

Vegetation Classification Report for the San Bernadino Valley Water Conservation District

With Vegetation Key & Descriptions

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Prepared for



San Bernardino Valley
Water Conservation District

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1 Introduction

This report describes the methods and results of sampling and classification of natural and naturalized vegetation occurring on San Bernadino Valley Water Conservation District (District) lands according to the Manual of California Vegetation (CNPS 2018). The District sought to prepare this classification in order to provide a consistent system for the mapping of vegetation on its lands, and specifically the District requested the preparation of a decision-making key to allow for the consistent application of the derived classification.

2 Methods

2.1 Methodology and standards

The methodology used in the vegetation sampling and classification of District lands followed the recommendations of the National Park Service (NPS) Vegetation Inventory that were current at the time of project implementation in early 2022. The Inventory uses the United States National Vegetation Classification ("USNVC"; FGDC 2008). The USNVC is a quantitative, plot-based system that provides a process by which classification units are described, peer reviewed, and maintained. The California Department of Fish and Game Vegetation (CDFW) Classification and Mapping Program develops and maintains California's expression of the USNVC. In collaboration with the California Native Plant Society, CDFW published the Manual of California Vegetation (Sawyer *et al.* 2009) and maintains an updated edition online (<http://vegetation.cnps.org/>). The sampling and classification of the vegetation on District lands conformed to the guidance and standards described in the following documents:

- 12-Step Guidance for NPS Vegetation Inventories (NPS 2013)
- Vegetation Classification Guidelines: National Park Service Vegetation Inventory, Version 2.0 (Lea 2011)
- Field Methods for Vegetation Classification: National Park Service Vegetation Inventory, Version 2.0 (Lea *et al.* 2011)
- Best Practices Field Keys
- National Vegetation Classification Standard (FGDC 2008)
- The NPS PLOTS Database.

The goal of this vegetation classification effort was to classify all vegetation on District lands to the association level, or in cases where insufficient distinction is apparent, to the alliance level.

2.2 Vegetation Plot Data Collection

Vegetation sampling was undertaken with the goal of collecting representative plots ("relevés") for each vegetation alliance and association occurring on District lands. Several sources were used for determining the general locations for vegetation plots in advance of field sampling, including a review of previous vegetation mapping efforts, current aerial photography, and existing literature and prior mapping efforts (ICF 2020, Romich 2019). The final decisions for the stands to be sampled and placement of the plots within stands were made in the field by the vegetation ecologists based the conditions encountered at the time of the survey. In general, well defined and distinct stands were

chosen for sampling, and the plot boundaries were placed to capture the conditions and species composition typical and representative of the overall stand. Ecotones, areas of very recent fire or disturbance, and areas within 45 feet of paved roads and 20 feet of dirt roads were avoided in the placement of the sample plots. Care was taken to avoid sampling stands of the same association in close proximity in order to avoid spatial autocorrelation in the data.

All plot data were collected directly into the NPS PLOTS Database Version 3.2 as modified by AECOM. Modifications included incorporating current California plant taxonomy into the species entry pull-down menus, and modifications to enable direct recording of the plot location information via external GPS units connected to the tablet computers used to record the plot data. Additional details of the NPS field methods can be found in Chapter 5 of the 1994 NPS guidance (TNC 1994).

Four photographs were taken of each plot and the GPS coordinates and direction were recorded for each photograph. For circular plots, four photographs were typically taken in each cardinal direction from the plot center. In cases where this was not possible or practical due to dense vegetation or other obstructions at the plot center, photos were taken as appropriate to document the stand and the photo locations and directions recorded in the database.

Vegetation plot size was determined by the physiognomic class of the sampled stands and conformed to the California standards for USNVC projects in the state (CDFW 2015). The plot sizes were as follows: 1,000 m² for upland forest and woodland vegetation, 400 m² for shrub-dominated vegetation and riparian forests and woodlands, and 100 m² for herbaceous vegetation types. Forest and woodland vegetation stands are defined as stands having greater than or equal to 10% absolute cover of overstory trees, regardless of shrub and herb cover. Shrub-dominated vegetation must have less than 10% absolute cover of overstory trees and greater than 10% absolute cover of shrubs. Herbaceous vegetation consists of stands with less than 10% absolute tree cover and less than 10% absolute shrub cover.

