Prairie City SVRA

Vegetation Mapping Report 2021

California State Parks





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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

<u>California Vernal Pool and Grassland Matrix mapping unit – 511.1 acres:</u> 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 - Achyrachaena 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 lobbii), white meadowfoam (Limanthes 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.

<u>Mediterranean California naturalized annual and perennial grassland group – 477.1 acres:</u> 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.

<u>Californian mixed annual/perennial freshwater vernal pool/swale bottomland group (Vernal pool/Swale) – 6.9 acres:</u> 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.

<u>Baccharis pilularis Shrubland Alliance (Coyote brush scrub) – 15.4 acres:</u> 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*).

<u>Populus fremontii - Fraxinus velutina - Salix gooddingii Forest & Woodland Alliance (Fremont</u> <u>cottonwood forest and woodland) – 55.5 acres:</u> 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.*). <u>Quercus douglasii</u> 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*).

<u>Salix exigua</u> 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.

<u>Developed</u> – 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 <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=64011&inline</u>
- California State Parks 2016. "Final General Plan: Prairie City State Vehicular Recreation Area." Available at <u>https://demo2.parks.ca.gov/pages/1170/files/Prairie-City-Final-General-Plan_9_%202016.pdf</u>
- California State Parks 2022. "Final 2022 Prairie City State Vehicular Recreation Area Wildlife Habitat Protection Plan." Available at <u>https://ohv.parks.ca.gov/pages/1170/files/Final%202022%20PCSVRA%20WHPP_ada1221</u> 2022.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: <u>https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18599&inline</u>

Appendices

Appendix A: Map Figures



Appendix B: Field datasheets

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Disturba II. HABI Tree DBI Shrub: <u>S</u> Herbaceco Desert Ri Desert Pa III. INTE Field-asse Field-asse	to co to co to co the co	tensity (L,M,H): tensity (L,M,H): TO TO TO TO TO TO TO TO TO TO	$\frac{1}{3} (6-11" dbh), T4 (11-24" \frac{3}{3} (6-11" dbh), T4 (11-24" dbh), \underline{T4 (11-$	n jut 7) h. Story 	energing Adjacent tailings nearby . Freah gopher mond 	ver)
Disturba II. HABI Tree DBI Shrub: <u>S</u> Herbaceo Desert Ri Desert Pa III. INTE Field-asse Field-asse Adjacent.	to co check unce code / In <u>TTAT DESCF</u> H : <u>T1</u> (<1" db <u>S1</u> seedling (< pous: <u>H1</u> (<12" iparian Tree/ ulm/Joshua T <u>RPRETATIO</u> essed vegetati sssed Associat Alliances/dir	tensity (L,M,H): tensity (L,M,H): UPTION wh), <u>T2</u> (1-6" dbh), <u>T</u> 3 yr. old), <u>S2</u> young plant.ht.), <u>H2</u> (>12" h Shrub: 1 (<2ft. ster ree: 1 (<1.5" base d <u>ON OF STAND</u> on Alliance name: tion name (optional ection:($\frac{1}{2} (6-11" dbh), T4 (11-24" \frac{3}{2} (6-11" dbh), T4 (11-24" (<1\% dead), S3 mature it.) bash stanki in ht.), 2 (2-10ft. ht.); 3 (inameter), 2 (1.5-6" diam. Holocar ph htors wood$	n juo 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	energine Adjacent tailings nearby . Fresh gopher mond //	ver)
Disturba II. HABI Tree DBI Shrub: <u>S</u> Herbaced Desert Ri Desert Pa III. INTE Field-asse Field-asse Adjacent, Diccol Confidence	to co to	tensity (L,M,H):	$\frac{3}{2} (6-11" dbh), \underline{T4} (11-24")$ $\frac{3}{2} (1-5-6") dbh$ $\frac{1}{10} (1-5-6") dbh$	n juo i h. Story /	energing Adjacent tailings nearby , Fresh gopher mound 	ver)
Disturba II. HABI Tree DBJ Shrub: <u>S</u> Herbaced Desert Ri Desert Pa III. INTE Field-asse Field-asse Adjacent. Direct Confidence	to $control control c$	tensity (L,M,H):	$\frac{1}{3} (6-11" dbh), T4 (11-24')$ $\frac{3}{3} (6-11" dbh), T4 (11-24')$	<u>h</u> , <u>s</u>	energing Adjacent tailings nearby, , fresh gopher mound 	ver)
Disturba II. HABI Tree DBJ Shrub: <u>S</u> Herbaceo Desert Ri Desert Pa III. INTE Field-asse Field-asse Field-asse Adjacent. Direct Confidence Phenology	to control to the second seco	tensity (L,M,H):	$\frac{1}{3} (6-11" dbh), T4 (11-24')$ $\frac{3}{3} (6-11" dbh), T4 (11-24')$	<u>h</u> , <u>s</u>	energing Adjacent tailings nearby, , freah gopher mound 	ver)

Datab	ase #: <u>PCDO</u>	SPEC	March IES S	27, 2018) HEET
IV. V	EGETATION DESCRIPTION			
<u>% Cov</u> Height	<u>/er</u> - Conifer tree / Hardwood tree:/ <u>Class</u> - Conifer tree / Hardwood tree:/	Reg	% enera enera	NonVasc cover: <u>2</u> Total % Vasc Veg cover: <u>35</u> ting Tree: <u>Shrub:</u> Herbaceous: <u>35</u> ting Tree: <u>Shrub:</u> Herbaceous: <u></u>
Н	eight classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2	2-5m, 5=5-10	0m, 6	=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m
	Stratum categories: T=Tree, A = SA	Apling, $E = S$	SEedli	ng, S = Shrub, H= Herb, N= Non-vascular 515% $515%$ $550%$ $550.75%$ $575%$
Stratur	Species	% cover	C	Final species determination
H	Hypocharis (grovia?) 2.	Spr. 2		~ L TTA .
	Dirn. Capitation		1	
	Erodium botrys	3		
	Elynus coplet - medusa			
	Lupinus bicolor	< 1		
	Lotus?			
	Calodortus)		
	Plantago	2		
	Gallium parisiense	< 1	-	
	Villa Spp		-	
	Brodines 30. (elegans)	/	
	Unknown bunchpers		F	
	Bronus 3p.		-	
	Jestica Sp.	D	+	
	Ach, sport and the	R	+	
	Triphusoria estenthes	R	+	
	Plagipbothrys	<1		
	(mild be Fritelin spike	re)		
	cover of Lilies (all)	١ -		emode up ob sp. 1. sted above
	Te, folium	<1		
	Holocorpa / Calacodin	ia Ll	0	te presence from last of
	Grazzes	25		
	-nonnati,	reann	nal	graddes - likely lots of mod
			-	- 0
			-	
			\vdash	
		_	\vdash	

Page 2

I	For Office Use:	Final database #:		Alliance		1
	Tor onne oser	That database #.	Final vegetation type:	Association	\bigcirc	
	I. LOCATIONAL/I	ENVIRONMENTAL	DESCRIPTION		circle: Relevé or RA	-
EW	Database #:	Date:	Name of record	er: L.G		-
SWO'L	PC001	3-12-2	Other surveyor	s: Melissa, Beth, R	losie, Kachelle	
O.		UID:	Location Name	PCGOI	,	
	GPS name: Irim	ble .	For Relevé	only: Bearing°, left axis at	ID point of Long / Short side	
	UTME	UTN	IN	Zone: 11 NAI	083 GPS error: ft./ m./ PDOP	
	Decimal degrees:	LAT 35° 3	6-14" N	LONG / 2 / A	934 M W	
	Decimal degrees.	LAI <u></u> . <u>_</u>		Long Tat.		Camera
	GPS within stand	? Yes / No If No	, cite from GPS to stand: di	stance (m) bearing °	inclination °	day zoon
	and record: Base	point ID	Projected UTM	: UTME	UTMN	"JPG#
	Camera Name:	_505"Cardinal	ohotos at ID point: NE	,S,W,X orde	N	D attra
	Other photos:	(<u>582,-0585</u> ,	0586 NE KCYOS	SE plot	incollector
	Stand Size (acres):	<1, 1-5, (>5) P	lot Area (m ²): 100 /	Plot Dimensions 10	x 10 m RA Radius m	
vecom	Exposure, Actual °:	170 NE NW	SE SW Flat Variabl	e Steepness, Actual º: _6	$^{\circ}$ 0° 1-5° $> 5-25^{\circ}$ > 25	
gonun	Topography: Ma	cro: top upper	mid lower bottom	Micro: convex flat	concave undulating	
planswar	Geology code: MI	A Soil Text	ure code: FISA	Upland or Wetland	Riparian (circle one)	
COULS MIAD	% Surface cover:		cl outcrops) (>60cm diam)	(25-60cm) (7.5-25cm)	(2mm-7.5cm) (Incl sand, mud)	
digentiside	Hat: O BA Stem	Litter: 25	Bedrock: Boulder:) Stone:∩ Cobble:∠	2 Gravel: 45 Fines: 46 =100%	1 T
PIOI	% Current year bi	turbation DTo	ast higher bioturbation present	Ves No 1 % Hoof	nunch	
* ~~ s	Fire evidence: Yes	/Novcircle one) If	ves. describe in Site history	section, including date of fire	if known.	
		<i>Q</i> .	CILL CUPA		,	
	Site history, stand a	ige, comments: Ira	rie Uty SVATI,	grassland adja	cent Cotton wood ripari	pan,
	Tower line m	nining & grazi	ngin past other	disturbances	in past	4
	Slightly	Soping W.	some moure	ing (mat influe	ence Sp, composition)	-
	tarty for p	hendogy to	v Spilp, + 10W	er cover than la	Her in scusore	
	Lastyears	standings	tems, this	rs energing + c	ruy a tew inches high	4
18	Gopher act	WITZ. Close to	o a vood. glong T	op at sofe		
					and a second control of the foreign and the second s	
-						
	(See	tist)	511 151	1 1 1	"Other"	
ļ	Disturbance code /)	Intensity (L,M,H): _	DS/A 10/L			
-	LINCH APPOO	Drick type	s .	1		-
d	Tree DBH : T1 (<1"	dbh), T2 (1-6" dbh), T	<u>'3</u> (6-11" dbh), <u>T4</u> (11-24" d	bh), T5 (>24" dbh), T6 multi-l	ayered (T3 or T4 layer under T5, >60% cover)	
Ę	Shrub: S1 seedling	(<3 yr. old), <u>S2</u> young	(<1% dead), <u>S3</u> mature (1-	25% dead), <u>S4</u> decadent (>25%	% dead)	
	Herbaceous: Hh (<1	2" plant ht.), <u>H2</u> (>12" h	t.)			o '
e	Desert Riparian Tre	ee/Shrub: 1 (<2ft. ste	n ht.), 2 (2-10ft. ht.), 3 (10	-20ft. ht.), 4 (>20ft. ht.)		
¢	Desert Palm/Joshua	Tree: 1 (<1.5" base of	iameter), 2 (1.5-6" diam.),	3 (>6" diam.)		
	III. INTERPRETAT	TION OF STAND				1 .
ſ				11.1	haber i'm I klacker	COTAC
	Field-assessed veget	ation Alliance name:	Elymus caput	-medusae Holoc	arpha virgata Haru	pours
	Field-assessed Asso	ciation name (optiona	1): Holg carpha	Virgota accord	ation Allo	nce
ľ	Adjacent Alliances/	direction: <u>CoHo</u>	nubod	1'S , Cottor	incod INW	
	Confidence in Allia	nce identification: I	M H Explain:	up to phonylog	TIA	
	Phanology (F D I).	Harb E Shrub	Tree Other identi	fication or manning inform	ation: >	
r	Sould diffe	It I COUPEN	alles no low	nearbor or mapping morths	~	1 4 (
	- pp Ir alt a	all y cuver v	mouge jour		can put ~ WMIL hora.	-
	1 aga -la	whatto	section		May man transition Roman	ots
1 perso	M Carl au	mok pp.			ing ing incrision from	, , ,
				Page I		

