeparsley	non-native
Apiaceae	Yabea microcarpa	Hedge parsley	blank
Apocynaceae	Asclepias fascicularis	Narrow leaf milkweed	blank
Apocynaceae	Asclepias speciosa	Showy milkweed	blank
Apocynaceae	Vinca sp.	Periwinkle	non-native
Asteraceae	Achyrrachaena mollis	Soft blow wives	blank
Asteraceae	Agoseris heterophylla	Annual agoseris, Annual mountain dandelion	blank
Asteraceae	Anthemis cotula	Mayweed, dog fennel	non-native
Asteraceae	Baccharis pilularis	Coyote brush	blank
Asteraceae	Baccharis salicifolia	Mule fat	blank
Asteraceae	Blennosperma nanum var. nanum	Common blennosperma, Common stickyseed	blank
Asteraceae	Calycadenia spicata	Spiked rosin weed	blank
Asteraceae	Carduus pycnocephalus	Italian thistle	non-native
Asteraceae	Centaurea solstitialis	Yellow star-thistle	non-native
Asteraceae	Centromadia fitchii	Spikeweed	blank
Asteraceae	Centromadia parryi	Pappose tarweed	blank
Asteraceae	Chondrilla juncea	Skeleton weed	non-native

Asteraceae	Cirsium sp.	Thistle	blank
Asteraceae	Cirsium vulgare	Bull thistle	non-native
Asteraceae	Cotula coronopifolia	Brassbuttons	non-native
Asteraceae	Dittrichia graveolens	Stinkwort	non-native
Asteraceae	Erigeron sumatrensis	Tropical horseweed	non-native
Asteraceae	Eriophyllum lanatum	Common woodlily sunflower	blank
Asteraceae	Grindelia camporum	Common gumplant	blank
Asteraceae	Helminthotheca echinoides	Bristly ox-tongue	non-native
Asteraceae	Heterotheca grandiflora	Telegraph weed	blank
Asteraceae	Holocarpha obconica	San Joaquin tarweed	blank
Asteraceae	Holocarpha virgata ssp. virgata	Yellowflower tarweed	blank
Asteraceae	Hypochaeris glabra	Smooth cat's ear	non-native
Asteraceae	Hypochaeris radicata	Hairy cat's ear	non-native
Asteraceae	Lactuca saligna	willow lettuce	non-native
Asteraceae	Lactuca serriola	Prickly lettuce	non-native
Asteraceae	Lasthenia californica	Goldfields	blank
Asteraceae	Lasthenia fremontii	Vernal pool goldfields	blank
Asteraceae	Lasthenia glaberrima	Smooth goldfields	blank
Asteraceae	Layia fremontii	Fremont's tidy tips	blank
Asteraceae	Leontodon saxatilis	Hawkbit	non-native
Asteraceae	Logfia gallica	Narrowleaf cottonrose	non-native
Asteraceae	Madia elegans	Common madia	blank
Asteraceae	Matricaria discoidea	Pineapple weed	blank
Asteraceae	Micropus californicus var. californicus	Q-tip plant, Slender cottonweed	blank
Asteraceae	Microseris douglasii	Douglas' silverpuffs, Douglas' microseris	blank
Asteraceae	Pseudognaphalium luteoalbum	Jersey cudweed	non-native
Asteraceae	Psilocarphus brevissimus var. brevissimus	Woolly-heads	blank
Asteraceae	Psilocarphus chilensis	Round woolly marbles	blank
Asteraceae	Psilocarphus oregonus	Woolly marbles	blank
Asteraceae	Psilocarphus tenellus	Slender woolly-heads	non-native
Asteraceae	Senecio vulgaris	Old man of spring, Common groundsel	non-native
Asteraceae	Silybum marianum	Milk thistle	non-native
Asteraceae	Soliva sessilis	South American soliva	non-native
Asteraceae	Sonchus asper	Prickly sowthistle	non-native
Asteraceae	Sonchus oleraceus	Sow thistle	non-native
Asteraceae	Taraxacum officinale	Red seeded dandelion	non-native