The plot shapes were most often circular, but the shape of the plots was occasionally altered (while keeping the area constant) in order to capture unusually shaped stands of vegetation, such as narrow strips of riparian trees or shrubs that may occur along drainages. The shape and size of each plot was documented in the PLOTS database.

All plot data on District lands were collected by AECOM biologists, Jonathan Dunn, Ed Kentner and Ninfa Negrete Alcaraz. Plot data collection were completed May 2-5, 2022. Phenology for the detection and identification of floral taxa was assessed by the collection team to be excellent at the time of survey. Additional regional plot data were provided by request from CDFW VEGCAMP and extracted from datasets collected and maintained by AECOM.

2.3 Vegetation Classification

Each vegetation plot collected on District lands was assigned to a MCV alliance and association according to the following procedure. A preliminary assignment was made in the field during plot data collection using published MCV membership rules (Sawyer *et al.* 2009, <http://vegetation.cnps.org/>). CDFW VEGCAMP maintains a comprehensive database of vegetation surveys throughout California. Based on preliminary field assignments, a regional dataset containing approximately 220 additional relevant plots from formally classified relevé and Rapid Assessment surveys was compiled from the VEGCAMP database. The compiled dataset allowed direct comparison of the SBVWCD plots to vetted representative examples of MCV alliances. Species composition and cover data for each SBVWCD plot

was evaluated by comparison to species composition and cover values of all regional plots. Keys from relevant regional reports (Dunn *et al.* 2015, Buck-Diaz *et al.* 2011, CNPS 2005) were also reviewed for plot assignment. Following this detailed comparison, an alliance and association was assigned to each in accordance with published and/or CDFW-vetted membership criteria.

The classification was completed by ecologists Ed Kentner and Jonathan Dunn, who each independently confirmed the final classification assignment of each plot.

2.4 Vegetation Key and Alliance Descriptions

A decision-making key to the vegetation types described in this classification was prepared by adapting existing vegetation keys for San Bernadino, Riverside, Orange, and San Diego counties (Dunn *et al.* 2015, Buck-Diaz *et al.* 2011, CNPS 2005) to the vegetation present on District lands.

The vegetation descriptions were compiled directly from plot data using database queries and presented in the form of stand tables. For each sampled vegetation type, two sets of values are reported for quantitative variables, one set based on plot data collected on District lands, and another set of values based on the regional plot data for each vegetation type. These regional data were compiled by AECOM and are derived from plot data collected by AECOM and CDFW VEGCAMP for other recent regional vegetation classification and mapping projects. The combined dataset for this classification represents approximately 250 plots. For categorical data such as aspect and parent material, the number of plots scored for each category is reported for plots on District lands, and again for all regional examples of the type. Two representative plot photographs recorded on District lands are also included in each description.