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

7

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

Databa	se #: <u>PC00</u> 1	(Revised) SPECI	March ES S	27, 2018) HEET
IV. VE	GETATION DESCRIPTION	6 (PA)		
11. 12	BETATION DESCRIPTION		0/	NonVase cover: 12 Total % Vase Veg cover: 35
% Cove	- Conifer tree / Hardwood treet	Dog	70	ting Trees Chrub: Chrub: Herbaceous:
Height	[Conifer tree / Hardwood tree:/_	Reg	anora	ting Tree: Shrub: Herbaceous:
Hei	<i>aht classes</i> : 1=<1/2m 2=1/2-1m 3=1-2m 4=2-4	5m 5=5-10	m 6	=10-15m 7=15-20m 8=20-35m 9=35-50m 10=>50m
	Stratum astagories: T-Trag A - SA	radia = E - S	Eadli	ng S = Shak H= Hat N= Non vacaular
	% Cover Intervals for reference: r = trace, +:	= <1%, 1-3	5%,	>5-15%, >15-25%, >25-50%, >50-75%, >75%
Stratum	Species	% cover	C	Final species determination
8	Hypochaeris (glabra) + radiu	cata 2	Sif	collected . Property
	Dichellostema capitatum			
	Habsarpha vira ata	1		dead only from last vr
	Alamis cout-medical			ing the p
	ALIGNO CAPOT MACOSAC			
	Evadium hotrys	3.		
	Biohinghoons	F	+	
	Maria Eugenis		-	
	Upinus Diceior	5.1	-	
	inthown aster. or		-	
	Mantagoerecta	d.	-	
	Iritalium P	<1	-	
2	Calycadenia spicata	<1		dead only last yr.
	Gallium parisiense	<	-	
	Vicia	<1	_	
	Bromusse,	_		
	Festuca P.			
	moss	12%		
	Armison americance	Ċ	R	Rifonly 10r2
	Kestica perennis	K1		
	Triphaista evinntha	K1	R	
	Placio hoto 50	41		
	Traylobolitys -	1		1 = Unknown"Lilv" (plantiful)
	Colochortos jure			75-0 mss ambined
				non-notilla annuale
		-		Chalaton a matter be duna has d
			-	Specinons moving means a rearc
			-	
			<u> </u>	
			<u> </u>	
1		1	-	