Asteraceae	Tragopogon porrifolius	Oyster Plant, Salsify	non-native
Asteraceae	Uropappus lindleyi	Silver puffs	blank
Asteraceae	Wyethia angustifolia	Narrow-leaved mule ears	blank
Asteraceae	Wyethia bolanderi	Bolander's mule ears	blank
Asteraceae	Xanthium strumarium	Cocklebur	blank
Boraginaceae	Amsinckia intermedia	Common fiddleneck	blank
Boraginaceae	Amsinckia menziesii	Small flowered fiddleneck	blank
Boraginaceae	Plagiobothrys fulvus var. campestris	Tawny popcornflower	blank
Boraginaceae	Plagiobothrys greenei	Greene's popcornflower, Greene's allocarya	blank
Boraginaceae	Plagiobothrys nothofulvus	Rusty popcorn flower	blank
Boraginaceae	Plagiobothrys stipitatus var. micranthus	Common vernal pool allocarya	blank
Brassicaceae	Brassica nigra	Black mustard	non-native
Brassicaceae	Brassica rapa	Field mustard	non-native
Brassicaceae	Capsella bursa-pastoris	Shepherd's purse	non-native
Brassicaceae	Cardamine oligosperma	Bitter cress	blank
Brassicaceae	Hirschfeldia incana	Mediterranean hoary mustard	non-native
Brassicaceae	Lepidium didymum	Lesser swine cress	non-native
Brassicaceae	Lepidium nitidum var. nitidum	Shining pepper-grass	blank
Brassicaceae	Raphanus raphanistrum	Jointed charlock	non-native
Brassicaceae	Raphanus sativus	Wild radish	non-native
Brassicaceae	Rorippa curvisiliqua	Curvedpod yellow cress	non-native
Brassicaceae	Sisymbrium officinale	Hedge mustard	non-native
Brassicaceae	Thysanocarpus radians	Showy fringe pod	blank
Campanulaceae	Downingia bicornuta	Doublehorn downingia	blank
Campanulaceae	Downingia ornatissima	Horned downingia, Folded downingia	blank
Campanulaceae	Heterocodon rariflorum	Rareflower heterocodon	blank
Campanulaceae	Legenere limosa	Legenere	Listed 1B.1, s2, g2
Caryophyllaceae	Cerastium glomeratum	Chickweed	non-native
Caryophyllaceae	Minuartia californica	Sandwort	blank
Caryophyllaceae	Petrorhagia dubia	Petrorhagia	non-native
Caryophyllaceae	Petrorhagia prolifera	Pink grass	non-native
Caryophyllaceae	Scleranthus annuus	German knotgrass	non-native
Caryophyllaceae	Silene gallica	Common catch-fly	non-native
Caryophyllaceae	Spergula arvensis	Corn spurry	non-native
Caryophyllaceae	Spergularia bocconeii	Boccon's sand spurrey	non-native
Caryophyllaceae	Spergularia rubra	Purple sand spurry	non-native