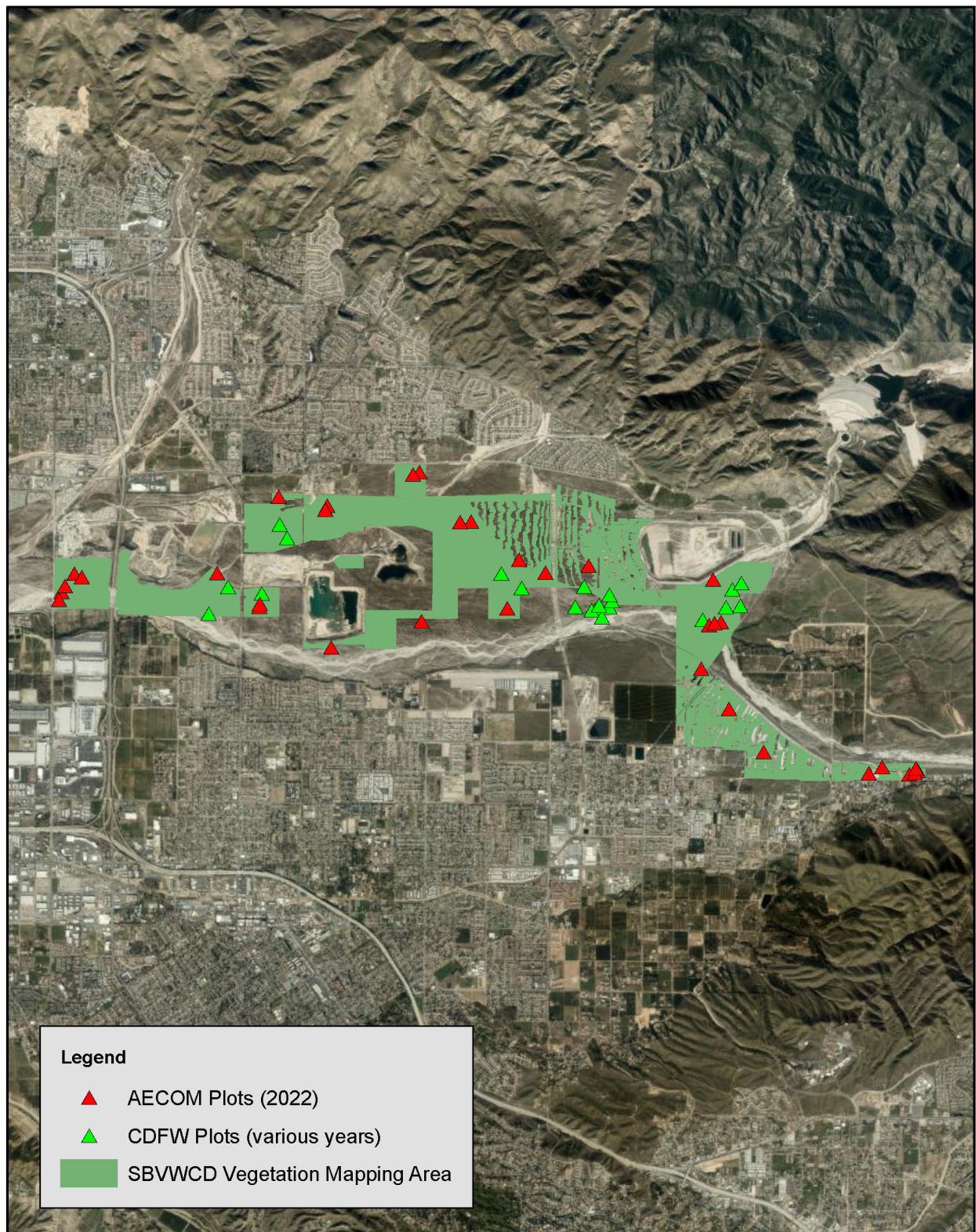
3 Results

3.1 Vegetation Plot Data Collection

A total of 35 vegetation plots were recorded during the field sampling missions (Figure 1). All the plot data were compiled into a single NPS PLOTS database and will be submitted to the District along with all plot photographs (Figure 2). A complete list of all vascular plant species observed in the plots and observation points is included in Appendix A.

3.2 Vegetation Classification

Classification assignments resulted in 14 MCV alliances and 17 associations being determined for District lands. All alliances and associations are well represented in the compiled regional dataset, except for two: the *Heterotheca sessiliflora* Association and *Opuntia littoralis* - *Opuntia oricola* - *Cylindropuntia prolifera* Shrubland Alliance. *Heterotheca sessiliflora* Association was originally known as a special stand type from plots ($n=8$) collected for a vegetation inventory in Pinnacles National Park (Kittle *et al.* 2012). This association is currently included in the MCV based on the Pinnacle stands. The plot representation on District lands occupies similar alluvial habitat and with high relative cover of *H. sessiliflora*, albeit with far less nonnative cover than the plots at Pinnacles National Park. The *Opuntia* alliance named above is described principally as a coastal vegetation alliance in the MCV and is represented in the western Riverside classification by a single inland plot (CNPS 2005). The single western Riverside plot has been included in the stand table summary for this alliance.