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I. LOCATIONALENVIRONMENTAL DESCRIPTION Instantian of the conders in the product of the product
Database #: Date: Name of recorder: MVP, L(G, R, G, Betty PC 002 UID: Location Name: PC Other surveyors: P UID: Location Name: PC GPS name: Image: Second Se
PC 002 Other surveyors: UID: Location Name: PC GPS name: Tr.mble For Releed only: Bearing", left axis at ID point: of Long / Short side UTME
UID: Location Name: $\rho < \rho <$
GPS name: Tornble For Relevé only: Bearing ⁶ , left axis at ID point of Long / Short side UTME Zone: INAD83 GPS cardinal degrees: LAT 3 3 2 LONG 1 2 1 $NAD83$ GPS cardinal degrees: LAT 3 3 2 2 LONG 1 2 1 5 4 8 7 GPS within stand? With No. if No. cite from GPS to stand: distance (m) bearing ⁶ inclination ° m and record: Base for Marce Cardinal photos at ID point: Yes Within Stand? W <t< th=""></t<>
OT STAIL IT NO.
Decimal degrees: LAT 3 8 . 60 3 2 1 LONG 1 21 . 1 5 9 1 8 7 GPS within stand? 10 / No (if No, cite from GPS to stand: distance (m) bearing "inclination " and record: Base point ID Projected UTMs: UTME
Decimal degrees: LAT <u>5</u> <u>8</u> , <u>6</u> <u>0</u> <u>5</u> <u>2</u> <u>2</u> <u>b</u> LONG <u>1</u> <u>21</u> , <u>1</u> <u>5</u> <u>1</u> <u>b</u> <u>8</u> <u>4</u> GPS within stand? (Ye) / No If No, cite from GPS to stand: distance (m) <u>bearing</u> <u>inclination</u> <u>inclination</u> <u>location</u> <u>Projected UTMs: UTME <u>UTMN</u> <u>UTMN</u> <u>UTMN</u> <u>Inclination</u> <u>Cardinal photos at ID point:</u> Yeb <u>character</u> <u>UTMN</u> <u>Inclination</u> <u>Projected UTMs: UTME <u>UTMN</u> <u>UTMN</u> <u>Inclination</u> <u>Inclination</u> <u>Projected UTMs: UTME <u>UTMN</u> <u>Inclination</u> <u>Projected UTMs: UTMN</u> <u>Inclination</u> <u>Inclination</u></u></u></u></u></u></u></u></u>
GPS within stand? Yeb / No If No, cite from GPS to stand: distance (m) bearing * inclination * and record: Base point ID Projected UTMs: UTME UTMN Camera Name: Ave for the control of the point of the po
and record: Base point D Projected UTMs: UTME UTME UTMN UTMN UTMN UTMN UTMN UTMN UTMN UTMN
Camera Name: $m \vee e$ Cardinal photos at ID point: Yeb -sea mutica muticas s prove Other photos: $maintee math S$ Stand Size (acres): <1, 1-5, (S) Plot Area (m ²): 100/ Plot Dimensionsxm RA Radiusm Exposure, Actual *: <u>300</u> NE (W) SE SW Flat Variable Steepness, Actual *: _1 0° (1.5°) > 5-25° > 25 Topography: Macro: top upper mid lower battom Micro: convex flat concave undulating Geology code: _MIALSoil Texture code: _FLSA Upland or WetTand/REpring (circle one) % Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (2mm-7.5cm) (Incl. sad, mud) Halt: O BA Stems: 4 Litter:] & Bedrock: O Boulder: O Stone: O Cobble: O Gravel: Fines:] = 100% % Current year bioturbation < Past bioturbation present? Yes / (No) % Hoof punch/A Fire evidence: Yes / No circle one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Veryhrance(Ky +_ A is strubed) fromOLA $M \cap K$ + $\pi i \in [m \cap M \cap K]$ + $\pi i \in [m \cap$
Stand Size (acres): <1, 1-5, (S) Plot Area (m ²): 100 / Plot Dimensions m RA Radius m Exposure, Actual °: 20? NE (W) 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:AL Soil Texture code:AL Upland or Wettand/Riparjan (circle one) % Surface cover: (Incl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) Hoi: O BA Stems: 4 Litter:] & Bedrock: O Boulder: O Stone: O Cobble: O Gravel: Fines:] = 100% % Current year bioturbation Past bioturbation present? Yes / (No) % (Moof punch A Fines:] = 100% I % for enclose one If yes, describe in Site history section, including date of fire, if known. I Site history, stand age, comments: Very
Stand Size (acres): <1, 1-5, (3) Hot Aria (iii); 100] Hot Dimensions _ 1 00 1-5 > 5-25 > 25 Exposure, Actual °: <u>300</u> NE GW SE SW Flat Variable Steepness, Actual °: _ 00 1-5 > 5-25 > 25 Topography: Macro: top upper mid lower bottom Geology code: _ MIAL _ Soil Texture code: _ FISA Upland or Wettand/Ripagian (circle one) % Surface cover: (Incl. outcrops) (>600 m diam) (25-60 m) (7.5-25 m) (2mm-7.5 m) (Incl sand, mud) H20: O BA Stems: 4 Litter:] 2 Bedrock: O Boulder: O Stone: O Cobble: O Gravel: Fines: 23 = 100% % Current year bioturbation < _ Past bioturbation present? Yes / (No) 4% Hoof punch _ MA Fire evidence: Yes / @ circle one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Very _ humocky + A: is two af from old Marce trailing to grave w/ early phenology - K: Moo test coston woods EW O Constal - Figure / fair flat and w/ early phenology - K: Moo test coston woods EW O Constal - Figure / fair flat = 0, 11 / grave = humocky - for flat yearly flat = for costo. Normey - dredye dailing flat = humocky - for flat yearly + A: is two af for coston woods EW O Constal - Figure / fair flat = for coston woods EW O Constal - Figure / fair flat = for coston woods EW O Constal - Figure / fair flat = for coston woods EW O Constal - Figure / fair flat = for coston woods EW O Figure / fair flat = for coston woods
Exposure, Actual : or (c) yes SW Prat variable Steepness, Actual : or (c) yes Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating Geology code: AL Soil Texture code: Stepness, Actual : or (c) result in the source of the soil of
Topography: Macro: top upper mid lower bottom Micro: convex flat concave undulating Geology code: MIAL Soil Texture code: ISA Upland or Wetland/Ripasjan (circle one) % Surface cover: (Incl. outcrops) (>600cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) H20: O BA Stems: 4 Litter: 7 & Bedrock: O Boulder: O Stone: O Cobble: O Gravel: 1 Fines: 33 =100% % Current year bioturbation Past bioturbation present? Yes / (No) % Hoof punch // A Fire evidence: Yes / (No) circle one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Very_hum.ockly + A is twood from old Micro: dot fire, if known. A gravel: 1 Site history, stand age, comments: Very_hum.ockly + A is twood from old A is twood from old For work for wor
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $
% Surface cover:(Incl. outcrops) (>60cm diam)(25-60cm)(7.5-25cm)(2mm-7.5cm)(Incl sand, mud)H20: OBA Stems: 4Litter: 7.2Bedrock: OBoulder: OStone: OCobble: OGravel: IFines: 3.3 =100%% Current year bioturbation Past bioturbation present?Yes / (N) % Hoof punchN/AFire evidence:Yes / (N) is the bistory section, including date of fire, if known.Site history, stand age, comments:Veryhumocky +A is twobalfrom oldMine:tailingthformoffenmdes Staryordercotton woodsEWO cientedformformformoffenoffenoffenO cientedformformformoffenoffenoffenO cientedformformformformoffenoffenO cientedformformformformoffenoffenO cientedformformformformoffenoffenO cientedformformformformoffenoffenO cientedformformformformoffenformoffenO cientedformformformformformoffenformO cientedformformformformformformformDisturbanceformformformformformformformDisturbanceformformformformformfor
H20: O BA Stems: 4 Litter: 72 Bedrock: 6 Boulder: 6 Stone: 6 Cobble: 6 Gravel: 1 Fines: 73 =100% % Current year bioturbation 1 Past bioturbation present? Yes / (No) 1 % Hoof punch <u>MA</u> Fire evidence: Yes / Robertele one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Very hummocky + A is twobed from old mine tailings, open modes Story inder cotton woods EW origination of the present of the story of the story of the story for the story for the store of the story of the store of
% Current year bioturbation ≤ Past bioturbation present? Yes / (No) % Hoof punchA Fire evidence: Yes / (No) circle one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Very hummocky + distributed from old mine tailing, Open mades Stary under cotton woods EW or install, Riperion, fairly under open, very few startes, lots of grass w/ early phenology, kind or tesraced, cotton woods, lock add daraght stressel, No. IVS yet, hots of mistletoe. Mining - dredye tailingt = hummocky; Intersteed / Intensity (L,M,H): 05/M 09/L / "Other"
Fire evidence: Yes / Dicircle one) If yes, describe in Site history section, including date of fire, if known. Site history, stand age, comments: Very hummocky + A is twied from old mine tailingt, Open index Story index cotton woods EW Driemted _ Provide _ fairing where open, very few strubs. Lots of grass w/ early phenology. Kind of terraced, Cotton woods lock add / drought stressel. No. Ivs yet, Lots of mistletoe. Mining - dredge dailingt = hummocky; Early phen means herb to incomplete; correct low Early phen. means herb to incomplete; correct low 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> decedent(>25% dead) Herbaceous: <u>H1</u> (<12° playtht), <u>H2</u> (>12° ht) mill get higher for any week of db) Desert Riparian Tree: 1 (<15° base diameter), 2 (1.5-6° diam.), 3 (>6° diam.) UNTERPETENTION OF STAND
Site history, stand age, comments: Very hummocky + distributed from old Mine tailings, Open indes Story index cotton woods EW Driented Proving, fairly wile, open, very few strubs. Lots of grass w/ early phenology, kind of terraced. Cotton woods, lock add/drought stressel. No. Ivs yet, Lots of mistletoe. Mining - dredge dailings = hummocky, Early phen. means herb tD incomplete, correct low Early phen. means herb tD incomplete, correct low 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> decedent(>25% dead) Herbaceous: <u>H1</u> (<12" playtht), <u>H2</u> (>12" ht) will get higher this of say w/ leab of db) Desert Riparian Tree/Shrub: 1 (<2f. stem ht), 2 (1-6" diam.), 3 (>6" diam.) ULINTERPRETATION OF STAND
Lots of grass w/early phenology, kind of testaced. Lots of grass w/early phenology, kind of testaced. Lots of mistletoe. Mining - dredge dailings = hummorky. Early phen. mems herb to momplete; corer ton <u>Early phen. mems herb to momplete; corer ton</u> <u>II. HABITAT DESCRIPTION</u> 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 decademt</u> (>25% dead) Herbaceous: <u>H1</u> (<2" playtht), <u>H2</u> (>12" ht) $mill gat higher (hard to say w/ leab of db)) Desert Riparian Tree/Shrub: 1 (<2ft. stem ht), 2 (1-56" diam.), 3 (>6" diam.) WINTERPRETATION OF STAND$
$\begin{array}{l} \begin{array}{l} \begin{array}{l} \begin{array}{l} \begin{array}{l} \begin{array}{l} \begin{array}{l} \begin{array}{l} $
Early Phen. means herb tD manpete, cover the formation of the provided state provided state of the provided state of the provided
Disturbance code / Intensity (L,M,H): $05/M$ $01/L$ // "Other" // "Other" // "III. 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> decadents (>25% dead) Herbaceous: <u>H1</u> ($(12^{\circ}$ pla)t ht), <u>H2</u> (>12" ht.) $\sim 11\sqrt{9} + h\sqrt{16} + h1$
II. HABITAT DESCRIPTION Tree DBH : $\underline{T1}$ (<1" dbh), $\underline{T2}$ (1-6" dbh), $\underline{T3}$ (6-11" dbh), $\underline{T4}$ (11-24" dbh), $\underline{T5}$ (>24" dbh), $\underline{T6}$ multi-layered (T3 or T4 layer under T5, >60% cover) Shrub: $\underline{S1}$ seedling (<3 yr. old), $\underline{S2}$ young (<1% dead), $\underline{S3}$ mature (1-25% dead), $\underline{S4}$ decadent (>25% dead) Herbaceous: $\underline{H1}$ (<12" plat ht.), $\underline{H2}$ (>12" ht.) \cdots 11% ga + herbaceous: $\underline{H1}$ (<12" plat ht.), $\underline{H2}$ (>12" ht.) \cdots 11% ga + herbaceous: $\underline{H1}$ (<20ft. 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 (<15" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.) ULINTERPRETATION OF STAND
Tree DBH : $\underline{T1}$ (<1" dbh), $\underline{T2}$ (1-6" dbh), $\underline{T3}$ (6-11" dbh), $\underline{T4}$ (11-24" dbh), $\underline{T5}$ (>24" dbh), $\underline{T6}$ multi-layered (T3 or T4 layer under T5, >60% cover) Shrub: $\underline{S1}$ seedling (<3 yr. old), $\underline{S2}$ young (<1% dead), $\underline{S3}$ mature (1-25% dead), $\underline{S4}$ decadent (>25% dead) Herbaceous: <u>H1</u> (<12" plant ht.), <u>H2</u> (>12" ht.) \longrightarrow 11% ga + hybrid for Sary w/ wab of (5) Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) Desert Palm/Joshua Tree: 1 (<15" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.) HI INTERPRETATION OF STAND
Shrub: <u>S1</u> seedling (<3 yr. old), <u>S2</u> young (<1% dead), <u>S3</u> mature (1-25% dead), <u>S4</u> decadem5(>25% dead) Herbaceous: <u>H1</u> ((2^{n}) plat ht.), <u>H2</u> (>12" ht.) ~ 111 ga + hyper from (1-25% dead) Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) Desert Palm/Joshua Tree: 1 (<15" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.) ULL TERPRETATION OF STAND
Herbaceous: <u>H1</u> (<12" pla) tht), <u>H2</u> (>12" ht.) ~ 111 ga + h yber theo Desert Riparian Tree/Shrub: 1 (<2ft. stem ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.) Desert Palm/Joshua Tree: 1 (<15" base diameter), 2 (1.5-6" diam.), 3 (>6" diam.)
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.) ULINTERPRETATION OF STAND
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: Populms freemonti
Field-assessed Association name (optional):
Adjacent Alliances/direction: Holocorpha / N.
Confidence in Alliance identification: L M (H) Explain:
Phenology (E.P.I.): Herb F Shruh F Tree F Other identification or mapping information:

Combined Vegetation Rapid Assessment and Relevé Field Form (Revised March 27, 2048)

Databa	se #: <u> </u>	SPECI	ES S	HEET
IV. VE	GETATION DESCRIPTION		5.2	
	رى ب ب	I pe n	%	NonVasc cover: O Total % Vasc Veg cover
% Cove	- Conifer tree / Hardwood tree: 🔿 /	1 Rege	nera	ting Tree: O Shrub: 4 Herbaceous: 5
Height (Class - Conifer tree / Hardwood tree: //	(O Reg	enera	ting Tree: Shrub: Herbaceous:
Hei	ght classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2	-5m, 5=5-10	m, 6	=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>2
	Stratum categories: T=Tree, A = SA	Apling, E = S	Eedli	ng, S = Shrub, H= Herb, N= Non-vascular
Stratum	% 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
T	Populus Fremontii	10		
5	Toxicodendron diressilor	2. 3		
1-1	bromus diandrus	30		
H	Vicia sp.	20		
5	Salix sp.	<1	C	
H	Br. e. legens			
-	Provins and	11		
5	A pulselis	<1		
	C. privice of a		-	
	(Fermionion marins	51		
1	Clymus capat - medusa	e	-	
	Oeb physes (Lilies)		-	
1	Torrilios avensis	<1		
	Centancea Solt, talis	<1		
	Stipm sp.			
-	Cardnus pyc	$\langle \rangle$		
	(> Ffee -berry	<1		
	۵.			
C	Mistletre	1		
>	v	,		
			-	
			_	

Page 2

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

Recorder: Meli 459	Other Surveyors:	Date: 9	12-21 Return? 0
Waypoint ID:	GPS Name Civille Proje	cted? No/ Yes / Base / Digit	ized
K003-R	If Yes, enter: Bearing (°):	Distance (m): Incli	nation (°):
UID:	If Yes or Digitized, enter: Base Way	ooint ID:	
Location Name:	Rase / Projected (circle one) Record either U	TMs or Decimal Degrees GPS	error: ft./ m./ PDOP
Prairie City	UTMs: UTME	UTMN	
	Decimal degrees: LAT 38.6039	84 LONG-121.1	60254
Stand Size <1) 1–5 >5	Camera: Photos: 593-596	aNS	View Radius
Exposure, Actual º: _//	NE NW SE SW Flat Variable Ste	epness, Actual °: <u>NA</u> 0°	1-5° > 5-25° > 25
Field Alliance name: Fr	acony on Calgon ntum Durling	Alliance 597 9	E from point
Comments: beltra N	Mill but repeating at lowe	r band of hummi	cky mounds h
diff over of not	ive forms w, Errogorium =	sparsely but consi.	stly throut.
In Imagery look f	or darker owen of Erio conum).	Discontinuous N	rounds. Undulati
% Cover: Conifer & Har	wood Total Tree C Regen Tree C	Shruh C Herb 40 Total Ver	46 Exotics (I M H)
Strata Species	% cover Strata Species	% cover Strata Species	/ C Exolics (E,M,H)
priogon um nu	erain Eradium both	rys 7 Inysa	no carpus cravipes a
Escholzia lobbi	1 Cupinus bicz	for 2 Geo	phytes unk. <
Holocarphav	gata 21 Plantago crec	a 21 uni	nowngrass 1
Richelostema Rapi	otum <1 Plagiobothrue	notherulaisal Gra	ses at
	TECHOR WIT & CREAT CONTACT		