Caryophyllaceae	<i>Stellaria media</i>	Chickweed	non-native
Convolvulaceae	<i>Convolvulus arvensis</i>	Field bindweed	non-native
Convolvulaceae	<i>Cuscuta howelliana</i>	Boggs lake dodder	blank
Crassulaceae	<i>Crassula aquatica</i>	Aquatic pygmyweed	blank
Crassulaceae	<i>Crassula connata</i>	Pigmy weed	blank
Cyperaceae	<i>Carex</i> sp.	Sedge	blank
Cyperaceae	<i>Cyperus eragrostis</i>	Tall flatsedge	blank
Cyperaceae	<i>Cyperus</i> sp.	Sedge	blank
Cyperaceae	<i>Eleocharis acicularis</i>	Needle Spike rush	blank
Cyperaceae	<i>Eleocharis macrostachya</i>	Creeping Spike rush	blank
Cyperaceae	<i>Eleocharis palustris</i>	Common spike rush	blank
Dipsacaceae	<i>Dipsacus fullonum</i>	Fuller's teasel	non-native
Euphorbiaceae	<i>Croton setiger</i>	Turkey-mullein, Dove weed	blank
Fabaceae	<i>Acmispon americanus</i>	Spanish lotus, American bird's foot trefoil	blank
Fabaceae	<i>Acmispon parviflorus</i>	Hill lotus	blank
Fabaceae	<i>Lathyrus angulatus</i>	Angled pea vine	non-native
Fabaceae	<i>Lathyrus cicera</i>	Red peavine	non-native
Fabaceae	<i>Lathyrus hirsutus</i>	Caley pea	non-native
Fabaceae	<i>Lupinus bicolor</i>	Dwarf lupine	blank
Fabaceae	<i>Lupinus nanus</i>	Sky lupine	blank
Fabaceae	<i>Medicago polymorpha</i>	CA burclover	non-native
Fabaceae	<i>Melilotus indicus</i>	Yellow sweetclover	non-native
Fabaceae	<i>Melilotus officinalis</i>	Yellow sweet clover	non-native
Fabaceae	<i>Trifolium albopurpureum</i>	Indian clover	blank
Fabaceae	<i>Trifolium campestre</i>	Hop clover	non-native
Fabaceae	<i>Trifolium ciliolatum</i>	Tree clover	blank
Fabaceae	<i>Trifolium depauperatum</i> var. <i>depauperatum</i>	Cow bag clover, Dwarf bladder clover	non-native
Fabaceae	<i>Trifolium dubium</i>	Shamrock	non-native
Fabaceae	<i>Trifolium glomeratum</i>	Clustered clover	non-native
Fabaceae	<i>Trifolium gracilentum</i>	Pinpoint clover	blank
Fabaceae	<i>Trifolium hirtum</i>	Rose clover	non-native
Fabaceae	<i>Trifolium incarnatum</i>	Crimson clover	non-native
Fabaceae	<i>Trifolium microcephalum</i>	Smallhead clover	blank
Fabaceae	<i>Trifolium subterraneum</i>	Subterranean clover	non-native
Fabaceae	<i>Trifolium variegatum</i>	White-tipped clover, variegatum	blank
Fabaceae	<i>Trifolium willdenovii</i>	Tomcat clover	blank
Fabaceae	<i>Vicia benghalensis</i>	Purple vetch	non-native
Fabaceae	<i>Vicia sativa</i> ssp. <i>sativa</i>	Common vetch	non-native
Fabaceae	<i>Vicia villosa</i> ssp. <i>villosa</i>	Hairy vetch	non-native

Fagaceae	Quercus douglasii	Blue oak	blank
Fagaceae	Quercus lobata	Valley oak	blank
Fagaceae	Quercus wislizeni	Interior live oak	blank
Gentianaceae	Centaureum tenuiflorum	Slender centaury	non-native
Gentianaceae	Cicendia quadrangularis	Oregon timwort	blank
Gentianaceae	Zeltnera muehlenbergii	Muehlenberg's centaury	blank
Geraniaceae	Erodium botrys	Broad leaf filaree	non-native
Geraniaceae	Erodium cicutarium	Red stem filaree	non-native
Geraniaceae	Erodium moschatum	White stem Filaree	non-native
Geraniaceae	Geranium dissectum	Cut leaved geranium	non-native
Hypericaceae	Hypericum perforatum	Klamath weed, St. John's Wort	non-native
Isoetaceae	Isoetes orcuttii	Orcutt's quillwort	blank
Juglandaceae	Juglans hindsii	Northern CA Black walnut	blank
Juncaceae	Juncus balticus	Baltic rush	blank
Juncaceae	Juncus bufonius	Toad rush	blank
Juncaceae	Juncus capitatus	Leafy bracted dwarf rush	blank
Juncaceae	Juncus tenuis	Slender rush	blank
Juncaceae	Juncus uncialis	Inch-high dwarf rush	blank
Juncaceae	Juncus xiphioides	Iris leaved juncus	blank
Juncaginaceae	Triglochin scilloides	Flowering-quillwort	blank
Lamiaceae	Mentha pulegium	Pennyroyal	non-native
Lamiaceae	Pogogyne zizyphoroides	Sacramento mint	blank
Lamiaceae	Pogoyne douglasii	Douglas' mesamint	new addition
Lamiaceae	Trichostema lanceolatum	Vinegarweed	blank
Liliaceae	Calochortus luteus	Yellow mariposa lily	blank
Limanathaceae	Limnanthes alba ssp. alba	White meadow-foam	blank
Limanathaceae	Limnanthes douglasii ssp. striata	Foothill meadowfoam	blank
Linaceae	Hesperolinon californicum	California dwarf-flax	non-native
Linaceae	Linum bienne	Narrowleaf flax, Pale flax	non-native
Lythraceae	Ammannia robusta	Grand Ammannia	blank
Lythraceae	Lythrum hyssopifolia	Hyssop loosestrife	non-native
Lythraceae	Lythrum portula	Broad-leaved loosestrife	non-native
Lythraceae	Lythrum tribracteatum	Three bracted loosestrife	non-native
Malvaceae	Malva parviflora	Cheeseweed	non-native
Malvaceae	Sidalcea calycosa	Annual checkerbloom	blank
Malvaceae	Sidalcea hartwegii	Hartweg's checker-mallow	blank
Malvaceae	Sidalcea hirsuta	Hairy checkerbloom	blank
Marsileaceae	Marsilea vestita	Hairy waterclover	blank
Marsileaceae	Pilularia americana	Pillwort	blank
Montiaceae	Calandrinia ciliata	Fringed red maids	blank