0 0.5 1 2 Miles

Figure 1
Vegetation Sampling Plot Locations

Figure 2. Typical vegetation plot sampling 2022



Table 1. MCV Alliance and Associations Sampled on District Lands

SBVWCD MCV Alliances and Associations
Woodland Vegetation
<i>Salix gooddingii</i> - <i>Salix laevigata</i> Forest & Woodland Alliance
<i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> Association
<i>Juniperus californica</i> Forest & Woodland Alliance
<i>Juniperus californica</i> / <i>Eriogonum fasciculatum</i> - <i>Artemisia californica</i> Association
<i>Juniperus californica</i> / herbaceous Association
Shrubland Vegetation
<i>Adenostoma fasciculatum</i> - <i>Salvia</i> spp. Shrubland Alliance
<i>Adenostoma fasciculatum</i> - <i>Salvia apiana</i> - <i>Artemisia californica</i> Association
<i>Baccharis salicifolia</i> Shrubland Alliance
<i>Baccharis salicifolia</i> – <i>Sambucus nigra</i> Association
<i>Baccharis salicifolia</i> Association
<i>Ceanothus crassifolius</i> Shrubland Alliance
<i>Ceanothus crassifolius</i> - <i>Adenostoma fasciculatum</i> - <i>Rhus ovata</i> Association
<i>Lotus scoparius</i> - <i>Lupinus albifrons</i> - <i>Eriodictyon</i> spp. Shrubland Alliance
<i>Lotus scoparius</i> Association
<i>Opuntia littoralis</i> - <i>Opuntia oricola</i> - <i>Cylindropuntia prolifera</i> Shrubland Alliance
Alliance Only
<i>Rhus ovata</i> Shrubland Alliance
<i>Rhus ovata</i> Association
<i>Encelia farinosa</i> Shrubland Alliance
<i>Encelia farinosa</i> - <i>Eriogonum fasciculatum</i> Association
<i>Lepidospartum squamatum</i> Shrubland Alliance
<i>Lepidospartum squamatum</i> - <i>Artemisia californica</i> Association
<i>Lepidospartum squamatum</i> - <i>Eriodictyon trichocalyx</i> - <i>Hesperoyucca whipplei</i> Association
<i>Lepidospartum squamatum</i> - <i>Eriogonum fasciculatum</i> Association
Herbaceous Vegetation
<i>Avena</i> spp. - <i>Bromus</i> spp. Herbaceous Semi-Natural Alliance
<i>Bromus diandrus</i> Association
<i>Bromus hordeaceus</i> - <i>Bromus tectorum</i> Association
<i>Heterotheca (oregona, sessiliflora)</i> Herbaceous Alliance
<i>Heterotheca sessiliflora</i> Association
<i>Pennisetum setaceum</i> - <i>Pennisetum ciliare</i> Herbaceous Semi-Natural Alliance
<i>Pennisetum setaceum</i> Association

3.3 Vegetation Key and Alliance Descriptions

A decision making key for the vegetation types recognized in this classification is presented in Appendix B. Stands tables and representative photographs of each type are presented in Appendix C. *[TBP - Stand tables have not been completed at this writing due a delay in receiving CDFW data. A single example stand table is provided in lieu.]*

4 References

- AECOM. 2013. Vegetation Classification Report, Nature Reserves of Orange County. Unpublished report. San Diego, CA.
- AECOM. 2015. Natural Resources Inventory for Camp Michael Monsoor and Remote Training Site Warner Springs Naval Base Coronado, California. Prepared for Naval Facilities Engineering Command Southwest. San Diego, California.
- Buck-Diaz, J., and J. M. Evens. 2011. Alluvial scrub vegetation of southern California, a focus on the Santa Ana River watershed in Orange, Riverside, and San Bernardino counties, California. Unpublished report to Riverside-Corona Resource Conservation District. California Native Society, Sacramento, California. Available at https://cnps.org/wp-content/uploads/2018/03/alluvial_scrub-diaz_evans2011.pdf.
- Burk, J.H., C. E. Jones, W. A. Ryan, and J. A. Wheeler. 2007. Floodplain Vegetation and Soils along the Upper Santa Aan River, San Bernadino County, California. *Madroño* 54(2):126-137.
- California Department of Fish and Wildlife [CDFW]. 2015. Rapid Assessment and Relevé Protocol. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18599>.
- California Department of Fish and Wildlife [CDFW]. 2018. California Natural Community list. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153399>.
- California Native Plant Society [CNPS]. 2005. Vegetation Alliances of Western Riverside County, California. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18245&inline>.
- California Native Plant Society [CNPS]. 2018. A Manual of California Vegetation Online. Available at <http://vegetation.cnps.org/>.
- Dunn, J., E. Kentner, T. Oberbauer. 2015. Vegetation Classification Manual for Western San Diego and 2015 Supplement. Prepared for San Diego Associations of Governments. San Diego, California.
- Federal Geographic Data Committee [FGDC]. 2008. National Vegetation Classification Standard, Version 2. Publication FGDC-STD-005-2008. Reston, Virginia.
- Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=75893>.
- ICF. 2020. Upper Santa Ana River Wash Habitat Conservation Plan. April 2020. San Diego, CA. Prepared for San Bernardino County Valley Water Conservation District, Redlands, CA.