Recorder	MVP Ot	her Surveyor	rs:					Date: 3-	7-21	Return	n? 🗹
Waypoi n Р	и ID: С004 If	PS Name <u>⊤</u> Yes, enter:	Bearing	Proj (°):	ected? (Distand	No/ Yes ce (m): _	/ Base	/ Digitize Inclina	d tion (°)	for :	r bette
UID:	If	Yes or Digit	ized, enter:	Base Way	ypoint II	D:					
Location	Name: Ba	se / Project	ed (circle on	e) Record either	UTMs or D	Decimal De	grees	GPS erro	or: ft./ m	/ PDO	Р
P	(U1	Ms: UTME			UTMN						
	De	imal degrees: l	LAT <u>3</u> 8	.5993	23	LONG -	12	1.14	154	173)
Stand Siz	e <1 1-5 >5 Ca	mera: Mel's	Photos:	collector	-		100	+ photol	³⁰ View	w Radiu	15
Exposure	, Actual °: NE	NW SE	SW Flat	Variable Si	teepness,	Actual °	7	0° 1-5	5° > 5	-25°	> 25
Field Alli	ance name: Sali	(goodi	vii) 1	Allionce							٨
Field Alli	s: Stand ju schinent A Willon	. (goodi st a fe basin s are	vii) w me trat not	Allionce Hors wi epets 5 leabed	de, e coppe ont	edge 1 o	n+b	pora	Few	y -	aped V
Field Alli Commen % Cover:	s: Stand Ju Schiment M W illon Conifer O Hardwood	Copodi the fe basin s are 5 Total T	vii) w me trat not Free 5 R	Allionce Hors wi gets 5 Leabed Seedings Legen Tree (F)	de, e coppe out Shrub 4	edge d on Herb	5	enery Total Veg []	Ferro Ferro 3 Exco	rf - hu Gran	aped 1.H) M
Field Alli Commen % Cover: - Strata Spe	s: Stand ju Schinent A Willon Conifer O Hardwood cies	Cyoodi Hafe basin Save <u>5</u> Total T % cover	vii) w me trat not <u>Strata</u> Spec	Allime Hos wi gets s leabed Seed	de coppe out Shrub 4	edge h n Herb % cover	5 Strate	every Total Veg []	Ferro	rf <hr< td=""><td>1,H) M % cove</td></hr<>	1,H) M % cove
Field Alli Comment % Cover: 1 Strata Spe β	ance name: Sali s: Stand Ju Schiment A Willon Conifer O Hardwood cies P verse frewarti	C good i y + a Fe b as in S ave 5 Total T % cover 1	vii) w ne trat not <u>Stree 5 R</u> <u>Strata Spec</u> <u>Ba</u>	Allionce +CS wi gets S leabed sudip legen Tree (1) ies choris P	de cooper out Shrub 4	edge A A Herb % cover	5 Strats	Total Veg []	Be Exc	tics (L,M	1,H) M % cove
Field Alli Commen % Cover: 9 Strata Spe P a Strata Spe	s: Stand ju schiment A willon Conifer O Hardwood cies P ulus freuenti ulix spp:	Cogoodi + A Fe basin 5 are 5 Total 7 % cover 1 4 C	vii) w me trat not Strata Spec Ba Ty	Allionce Hors wi gets 5 Leabed Seed p Legen Tree (1) ies	de , e coppe ont <u>Shrub 4</u> interis	Herb % cover 4 D	5 Stratz	Total Veg [] Species	BE Exc	y - lu y tics (L,M	1,H) M % cove
Field Alli Commen % Cover: 1 Strata Spe 0.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5.2 5	ance name: Sali s: Stand ju Schiment A will on Conifer O Hardwood cies P vers frewarti divession un	Copodi + a fe basin 5 ave 5 Total % cover 1 4 C (F)	vii) w me trat not Strata Spec Ba Ty Q.	Allionce Hos wi gets 5 cobed Sechip legen Tree (1) ies choris P tpha damplessi sech	shrub 4	Herb % cover 4 D	5 Stratz	Total Veg [] Species	Be Exc	y < hu ym tics (L,M	1.H) M 5

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

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

Reco	der: melissa	Other Survey	ors: f.d.	-1 Roje Ka	12 Cate Not.	rzie La	Date: D_1	Return?		1
Way	point ID:	GPS Name	vin	ble Pr	ojected? No / Y	es / Bas	e / Digitized			
PL	004	If Yes, enter:	Bea	ring (°):	Distance (m)	:	Inclinatio	n (°):		
UID:		If Yes or Dig	itized, e	nter: Base W	aypoint ID:					
Loca	tion Name:	Base / Projec	ted (cire	ele one) Record eithe	r UTMs or Decimal	Degrees	GPS error:	t.)m./ PDOP_	9	
Pro	icis city	UTMs: UTME			UTMN			20		10
		Decimal degrees		<u>58.599</u>	323 LON	G-12	1.143	5473		
Stand	Size: <1) 1-5 >5	Camera: phone	a's Pho	tos:	1 as moored by			View Radius	- m	Eyeball
Expo	sure, Actual °:	NE NW SE	SW	Flat Variable	Steepness, Actua	°:	0° · 1-5°	> 5-25° > 3	25	possible
Field	Alliance name: Sal	xapodin	cali	Alliance						1
Com	nents:Narron 1 ban 1 gels Scooperton;	d around p t. periodia	shd Ily.	Phenology +	to early fs	r 104	caver is	lsvi Sedime	2.17	
% Cov	er: Conifer O Hardy	rood 5 Total	Tree 3	Eagan Tran t	Shark Lk II	. 5	12	0		
Strata	Species	% cover	Strata	Species	He	r Strat	a Species	Exotics (L(M)H) % cover	
T	Populus fre	2. 1	S	Overie to	RIASSIIZI	6	Toxical	dian l'	., ,	
TIS I	Salix Dilasiole	12 4 C	Н	grasses U	identer 5	\square	IURICOZENO	Iron Alvers	1/0601	n+(trace)
S	Burrhanis pilu	0415 5	H	Typha sp.	+					