Montiaceae	Calandrinia menziesii	Red maids	blank
Montiaceae	Claytonia perfoliata	Miner's lettuce	blank
Montiaceae	Claytonia sp.	Miner's lettuce	blank
Montiaceae	Montia fontana	Water montia	blank
Myrsinaceae	Lysimachia arvensis	Scarlet pimpernel	non-native
Myrsinaceae	Lysimachia minima	Chaffweed	non-native
Oleaceae	Fraxinus latifolia	Oregon ash	blank
Onagraceae	Clarkia purpurea ssp. quadrivulnera	Purple clarkia	blank
Onagraceae	Epilobium brachycarpum	Annual fireweed, Autumn willowweed	blank
Onagraceae	Epilobium canum	CA fuchsia	blank
Onagraceae	Epilobium densiflorum	Dense boisduvlie	blank
Onagraceae	Epilobium torreyi	Narrow biosduvalia, brook willowherb	blank
Orobanchaceae	Castilleja attenuata	Valley tassels	blank
Orobanchaceae	Castilleja campestris ssp. campestris	Field owl clover	blank
Orobanchaceae	Castilleja lacera	Cutleaf owl's clover	blank
Orobanchaceae	Parentucellia viscosa	Yellow parentucellia, yellow glandweed	non-native
Orobanchaceae	Triphysaria eriantha ssp. eriantha	Butter and eggs	blank
Orobanchaceae	Triphysaria sp.	parasite	blank
Papaveraceae	Eschscholzia californica	California poppy	blank
Papaveraceae	Eschscholzia lobbii	Frying pan poppy	blank
Phrymaceae	Diplacus tricolor	Tri-color monkeyflower	blank
Phrymaceae	Erythranthe guttata	Yellow monkey-flower	blank
Pinaceae	Pinus sabiniana	Foothill pine, Bull pine	blank
Plantaginaceae	Callitriche heterophylla	Water starwort	blank
Plantaginaceae	Callitriche marginata	CA water starwort	blank
Plantaginaceae	Collinsia sparsiflora	Few flowered collinsia	blank
Plantaginaceae	Gratiola ebracteata	Common hedge hyssop	non-native
Plantaginaceae	Gratiola heterosepala	Bogg's lake hyssop	Listed 1B.2, s2, g2
Plantaginaceae	Plantago coronopus	Cutleaf plantain	non-native
Plantaginaceae	Plantago erecta	California plantain	blank
Plantaginaceae	Plantago lanceolata	English plantain, Ribwort	non-native
Plantaginaceae	Plantago major	Common plantain	non-native
Plantaginaceae	Plantago virginica	Dwarf plantain	non-native
Plantaginaceae	Veronica peregrina ssp. xalapensis	Purslane speedwell, Speedwell, neckweed	blank