-ch

For Office Use:		rmai vegetation type.		
I. LOCATIONAL/	ENVIRONMENTAL	DESCRIPTION	,	circle: Relevé or RA
Database #:	Date:	Name of recorder:	eah	1
Propr	3-17-8	Other surveyors: R	osie + Torr	and
rcws	UID:	Location Name: Q	airie City	
GPS name: Bad	FIF	For Relevé only	Bearing ^o , left axis at I	D point of Long / Short side
UTME		IN I	Zone: 11 NAD	B3 GPS error ft m / PDOP 15
Decimal degrees:	LAT <u>38.5</u>	98846 LO		40861
GPS within stand	1? Yes / No If No	o, cite from GPS to stand: distance	(m) bearing °	inclination ^o
and record: Base	point ID	Projected UTMs: UT	ME	UTMN
Camera Name: ip	honecardinal	photos at ID point: 1, 2, 3	34 N.E.S.V	U
Other photos:	~		, , ,	
Stand Size (acres): Exposure, Actual °	<1, 1-5, >5) P : <u>309</u> NE NW	lot Area (m ²): 100/ SE SW Flat Variable S	Plot Dimensions x teepness, Actual °: \rightarrow	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Topography: Ma	cro: (top upper	mid lower bottom M	licro: convex flat	concave undulating
Geology code: SA	AL Soil Text	ure code: MESH	Upland or Wetland/I	Riparian (circle one)
% Surface cover:	(1	ncl. outcrops) (>60cm diam) (2	5-60cm) (7.5-25cm) (2	2mm-7.5cm) (Incl sand, mud)
H20: 🚫 BA Stem	is: 2 % Litter: 80	Bedrock: 🗇 Boulder: 🔿 S	Stone: 🔿 Cobble: +	Gravel: 1% Fines: 17 =100%
% Current year bi				
Fire evidence: Yes	s (No) (circle one) If; age, comments: This femced off-	rast bioturbation present? The yes, describe in Site history sections sport of the stand in the otily the ing Ro	s / No % Hoot p on, including date of fire, s highly dist ad disturban	unch a slittle ind, abut if known. Cleaning bra <u>A 1 bed</u> , <u>Stavid contin</u> <u>Cl is high N8537</u> Cl is high N8537
Fire evidence: Yes Site history, stand to SW.4 is For Shind (F kariovs So early so id omal Oaks	s (No (circle one) If age, comments: Thi fer ced eff- ords not tolo. pest aspects difficult to a	rast bioturbation present? The yes, describe in Site history sections spart of the stand in the otil troils Ro (into a ccount for A lot of downed by over is low. Oaks) planted in the	s / 10 / % Hoot p on, including date of fire, s highly dist ad distribut Surfice cover anchest wood some large (= 0	unch O Rittle MC, down if known. Clishigh NB5-30% O. Rolling tymain w y clebris, Phenology Dd). Looks like som Stond to SW.
Fire evidence: Yes Site history, stand to SW. 4 is Fro Shind (F barious So Sarly so id Small Oaks	s (No (circle one) If age, comments: This fer cod eff- ads not tolo. pest aspects difficult to compare bare bar	rast bioturbation present? The yes, describe in Site history sections spart of the stand in no otily troils) Ro what is a count for A lot of downed by over is low. Oaks i planted in the	es / 10 / % Hoot p on, including date of fire, s highly dist ad distribut Surfice care anchest wood some lawge (= 0	unch O Rittle MC, 2000 if known. Cleanying bra A 1 bed. (Stand contin Cl is high N85-32% C). Rolling terrain w y de bris. Phenology Id). Looks like som Stord to SW.
Fire evidence: Yes Site history, stand to SWA is the SAND (A bar 1045 Star Sar 14 60 ID SMall Oaks Disturbance code /	Intensity (L,M,H): Q	2 st bioturbation present? A yes, describe in Site history sections spart of the stand in no ot IV trails) Ro (into a ccou ni Err A lot of downed br over is low. Oaks i planted in the 2/H 05/H /	s/ (g) % Hoot p on, including date of fire, s highly dist ad disturban surfice cover anchest wood surfice cover ferred-off	unch Rittle MC, 2000 if known. Clean jury bra Albed. (Stand contin Clishigh ~ 25-370 C). Rolling tyrrain w y clebris. Phenology Id). Looks like som Stond to SW.
Fire evidence: Yes Site history, stand to SWA is the SWA (A bar ious stand Sar ly so ID SMAL Oaks Disturbance code / II. HABITAT DES	Intensity (L,M,H): Q	21H 05/H	es/No/ / % Hoot p on, including date of fire, s highly dist ad distribution surfice cover anchest wood oure large (= c fenced-off	unch Riffle MC, about if known. Clean jury bra Albed, (Stand contin Clishigh ~ 25-30 C). Relline tyrrain w y clebris. Phenology Id). Looks like som Slond to SW.
Fire evidence: Yes Site history, stand i to SW. 4 is For chand (F kariovs so early so iD omall oaks Disturbance code / II. HABITAT DES Tree DBH : T1 (<1)	Intensity (L,M,H): (CRIPTION Control of the control of the cont	rast Dioturbation present? The yes, describe in Site history sections spart of the stand in no ot IV troils Ro into a coor of for a lot of downed by over is low. Oaks i blanted in the 2/H_ OS/H	s / 10 / % Hood p on, including date of fire, s highly dist ad disturban Surface cover anchest wood sare large (= 0 fer Cod-07 15) 24" dbh), <u>T6</u> multi-la	unch Riffle M.O., 2000 if known. Clearing bra Albed, (Stand contin Clishigh ~ 25:302). Rolling tyrain w y clebris, Phenology Id). Looks like som Slond to SW. / /
Fire evidence: Yes Site history, stand is to SW. 4 is	Intensity (L,M,H): Q (3 yr, old), S2 young (3 yr, old), S2 young	2 (5 11" dbh), T4 (11-24" dbh), T (12% dead), S3 mature (1-25% d	s/ 10 % Hoot p on, including date of fire, s highly dist ad disturban Surfare cover anchest wood sare large (= 0 fer Cod- 0 (5) 24" dbh), <u>T6</u> multi-la lead), <u>S4</u> decadent (>25%	unch Riffle M.C. 2000 if known. Clearing bra Albed, (Stavel contin Clishigh ~ 25:302). Rolling tyrain w y Clebris, Phenology Id). Looks like som Slord to SW. / /
Fire evidence: Yes Site history, stand is to SW. 4 is fro SW. 4 is star back Shrub: SI seedling Herbaceous: H1 (<)	Intensity (L,M,H): (<3 yr. old), <u>S2</u> young (23 yr. old), <u>S2</u> young (21 yr. old), <u>S2</u> young (21 yr. old), <u>S2</u> young (21 yr. old), <u>S2</u> young (21 yr. old), <u>S2</u> young	Past bioturbation present? The yes, describe in Site history section spart of the stand in the stand in the stand of downed by over is low. Oaks blanted in the 2/H_05/H_/ (<1% dead), <u>S3</u> mature (1-25% of the	s/ 10/ 1 % Hoot p on, including date of fire, Shighly dist ad distribut Surface caver anchest wood sare large (= 0 fewCed- off 5) 24" dbh), <u>T6</u> multi-la lead), <u>S4</u> decadent (>25%	unch
Fire evidence: Yes Site history, stand i to SW. 4 is fro SW. 4 is star bar is SW. 4 is to SW. 4 is fro SW. 4 is star bar is SW. 5 is star bar is SW.	Intensity (L,M,H): $(3 \text{ yr. old}, 52 \text{ young} (-3 \text{ yr. old}, 52 \text{ yr. old} (-3 \text{ yr. old} $	As to both the stand of the sta	s/ 10/ 1 % Hoot p on, including date of fire, Shighly dish ad distribut Surface cover anchest wood sare large (= 0 fewCed- off (5) 24" dbh), <u>T6</u> multi-la lead), <u>S4</u> decadent (>25%	unch
Fire evidence: Yes Site history, stand i to SW. 4 is for Switch S for Switch S for Switch S Swall Sale Disturbance code / II. HABITAT DES Tree DBH : <u>T1</u> (<1' Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<1) Desert Riparian Tr Desert Riparian Tr	Intensity (L,M,H): ((<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S1</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S1</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S1</u> young (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S1</u> young (<3 yr. old), <u>S1 young</u> (<3 yr. old), <u>yr. old</u> (<3 yr. old), <u>y</u>	As to both the top of the stand	s/ 10 % Hoot p on, including date of fire, Shighly dist ad distribut Surge caver anchest wood sare large (= 0 few Cod- off [s] 24" dbh), <u>T6</u> multi-la lead), <u>S4</u> decadent (>25%	unch
Fire evidence: Yes Site history, stand i to SW.4 is for SW.4 is for SW.4 is for SW.4 is for SW.4 is for SW.4 is for SW.4 is source of the Swall Cake Disturbance code/ II. HABITAT DES Tree DBH : <u>T1</u> (<1" Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<1" Desert Riparian Tr Desert Palm/Joshu: UL INTERPORT	Intensity (L,M,H): $(23 \text{ yr. old}, 52 \text{ yours}$ (33 yr. old, 52 yours (33 yr. old, 52 yours (23 yr. old, 52 yours (23 yr. old, 52 yours (27 yr. old, 52 yours) (27 yr. old, 52 yours (27 yr. old, 51 yr. or 51 yr. 50 yr. 51	Past bioturbation present? The rest describe in Site history sections S part of the stand in $S part of the stand in S (-11" dbh), T4 (11-24" dbh), T S (-11" dbh), T4 (11-24" dbh), T S (-11" dbh), T (11-24" dbh), T S (-11" dbh), T (11-24" dbh), T (-125% ch the stand in S (-11" dbh), T (-125% ch the stand in S (-11" dbh), T (-125% ch the stand in S (-11) = 0 (1.5-6" diam.), S (-6)S (-11) = 0 (1.5-6" diam.), S (-6)$	es / 10° % Hoot p on, including date of fire, Shighly dist ad disturban Surge cases and here cases and here two surge large (= 0 few Cod- off few Cod- off few Cod- off large (= 0 few Cod- off surge (= 0 few Cod- off few Cod- off ht, ht) St decadent (>25%	unch
Fire evidence: Yes Site history, stand i to SWA is for SWA is for SWA is for SWA is for SWA is source of the source of the isturbance code/ II. HABITAT DES Tree DBH : <u>T1</u> (<17 Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<17 Desert Riparian Tr Desert Riparian Tr Desert Palm/Joshu: III. INTERPRETA	Intensity (L,M,H): (23 yr. old) , 52 yours (33 yr. old), $52 yours(23 yr. old)$, $52 yours(27 yr. old)$, $52 yours(27 yr. old)$, $(27 t. ste)(27 t. ste)(27$	Past bioturbation present? The rest describe in Site history sections S part of the stand in $S part of the stand in S (-11" dbh), T (11-24" dbh), T S (-11" dbh), T (11-24" dbh), T (-125% ch (-11" dbh), T (11-24" dbh), T (-125% ch (-11" dbh), T (11-24" dbh), T (-125% ch $	es / 10° % Hoot p on, including date of fire, Shighly dish ad distribution Surge care and here care and here care and here two surge large (= 0 few Cod- off few Cod- off few Cod- off few Cod- off ht, St decadent (>25% ht, 4 (>20ft. ht.) O " diam.) O	unch
Fire evidence: Yes Site history, stand i to SWA is for SWA is for SWA is for SWA is for SWA is source of the Disturbance code / II. HABITAT DES Tree DBH : <u>T1</u> (<1' Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<1' Desert Riparian Tr Desert Palm/Joshu: <u>H1. INTERPRETA</u> Field-assessed veree	intensity (L,M,H): (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S1</u> young (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S1 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S1 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S1 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S1 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S2 young</u> (<3 yr. old). <u>S1 young</u>	As to both the top of the stand	es / 10° % Hoot p on, including date of fire, Shighly dist ad distribution Surge care and here care and here two sare large (= 0 few Cod- off few Cod- off few Cod- off few Cod- off ht, 4 (>20ft. ht.) O " diam.) O	unch
Fire evidence: Yes Site history, stand i to SMA is for SMA is for SMA is for SMA is source solution Disturbance code / II. HABITAT DES Tree DBH : <u>T1</u> (<1' Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<1' Desert Riparian Tr Desert Palm/Joshu: III. INTERPRETA Field-assessed Asso	intensity (L,M,H): (<3 yr. old). <u>S2</u> young (<3 yr. old). <u>S4</u> young (<3 yr. old). <u>S4</u> young (<3 yr. old). <u>S4</u> young (<3 yr. old). <u>S4</u> young	As to both the top of the stand	s / 10 % Hoot p on, including date of fire, S highly dist ad distribut Surge care and het wood surge large (= 0 few Cod- off few Cod- off few Cod- off few Cod- off few Cod- off ht, 4 (>20ft. ht.) O " diam.) O	unch
Fire evidence: Yes Site history, stand i to SWA is to SWA is to SWA is to SWA is to SWA is to SWA is solvers is and oaks oaks Disturbance code / II. HABITAT DES Tree DBH : <u>T1</u> (<1' Shrub: <u>S1</u> seedling Herbaceous: <u>H1</u> (<1' Desert Riparian Tr Desert Riparian Tr Desert Palm/Joshu: III. INTERPRETA Field-assessed vege Field-assessed Asso Adjacent Alliances/	intensity (L,M,H): (CRIPTION CRIPTION CAS not tolo, CRIPTION	As to both the present? A rest describe in Site history sections Spart of the stand in the otil trails Ro (A lat of downed by over 15 low, Oaks Danted in the 21H 05/H (1% dead), <u>S3</u> mature (1-25% on h.) m h.), 2 (2-10f. h.), 3 (10-20f. tiameter), 2 (1.5-6" diam.), 3 (>6 QUERCUES downed B QUERCUES downed B 1): QUERCUES downed B 1970 SES	s / 10 / % Hoot p on, including date of fire, S highly dist ad distribut Surge care and het wood surge lawge (= 0 few Cod- off few Cod-	unch
Fire evidence: Yes Site history, stand to SWA 5 Fire evidence: Yes Site history, stand to SWA 5 Field-assessed Asso Adjacent Alliances/ Confidence in Allia	Intensity (L,M,H): (age, comments: The feed code of the code of th	2 (6-11" dbh), <u>T4</u> (11-24" dbh), ((<1% dead), <u>S3</u> mature (1-25% c ti,) m h, 2 (2-10ft. ht.), 3 (10-20ft. tiameter), 2 (1.5-6" diam.), 3 (>6 M (H) Explain: cont	s/ (10) % Hoot p on, including date of fire, <u>Shighly dish</u> ad disturban <u>Surface cover</u> <u>andrest wood</u> <u>sare large (= cover fer Cod- off <u>andrest wood</u> <u>sare large (= cover fer Cod- off</u> <u>sare large (= cover fer Cod- off)</u> <u>sare large (= cover</u></u>	unch O Riffle MC, 2000 if known. Clearlying bra A 1 bod. (Stand contin Cl 15 high ~ 25-30). Rolline tyrain w y clebris. Phenology). Looks like som Slond to SW.
Fire evidence: Yes Site history, stand to SWA is to	Intensity (L,M,H): (<3 yr. old), <u>S2</u> young (<3 yr. old), <u>S2</u> youn	A lot of downed by a total of diversion of the stand in the stand in the stand in the stand in the Dianted	s/ 10 % Hoot p on, including date of fire, Shighly dish ad distribut Surface cover and ust wood sare large (= 0 fer Col- 0 fer Col	unch

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

Note - ned to standardize what we do with Road cover 1

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

(Iterised mai	CH 27, 2010)
SPECIES	SHEET

atabase #: <u>PC00</u> 5	(Revised) SPECI	March 2 ES SH	7, 2018) IEET
7. VEGETATION DESCRIPTION			
(more w.	leaves)	% N	NonVasc cover: <u>+</u> Total % Vasc Veg cover: 25
Cover - Conifer tree / Hardwood tree: _0 / 3	Reg	enerati	ng Tree: Shrub: Herbaceous: 25
eight Class - Conifer tree / Hardwood tree:/	Reg	enerati	ng Tree: 🔿 Shrub: Herbaceous:
Height classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5	im, 5=5-10	m, 6]	10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m
Stratum categories: T=Tree, A = SAp	oling, E = S	Eedling	g, S = Shrub, H= Herb, N= Non-vascular
% Cover Intervals for reference: r = trace, + =	= <1%, 1-	5%, >	5-15%, >15-25%, >25-50%, >50-75%, >13%
Talum Species	00000		
Diercus dauglassu	3	\vdash	
Bramus(tiandrus)	12	G	
Hordell M Sp.	12		
Vicia Villosa	ł	\vdash	
Amsinkia sp.	+	C	
stellaria media	+	$\left \right $	
Claytoma pertoliata		+	
Chlorasal Un pomeridianin	n +		
Dichelostemma capitatan	n +		
Galium aparine	t		
Cardwas pychocephela	t		
Avera sp.	1.		
Matricariadecoidea	+		
other arasses	2		
trifolium sp.	t		
1			
	_	\vdash	
		+ +	

	For Office Use:	Final database #:	Final vegetation type: Alliance
	I. LOCATIONAL	/ENVIRONMENTAI	DESCRIPTION circle: Relevé or RA
	Database #:	Date:	Name of recorder: MVP
	010000		Other surveyors: Betsy, Leah, Mc Kenzie, Beth, Katie
	AC 00 0	UID:	Location Name: PCOO 6
	GPS name: M	p phone	For Relevé only: Bearing°, left axis at ID point of Long / Short side
	UTME	UT!	MN Zone: 11 NAD83 GPS error: ft/ m/ PDOP
	Decimal degrees:	LAT	LONG
	GPS within stan	d? Yes / No If N	o, cite from GPS to stand: distance (m) bearing ° inclination °
	and record: Base	e point ID P (D C	O O
	Camera Name: Other photos:	Cardinal	photos at ID point: NESW (on phone [
	Stand Size (acres) Exposure, Actual	: <1, 1-5, >5 I °: NE NW	Plot Area (m²): 100 / Plot Dimensions x m RA Radius <u>40</u> m SE SW Flat Variable Steepness, Actual °: 0° 1-5° > 5-25° > 25
	Topography: Ma Geology code: M	acro: top upper	mid lower bottom Micro: convey flat concave undulating ture code: MCSL Upland or Wetland/Riparian (circle one)
	% Surface cover: H20: (7) BA Ster	ر) ms: Litter: 15	ncl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) Bedrock: ○ Boulder: ○ Stone: ④ Cobble: ⑤ Gravel: [汤 Fines: [₀ [₀ =100%]
	% Current year b Fire evidence: Ye	ioturbation es / 10 (circle one) If	Past bioturbation present? Yes / (N) % Hoof punch 6 Jopher bole go where bole contraction including date of fire, if known.
	Site history, stand	age, comments:	sloped up to 12° uni also flat (1-2°)
(on ing	exposure	abo vorio	hose variable because not I + youral ble. Stand spans flat ridge and slopes
205	on citne	E side N	arrow gulley stills from dirt bike prails.
5 ma	Algo w.	de open	roads, rence divides stand, ratchy
100	baccher 1ª	5 w Deci	assimat toxicorendron particles driven by
	57 55 00 55 1	if only ac	The occastional sansheus, the ballous
	activity	, Cottern wo	and eage of stand. A few coffee berry inds, * 0.
	Exposed PV	c pipe?	, , , , , , , , , , , , , , , , , , ,
	Disturbance code /	Intensity (L,M,H): _	02/H 05/////
	II. HABITAT DES	SCRIPTION	Jules
	Tree DBH : <u>T1</u> (<1	" dbh), T2 (1-6" dbh),	<u>F3</u> (6-11" dbh), <u>F4 (11-24</u>) dbh), <u>T5</u> (>24" dbh), <u>T6</u> multi-layered (T3 or T4 layer under T5, >60% cover)
	Shrub: S1 seedling	g (<3 yr. old), <u>S2</u> young	g (<1% dead), \$3 mature (1-25% dead), \$4 decadent (>25% dead)
	Herbaceous H1 (<	12" plant ht.), H2 (>12"	ht.)
	Desert Riparian Th	ree/Shrub: 1 (<2ft. ste	em ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)
	Desert Palm/Joshu	a Tree: 1 (<1.5" base	diameter), 2 (1.5-6" diam.), 3 (>6" diam.)
	III. INTERPRETA	TION OF STAND	
	Field-assessed you	etation Alliance name	· Bacharis sitularis
	Field assessed Ass	ociation name (ontion	Baccheris oilulain
	Field-assessed Ass		all har analy all among Willow/sediment
	Adjacent Alliances		ne po, your all north basia
Confidence in Alliance identification: L M (H) Explain:			Tree E Other identification or manning information:
	Bachar	15 = evergee	· TODI: some has the bern war
		U	- in side i to the first

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

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Combined Vegetation Rapid Assessment and Relevé Field Form (Revised March 27, 2018) SPECIES SHEET Database #: _ P (006

% Cove	<u>r</u> - Conifer tree / Hardwood tree: <u>O / <</u> Class - Conifer tree / Hardwood tree: <u>NA / T</u>	⊥ Rege ⊁ Rege	enerating Tree: <u>0</u> Shrub: <u>20</u> Herbaceous: <u>5</u> enerating Tree: <u>NA</u> Shrub: <u>3</u> Herbaceous: <u>1</u>
He	ight classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5	m, 5=5-10	m, 6=10-15m, 7=15-20m, 8=20-35m, 9=35-50m, 10=>50m
	Stratum categories: T=Tree, A = SAp	ling, $E = S$	Eedling, S = Shrub, H= Herb, N= Non-vascular
	% Cover Intervals for reference: r = trace, +=	<1%, 1-5	5%, >5-15%, >15-25%, >25-50%, >50-75%, >75%
Stratum	Species	% cover	C Final species determination
	B, p. Intaris	18	
	Sambucus	< 1	X
	Toyi codent in 2 workshow		
Т	P. Fremontij	< 1	
1	Franciala califonica sectionen	ule <	
5	Q. miztenzij	<1	
	He training around flora	-21.	
	Bobana laised a grand		
		<1	
	Tracelia	-11	
	F mil secutor um Kt	10	
	Eroai um + 600- jo	10	
	H. JONS WOLV	41	
	Micropus californica	1	
	Hypocharis	1	
	Cardinas plane ceptonia	1	
	Crassula erecta	<1	
	Vulpia sp	(1)	
	Amsinkia Sp.	<1	
	Nellowstar thistle	<1	· · · · · · · · · · · · · · · · · · ·
	Lomatiun sp.	<1	
	All grasses	5%	
	U		

For Office Use:	Final database #:	Final vegetation type: Alliance	
I. LOCATIONAL	ENVIRONMENTAL	DESCRIPTION circle: Relevé or RA	
Database #:	Date: /	Name of recorder: BH, Melise, M(Kenzie (PCShelf)	
Dr mD/	3/17	Other surveyors:	
1006	UID:	Location Name:	
GPS name: 11/1	nble	For Relevé only: Bearing°, left axis at ID point of Long / Short side	
UTME	UT	AN Zone: 11 NAD83 GPS error: ft/m/PDOP	
Decimal degrees:	LAT .	LONG .	
CPS within stan	de Vas / No ISN		п
and record: Base	noint ID	Projected UTMe: UTME UTME	П
Camera Name: h	Alter Cardinal	nhotos at ID point: NIGCL	_
Other photos:	Clips C cardinal	F	
Etand Elas (same)	I AT THE	NA NA NA	п
Stand Size (acres):		Plot Area (m ²): 100 Plot Dimensions $1 \times m$ RA Radius $7 \vee m$	
Exposure, Actual	NE NW	SE SW Flat Variable Steepness, Actual ^o : 15° > 5-25° > 25	
Topography: Ma	acro: (top (upper)	mid lower bottom Micro: (convex) flat concave undulating	
Geology code: [/]	A Soil Tex	ture code: MGL Upland or Wetland/Riparian (circle one)	
% Surface cover:	.0.	Incl. outcrops) (>60cm diam) (25-60cm) (7/5-25cm) (2mm-7.5cm) (Incl sand, mud)	
H20: 7 BA Ster	ns: 6 Litter: 57	Bedrock: Boulder: Stone: Cobble: 5 % Gravel: 3 % Fines: 6% =100%	
% Current year b	ioturbation O	Past bioturbation present? Yes / No / % Hoof punch	
Fire evidence: Ye	es / No (circle one) If	yes, describe in Site history section, including date of fire, if known.	
Site history, stand	age, comments:	If road vehicle Invaris prior years on flas	fance
COMAND,	NUPAR N	Imild lexe 2620), Bearthe & slow tak - A	G fan
Jonh	il Gupp	top of close > ven slicht slaply show on	How
Alm 5	les the S	the - 10% on other rich of mesh	8
ENTHER	ville at cru	Thes an slappers Fence + round divide stund.	
Patch	BAPI of	anian Totol stands scattered SAMMER	1
Henh. Co	New main	+ surrounding church	
2 POPI	RE at edge	- of stand, Coffee bing charge, QUWI France)	
Bapic	ine regene	with in previously moved our	-
•	U	an it or in it in 21	
Disturbance code	/ Intensity (L,M,H):	<u>02/H 05/11/15/14/36/L</u> "Other"/	
II. HABITAT DE	SCRIPTION		-
Tree DBH : T1 (<	1" dbh), T2 (1-6" dbh),	T3 (6-11" dbh), T4 () -24" dbh), T5 (>24" dbh), T6 multi-layered (T3 or T4 layer under T5, >60% cover)	
Shrub: S1 seedlin	g (<3 yr. old), <u>S2</u> you	ng (<1% dead), S3 mature (1-25% dead), S4 decadent (>25% dead)	
Herbaceous H1	k12" plant ht), H2 (>12	"ht.)	
Desert Rinarian I	ree/Shrub: 1 (<2ft.s	stem ht.), 2 (2-10ft, ht.), 3 (10-20ft, ht.), 4 (>20ft, ht.)	
Desert Palm/Josh	ua Tree: 1 (<1.5" has	e diameter), 2 (1.5-6" diam.), 3 (>6" diam.)	
III. INTERPRET	ATION OF STAND	and a second	-
		Protect it les and	
Field-assessed veg	etation Alliance nam	e: Dacchar's pilvians Strubland Alline	
Field-assessed Ass	ociation name (optio	nal): Bucchance pilu an- associat	
Adjacent Alliance	s/direction: Unn	und/phranic drassan	
Confidence in Alli	ance identification:	L M H Explain:	
Phenology EP.L	Herb & Shrub	\mathbb{R} Tree \mathcal{E} Other identification or mapping information:	
ph	emplagh Di	BAPI 'S lew(-on (everyon)	
1.			