Poaceae	<i>Aegilops triuncialis</i>	Barbed goatgrass	non-native
Poaceae	<i>Aira caryophylla</i>	Silver hairgrass, Shivergrass	non-native
Poaceae	<i>Alopecurus saccatus</i>	Pacific foxtail	blank
Poaceae	<i>Anthoxanthum odoratum</i>	Sweet vernal grass	non-native
Poaceae	<i>Avena barbata</i>	Slender wild oats	non-native
Poaceae	<i>Avena fatua</i>	Wild oat	non-native
Poaceae	<i>Brachypodium distachyon</i>	Purple false brome	non-native
Poaceae	<i>Briza maxima</i>	Quaking grass	non-native
Poaceae	<i>Briza minor</i>	Little quaking grass	non-native
Poaceae	<i>Bromus diandrus</i>	Ripgut brome	non-native
Poaceae	<i>Bromus hordeaceus</i>	Soft brome, soft chess brome	non-native
Poaceae	<i>Bromus madritensis</i> ssp. <i>rubens</i>	Foxtail brome	non-native
Poaceae	<i>Crypsis vaginiflora</i>	African prickleggrass	non-native
Poaceae	<i>Cynosurus echinatus</i>	Bristly dog-tail grass	non-native
Poaceae	<i>Deschampsia danthonioides</i>	Annual hairgrass	blank
Poaceae	<i>Elymus caput-medusae</i>	Medusahead	non-native
Poaceae	<i>Elymus glaucus</i>	Blue wild rye	blank
Poaceae	<i>Elymus multisetus</i>	Squirreltail grass	blank
Poaceae	<i>Festuca bromoides</i>	Brome fescue	non-native
Poaceae	<i>Festuca microstachys</i>	Small Fescue	blank
Poaceae	<i>Festuca myuros</i>	Rat-tail fescue, Rattail sixweeks grass	non-native
Poaceae	<i>Festuca perennis</i> (previously <i>Lolium</i>)	Italian ryegrass	non-native
Poaceae	<i>Gastridium phleoides</i>	Nit grass	non-native
Poaceae	<i>Glyceria declinata</i>	Waxy mannagrass	non-native
Poaceae	<i>Glyceria occidentalis</i>	Western manna grass	non-native
Poaceae	<i>Hordeum brachyantherum</i>	Meadow barley	blank
Poaceae	<i>Hordeum marinum</i> ssp. <i>gussoneanum</i>	Mediterranean barley	non-native
Poaceae	<i>Hordeum murinum</i> ssp. <i>leporinum</i>	Foxtail barley	non-native
Poaceae	<i>Phalaris aquatica</i>	Harding grass	non-native
Poaceae	<i>Phalaris minor</i>	Mediterranean canarygrass	non-native
Poaceae	<i>Phalaris paradoxa</i>	Hood canarygrass	non-native
Poaceae	<i>Pleuropogon californicus</i>	Annual semaphore grass	blank
Poaceae	<i>Poa annua</i>	Annual bluegrass	non-native
Poaceae	<i>Poa secunda</i> ssp. <i>secunda</i>	Sandburt's bluegrass	blank
Poaceae	<i>Polypogon monspeliensis</i>	Rabbit's foot grass, Annual beard grass	non-native