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

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For Office Use:	Final database #:	Final vegetation type: Alliance		
I. LOCATIONAL	ENVIRONMENTAL	DESCRIPTION circle: (Relevé) or RA		
Database #:	Date:	Name of recorder: MVP		
01007		Other surveyors: MIP, Leah, bettigg, Torrance		
4000 I	UID:	Location Name: PCOO7 Prairie City		
GPS name: <u>Bo</u>	d Elif-	For Relevé only: Bearing°, left axis at ID point 1 of Long Short side		
UTME	UTN	AN Zone: 11 NAD83 GPS error: ft./ m./ PDOP		
Decimal degrees:	LAT <u>38.5</u>	97406 LONG 121.142406		
GPS within stan	1? Yes / No If No	o, cite from GPS to stand: distance (m) bearing ° inclination °		
and record: Base	point ID P C O O	Projected UTMs: UTME UTMN		
Camera Name:	cah's photoCardinal	photos at ID point: No elus one of plot; NE		
Stand Size (acres):	<1, (1-5,)>5 F	lot Area (m ²): 100 Plot Dimensions 10 _ x 10 m RA Radius m		
Exposure, Actual	: <u>227</u> NE NW	SE SW Flat Variable Steepness, Actual $^{\circ}$: 15 0° $1-5^{\circ}$ $\geq 5-25^{\circ}$ > 25		
Topography: Ma	icro: top upper	mid lower bottom Micro: convex flat concave undulating		
Geology code:	Soil Tex	ture code: <u>MCDL</u> Uptand or Wetland/Riparian (circle one)		
% Surface cover: H20: O BA Ster	(I ns: <) Litter: م	ncl. outcrops) (>60cm diam) (25-60cm) (7.5-25cm) (2mm-7.5cm) (Incl sand, mud) Bedrock: Boulder: Stone: Cobble: \ Gravel: 5 Fines: 65 =100%		
% Current year b	oturbation (F)	Past bioturbation present? (Yes) No % Hoof punch Graziz allowed		
Fire evidence: Ye	No (circle one) If	yes, describe in Site history section, including date of fire, if known.		
Site history, stand	age, comments:	Lack of grass is distinctive, Post-fire -		
grassland	inder blue	oak, Burned Fall 2020. Erod um, Diche Worten		
other ge	ophyses,	escassula is bright red + stands out. Bioturbation		
is From moles/go phers/ground, Olde con-pice present from grossing				
Soil see	ns thin-	mutrient poor compared to under		
trees, swronded by the oak. Annual veg prob driven				
by reunt fire				
	The second parts			
Disturbance code /	Intensity (L,M,H):			
II. HABITAT DES	OCKIPTION			
Tree DBH : <u>T1</u> (<1	"dbh), <u>T2</u> (1-6" dbh), <u></u>	<u>F3</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: S1 seedling	g (<3 yr. old), <u>S2</u> young	g (<1% dead), $\underline{S3}$ mature (1-25% dead), $\underline{S4}$ decadent (>25% dead)		
Herbaceous:	12" plant ht), H2 (>12"	ht.)		
Desert Riparian Ti	ree/Shrub: 1 (<2ft. ste	m ht.), 2 (2-10ft. ht.), 3 (10-20ft. ht.), 4 (>20ft. ht.)		
Desert Palm/Joshu	a Tree: 1 (<1.5" base	diameter), 2 (1.5-6" diam.), 3 (>6" diam.)		
III. INTERPRETA	TION OF STAND	Sum Neurola Easthills Vau		
Field-assessed vege	etation Alliance name	see that the top the top the top		
Field-assessed Asso	ciation name (option	al): Blue Oak, grusto		
Adjacent Alliances	/direction:	//		
Confidence in Allia	nce identification: I	M H Explain:		
Phenology (E.P.L.)				
	Herb Shrub	Tree Other identification or mapping information:		
1 Henology (2,1,2)	Herb Shrub	Tree Other identification or mapping information:		
	Herb Shrub	Tree Other identification or mapping information:		

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

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Combined Vegetation Rapid Assessment and Relevé Field Form

(Revised Water 27, 2010)
SPECIES SHEET

<u>% Cove</u> <u>Height (</u> <i>Hei</i>	r - Conifer tree / Hardwood tree:/ Class - Conifer tree / Hardwood tree:/ eht classes: 1=<1/2m, 2=1/2-1m, 3=1-2m, 4=2-5	∑ Rege ∑ Rege m. 5=5-10	% enera enera	NonVasc cover: Total % Vasc Veg cover: 24 uting Tree: Shrub: Herbaceous: 24 ating Tree: Shrub: Herbaceous: Shrub: Herbaceous: Shrub: Herbaceous: Shrub: Herbaceous: Shrub: Herbaceous: Shrub: Herbaceous: Herbaceous: Shrub: Herbaceous: Herbaceous: Herbaceous: Herbaceous: Herbaceous: Herbaceous: Herbaceous: Her
	Stratum categories: T=Tree, A = SAp	ling, $E = S$	Eedli	ing, S = Shrub, H= Herb, N= Non-vascular >5.15% >15-25% >27-50% >50-75% >75%
Stratum	Species	% cover	C	Final species determination
	Erodium botrus	18		
	Ac Mispon parviflorus	+		
	Aira caryophylla	+		
	Dichellostemon cap.	1		perennial
	Tryphysaria criantha	R		
	Ch lorogalumponeridioniur	NR		perennial
	Crassila connata	3		
	Hypocheris a labra	1		
	Lupinus bicolor	+		
	Briza minima	+		
-	Trifolium sp,	R		
	Onagraceae unk.	R		
	unknown geophytes	+		
	Logfia gallica	R		
	quercus douglassi	R		
	Bromus Sp.	+		
			-	
				,
				A

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

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

Family	Taxonomic name	Common Name	Status/Notes
Asteracaea	Tragopogon porrifolius	Oyster Plant, Salsify	non-native
Asteracaea	Uropappus lindleyi	Silver puffs	
Asteracaea	Wyethia angustifolia	Narrow-leaved mule ears	
Asteracaea	Wyethia bolanderi	Bolander's mule ears	
Asteracaea	Xanthium strumarium	Cocklebur	
Boraginaceae	Amsinckia intermedia	Common fiddleneck	
Boraginaceae	Amsinckia menziesii	Small flowered fiddleneck	
Boraginaceae	Plagiobothrys fulvus var. campestris	Tawny popcornflower	
Boraginaceae	Plagiobothrys greenei	Greene's popcornflower, Greene's allocarya	
Boraginaceae	Plagiobothrys nothofulvus	Rusty popcorn flower	
Boraginaceae	Plagiobothrys stipitatus var. micranthus	Common vernal pool allocarya	
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	
Brassicaceae	Hirschfeldia incana	Mediterranean hoary mustard	non-native
Brassicaceae	Lepidium didymum	Lesser swine cress	non-native
Brassicaceae	Lepidium nitidum var. nitidum	Shining pepper-grass	
Brassicaceae	Raphanus raphanistrum	Jointed charlock	non-native
Brassicaceae	Raphanus sativus	Wild radish	non-native
Brassicaceae	Rorippa curvisiliqua	Curvepod yellow cress	non-native
Brassicaceae	Sisymbrium officinale	Hedge mustard	non-native
Brassicaceae	Thysanocarpus radians	Showy fringe pod	
Caryophyllaceae	Cerastium glomeratum	Chickweed	non-native
Campanulaceae	Downingia bicornuta	Doublehorn downingia	
Campanulaceae	Downingia ornatissima	Horned downingia, Folded downingia	
Campanulaceae	Heterocodon rariflorum	Rareflower heterocodon	
Campanulaceae	Legenere limosa	Legenere	Listed 1B.1, s2, g2
Caryophyllaceae	Minuartia californica	Sandwort	
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

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

Family	Taxonomic name	Common Name	Status/Notes			
Fabaceae	Trifolium variegatum	White-tipped clover,				
		variegatum				
Fabaceae	Trifolium willdenovii	Tomcat clover				
Fabaceae	Vicia benghalensis	Purple vetch	non-native			
Fabaceae	Vicia sativa ssp. sativa	Common vetch	non-native			
Fabaceae	Vicia villosa ssp. villosa	Hairy vetch	non-native			
Fagaceae	Quercus douglasii	Blue oak				
Fagaceae	Quercus lobata	Valley oak				
Fagaceae	Quercus wislizeni	Interior live oak				
Gentianaceae	Centaurium tenuiflorum	Slender centaury	non-native			
Gentianaceae	Cicendia quadrangularis	Oregon timwort				
Gentianaceae	Zeltnera muehlenbergii	Muehlenberg's centaury				
Geraniacea	Erodium botrys	Broad leaf filaree	non-native			
Geraniacea	Erodium cicutarium	Red stem filaree	non-native			
Geraniacea	Erodium moschatum	White stem Filaree	non-native			
Geraniacea	Geranium dissectum	Cut leaved geranium	non-native			
Hypericaceae	Hypericum perforatum	Klamath weed, St. John's	non-native			
		Wort				
Isoetaceae	Isoetes orcuttii	Orcutt's quillwort				
Juglandaceae	Juglans hindsii	Northern CA Black walnut				
Juncaceae	Juncus balticus	Baltic rush				
Juncaceae	Juncus bufonius	Toad rush				
Juncaceae	Juncus capitatus	Leafy bracted dwarf rush				
Juncaceae	Juncus tenuis	Slender rush				
Juncaceae	Juncus uncialis	Inch-high dwarf rush				
Juncaceae	Juncus xiphioides	Iris leaved juncus				
Juncaginaceae	Triglochin scilloides	Flowering-quillwort				
Lamiaceae	Trichostema lanceolatum	Vinegarweed				
Lamiaceae	Mentha pulegium	Pennyroyal	non-native			
Lamiaceae	Pogogyne zizyphoroides	Sacramento mint				
Lamiaceae	Pogoyne douglasii	Douglas' mesamint	new addition			
Liliaceae	Calochortus luteus	Yellow mariposa lily				
Limanathaceae	Limnanthes alba ssp. alba	White meadow-foam				
Limanathaceae	Limnanthes douglasii ssp. striata	Foothill meadowfoam				
Linaceae	Hesperolinon californicum	California dwarf-flax	non-native			
Linaceae	Linum bienne	Narrowleaf flax, Pale flax	non-native			
Lythraceae	Ammannia robusta	Grand Ammannia				
Lythraceae	Lythrum hyssopifolia	Hyssop loosestrife	non-native			
Lythraceae	Lythrum portula	Broad-leaved loosestrife	non-native			

<u>Family</u>	Taxonomic name	Common Name	Status/Notes		
Lythraceae	Lythrum tribracteatum	Three bracted loosestrife	non-native		
Malvaceae	Malva parviflora	Cheeseweed	non-native		
Malvaceae	Sidalcea calycosa	Annual checkerbloom			
Malvaceae	Sidalcea hartwegii	Hartweg's checker-mallow			
Malvaceae	Sidalcea hirsuta	Hairy checkerbloom			
Marsileaceae	Marsilea vestita	Hairy waterclover			
Marsileaceae	Pilularia americana	Pillwort			
Montiaceae	Calandrinia ciliata	Fringed red maids			
Montiaceae	Calandrinia menziesii	Red maids			
Montiaceae	Claytonia perfoliata	Miner's lettuce			
Montiaceae	Claytonia sp.	Miner's lettuce			
Montiaceae	Montia fontana	Water montia			
Myrsinacae	Lysimachia arvensis	Scarlet pimpernel	non-native		
Myrsinacae	Lysimachia minima	Chaffweed	non-native		
Oleaceae	Fraxinus latifolia	Oregon ash			
Onagraceae	Clarkia purpurea ssp. quadrivulnera	Purple clarkia			
Onagraceae	Epilobium brachycarpum	Annual fireweed, Autumn willowweed			
Onagraceae	Epilobium canum	CA fuchsia			
Onagraceae	Epilobium densiflorum	Dense boisduvlia			
Onagraceae	Epilobium torreyi	Narrow biosduvalia, brook willowherb			
Orobanchaceae	Castilleja attenuata	Valley tassels			
Orobanchaceae	Castilleja campestris ssp. campestris	Field owl clover			
Orobanchaceae	Castilleja lacera	Cutleaf owl's clover			
Orobanchaceae	Parentucellia viscosa	Yellow parentucellia, yellow glandweed	non-native		
Orobanchaceae	Triphysaria eriantha ssp. eriantha	Butter and eggs			
Orobanchaceae	Triphysaria sp.	parasite			
Papaveraceae	Eschscholzia californica	California poppy			
Papaveraceae	Eschscholzia lobbii	Frying pan poppy			
Phrymaceae	Erythranthe guttata	Yellow monkey-flower			
Phrymaceae	Diplacus tricolor	Tri-color monkeyflower			
Pinaceae	Pinus sabiniana	Foothill pine, Bull pine			
Plantaginaceae	Callitriche heterophylla	Water starwort			
Plantaginaceae	Callitriche marginata	CA water starwort			
Plantaginaceae	Collinsia sparsiflora	Few flowered collinsia			

<u>Family</u>	Taxonomic name	Common Name	Status/Notes		
Plantaginaceae	Gratiola heterosepala	Bogg's lake hyssop	Listed 1B.2, s2, g2		
Plantaginaceae	Gratiola ebracteata	Common hedge hyssop	non-native		
Plantaginaceae	Plantago coronopus	Cutleaf plantain	non-native		
Plantaginaceae	Plantago erecta	California plantain			
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				
Poaceae	Aegilops triuncialis	Barbed goatgrass	non-native		
Poaceae	Aira caryophylla	Silver hairgrass, Shivergrass	non-native		
Poaceae	Alopecurus saccatus	Pacific foxtail			
Poaceae	Anthoxanthum odoratum	Sweet vernal grass	non-native		
Poaceae	Avena barbata	Slender wild oats	non-native		
Poaceae	Avena fatua	Wild oat	non-native		
Poaceae	Brachypodium distachyon	Purple false brome	non-native		
Poaceae	Briza maxima	Quaking grass	non-native		
Poaceae	Briza minor	Little quaking grass	non-native		
Poaceae	Bromus diandrus	Ripgut brome	non-native		
Poaceae	Bromus hordeaceus	Soft brome, soft chess brome	non-native		
Poaceae	Bromus madritensis ssp. rubens	Foxtail brome	non-native		
Poaceae	Crypsis vaginiflora	African pricklegrass	non-native		
Poaceae	Cynosurus echinatus	Bristly dog-tail grass	non-native		
Poaceae	Deschampsia danthonioides	Annual hairgrass			
Poaceae	Elymus caput-medusae	Medusahead	non-native		
Poaceae	Elymus glaucus	Blue wild rye			
Poaceae	Elymus multisetus	Squirreltail grass			
Poaceae	Festuca bromoides	Brome fescue	non-native		
Poaceae	Festuca microstachys	Small Fescue			
Poaceae	Festuca myuros	Rat-tail fescue, Rattail sixweeks grass	non-native		
Poaceae	Festuca perennis (previously Lolium)	Italian ryegrass	non-native		
Poaceae	Gastridium phleoides	Nit grass	non-native		
Poaceae	Glyceria declinata	Waxy mannagrass	non-native		
Poaceae	Glyceria occidentalis	Western manna grass	non-native		
Poaceae	Hordeum brachyantherum	Meadow barley			

<u>Family</u>	Taxonomic name	Common Name	Status/Notes						
Poaceae	Hordeum marinum ssp. gussoneanum	Mediterranean barley	non-native						
Poaceae	Hordeum murinum ssp. leporinum	Foxtail barley	non-native						
Poaceae	Phalaris aquatica	Harding grass	non-native						
Poaceae	Phalaris minor	Mediterranean canarygrass	non-native						
Poaceae	Phalaris paradoxa	Hood canarygrass	non-native						
Poaceae	Poa annua	annua Annual bluegrass no							
Poaceae	Poa secunda ssp. secunda	Sandburt's bluegrass							
Poaceae	Polypogon monspeliensis	non-native							
Poaceae	Pleuropogon californicus	Annual semaphore grass							
Poaceae	Stipa pulchra	Purple needlegrass							
Poaceae	Triticum sp.	Wheat	non-native						
Polemoniaceae	Navarretia intertexta	Interwoven navarretia							
Polemoniaceae	Navarretia leucocephala ssp. Leucocephala	White-headed navarretia							
Polemoniaceae	Navarretia prolifera ssp. prolifera	Burr navarretia							
Polemoniaceae	Navarretia pubescens	Downy or purple pincusion							
Polemoniaceae	Navarretia tagetina	Marigold navarretia							
Polygonaceae	Eriogonum fasciculatum	CA buckwheat							
Polygonaceae	Eriogonum nudum	Nude buckwheat							
Polygonaceae	Polygonum avivulare 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							
Ranunculaceae	Delphinium variegatum	Royal larkspur							
Ranunculaceae	Ranunculus aquatilis	Whitewater crowfoot							
Ranunculaceae	Ranunculus bonariensis var. trisepalus	Vernal pool buttercup							
Ranunculaceae	Ranunculus californicus	California buttercup							
Ranunculaceae	Ranunculus muricatus	Stick-seed buttercup	non-native						
Ranunculaceae	Ranunculus pusillus	Low buttercup							
Rhamnaceae	Frangula californica ssp. tomentella	Hoary coffeeberry							
Rosaceae	Heteromeles arbutifolia	Toyon							
Rosaceae	Rosa californica	CA wild rose							

<u>Family</u>	Taxonomic name	Common Name	Status/Notes
Rubiaceae	Galium aparine	Common bedstraw	
Rubiaceae	Galium parishii	Parish's bedstraw	
Rubiaceae	Galium parisiense	BRMI	non-native
Rubiaceae	Sherardia arvensis	Field madder	non-native
Salicaceae	Populus fremontii	Fremont's cottonwood	
Salicaceae	Salix laevigata	Red willow, Polished willow	
Salicaceae	Salix sessilifolia	Northern sandbar willow	
Themidaceae	Brodiaea coronaria	Crown brodiaea	
Themidaceae	Brodiaea elegans	Harvest brodiaea	
Themidaceae	Brodiaea minor	Dwarf brodiaea	
Themidaceae	Brodiaea nana	Dwarf brodiaea	
Themidaceae	Dichelostemma capitatum ssp.	Blue dicks	
Themidaceae	Dichelostemma multiflorum	Manyflower brodiaea	
Themidaceae	Triteleia hyacinthina	Wild hyacinth, White brodiaea	
Themidaceae	Triteleia laxa	Wally basket, Itherial's spear	
Typhaceae	Typha latifolia	Broad leaf cattail	
Verbenaceae	Phyla nodiflora	Common lippia	
Viscaceae	Phoradendron leucarpum ssp. tomentosum	Mistletoe	
Vitaceae	Vitis californica	California wild grape	

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 UTMs 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: **N**. 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.

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.

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 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	С
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.

Recor	rd er:	Othe	er Survey	ors:					Date:	Return?	
Way	point ID:	GPS If Ye	Name es, enter	Bea	_ ring (°):	Projected? Distan	No /Yes ice (m): _	/ Base	/ Digitized Inclinat	ion (°):	_
UID:		If Y	es or Dig	itizeđ, e	enter: Base	Waypoint I	D:				
Loca	tion Name:	Base	e / Proje	cted (cir	cle one) Record	either UTMs or	Decimal De	grees	GPS erro	or: ft./ m./ PDOP	
		UTM	ls: UTME			UT	MN				
		Decir	nal degree	s: LAT				NG	<u> </u>		
Stand	l Size: <1 1-5 >:	5 Cam	era:	Pho	otos:					View Radius	
Expo	Exposure, Actual°: NE NW SE SW Flat Variable Steepness, Actual°: 0° 1-5° > 5-25° > 25										
Field	Alliance name:										
Comments:											
% Cov	er: Conifer H	Hardwood_	Tot	al Tree	Regen Tree	Shrub_	Herb		Total Veg	Exotics (L,M,	H)
Strata	Species		% cover	Strata	Species		% cover	Strata	Species		% cove

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