Poaceae	Stipa pulchra	Purple needlegrass	blank
Poaceae	Triticum sp.	Wheat	non-native
Polemoniaceae	Navarretia intertexta	Interwoven navarretia	blank
Polemoniaceae	Navarretia leucocephala ssp. Leucocephala	White-headed navarretia	blank
Polemoniaceae	Navarretia prolifera ssp. prolifera	Burr navarretia	blank
Polemoniaceae	Navarretia pubescens	Downy or purple pincusion	blank
Polemoniaceae	Navarretia tagetina	Marigold navarretia	blank
Polygonaceae	Eriogonum fasciculatum	CA buckwheat	blank
Polygonaceae	Eriogonum nudum	Nude buckwheat	blank
Polygonaceae	Polygonum aviculare ssp. depressum	prostrate knotweed	non-native
Polygonaceae	Rumex acetosella	Sheep sorrel	non-native
Polygonaceae	Rumex conglomeratus	Green dock	non-native
Polygonaceae	Rumex crispus	Curly dock	non-native
Polygonaceae	Rumex pulcher	Fiddleleaf dock	non-native
Polygonaceae	Rumex salicifolius	Willow leaved dock	blank
Ranunculaceae	Delphinium variegatum	Royal larkspur	blank
Ranunculaceae	Ranunculus aquatilis	Whitewater crowfoot	blank
Ranunculaceae	Ranunculus bonariensis var. trisepalus	Vernal pool buttercup	blank
Ranunculaceae	Ranunculus californicus	California buttercup	blank
Ranunculaceae	Ranunculus muricatus	Stick-seed buttercup	non-native
Ranunculaceae	Ranunculus pusillus	Low buttercup	blank
Rhamnaceae	Frangula californica ssp. tomentella	Hoary coffeeberry	blank
Rosaceae	Heteromeles arbutifolia	Toyon	blank
Rosaceae	Rosa californica	CA wild rose	blank
Rubiaceae	Galium aparine	Common bedstraw	blank
Rubiaceae	Galium parishii	Parish's bedstraw	blank
Rubiaceae	Galium parisiense	BRMI	non-native
Rubiaceae	Sherardia arvensis	Field madder	non-native
Salicaceae	Populus fremontii	Fremont's cottonwood	blank
Salicaceae	Salix laevigata	Red willow, Polished willow	blank
Salicaceae	Salix sessilifolia	Northern sandbar willow	blank
Themidaceae	Brodiaea coronaria	Crown brodiaea	blank
Themidaceae	Brodiaea elegans	Harvest brodiaea	blank
Themidaceae	Brodiaea minor	Dwarf brodiaea	blank
Themidaceae	Brodiaea nana	Dwarf brodiaea	blank
Themidaceae	Dichelostemma capitatum ssp. Capitatum	Blue dicks	blank

Themidaceae	Dichelostemma multiflorum	Manyflower brodiaea	blank
Themidaceae	Triteleia hyacinthina	Wild hyacinth, White brodiaea	blank
Themidaceae	Triteleia laxa	Wally basket, Itherial's spear	blank
Typhaceae	Typha latifolia	Broad leaf cattail	blank
Verbenaceae	Phyla nodiflora	Common lippia	blank
Viscaceae	Phoradendron leucarpum ssp. tomentosum	Mistletoe	blank
Vitaceae	Vitis californica	California wild grape	blank

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 overlap¹ 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.

¹ 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.:

Strata	Species	%Cover	C
T/A/E	Quercus douglasii	40/<1/<1	

Species: Use Jepson Manual nomenclature. When uncertain of an identification (which you intend to confirm later) use parentheses to indicate what part of the determination needs to be confirmed. For example, you could write out *Brassica (nigra)* if you are sure it is a *Brassica* but you need further clarification on the specific epithet.

% cover: provide the % absolute aerial cover for each species listed. All species percent covers may total over 100% because of overlap.

Collections: If a species collection is made, it should be indicated in the blank column next to “% cover” with a “C” (for collected). If the species is later keyed out, cross out the species name or description and write the keyed species name in pen on the data sheet. Do not erase what was written in the field, because this information can be used if specimens get mixed up later. If the specimen is then thrown out, add a “T” to the “C” in that column (CT = thrown out after confirmation) or cross out the “C”. If the specimen is kept but is still not confidently identified, add a

“U” to the “C” (CU = collected and unconfirmed). In this case the unconfirmed species epithet should be put in parentheses [e.g. *Hordeum (murinum)*]. If the specimen is kept and is confidently identified, add a “C” to the existing “C” (CC = collected and confirmed). If the specimen is later deposited in an herbarium, add a “D” to the existing “C” (CD = collected and deposited) and note the receiving herbarium.

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

Recorder:		Other Surveyors:		Date:		Return? <input type="checkbox"/>																																																																																																																						
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