- Kittel, G., E. Reyes, J. Evens, J. Buck and D. Johnson. 2012. Vegetation classification and mapping project report, Pinnacles National Monument. Natural Resource Report NPS/SFAN/NRR—2012/574. National Park Service, Fort Collins, Colorado.
- Lea, C. 2011. Vegetation classification guidelines: National Park Service Vegetation Inventory, version 2.0. Natural Resource Report NPS/NRPC/NRR—2011/374. National Park Service, Fort Collins, Colorado.
- National Park Service [NPS]. 2011. PLOTS version 3.2 vegetation database. Fort Collins, Colorado.
- National Park Service [NPS]. 2013. 12-Step Guidance for NPS Vegetation Inventories. Available at http://science.nature.nps.gov/im/inventory/veg/docs/Veg_Inv_12step_Guidance_v1.1.pdf.
- Oberbauer, T. 1996. Draft Vegetation Communities of San Diego County. Available at https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf.
- Romich, M. 2019. Biological Baseline Report Mill Creek Operations Study Area. Origin Biological.
- Sawyer, J.O., T. Keeler-Wolf, and J.M Evens. 2009. A Manual of California Vegetation 2nd Edition. California Native Plant Society Press. Sacramento, California.
- Sproul, F., T. Keeler-Wolf, P. Gordon-Reedy, J. Dunn, A. Klein, and K. Harper. 2011. Vegetation Classification Manual for Western San Diego County. Prepared for San Diego Associations of Governments. San Diego, California. Available at <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=28651&inline>.
- The Nature Conservancy [TNC]. 1994. USGS/NPS Vegetation Mapping Program Field Methods for Vegetation Mapping. Available at http://science.nature.nps.gov/im/inventory/veg/docs/Chpt_5_Field_Methods.doc.

Appendix A

Vascular Plant Species Observed in SBVWCD Plots

Appendix A

Vascular Plant Species Observed in SBVWCD Plots

May 2022

Major Clade	Family	Scientific Name	Common Name	Nativity
Lycophytes				
	Selaginellaceae (Spike-moss family)			
		<i>Selaginella bigelovii</i>	Bushy spikemoss	Native
Ferns				
	Pteridaceae (Maidenhair Fern family)			
		<i>Pellaea andromedifolia</i>	Coffee cliffbrake	Native
		<i>Pellaea mucronata</i>	Birdfoot cliffbrake	Native
Gymnosperms				
	Cupressaceae (Cypress family)			
		<i>Juniperus californica</i>	California juniper	Native
Eudicots				
	Adoxaceae (Muskroot family)			
		<i>Sambucus nigra subsp. caerulea</i>	Mexican elderberry	Native
	Anacardiaceae (Sumac family)			
		<i>Rhus ovata</i>	Sugar sumac	Native
	Apiaceae (Carrot family)			
		<i>Anthriscus caucalis</i>	Bur chervil	Naturalized
	Asteraceae (Aster family)			
		<i>Ambrosia acanthicarpa</i>	Annual bur-sage	Native
		<i>Artemisia californica</i>	Coastal sagebrush	Native
		<i>Artemisia douglasiana</i>	Douglas' sagewort	Native
		<i>Brickellia californica</i>	California brickellbush	Native
		<i>Centaurea melitensis</i>	Maltese star-thistle	Naturalized
		<i>Chaenactis glabriuscula</i> var. <i>glabriuscula</i>	Yellow pincushion	Native
		<i>Cirsium scariosum</i>	Meadow thistle	Native
		<i>Encelia farinosa</i>	Brittlebush	Native
		<i>Ericameria linearifolia</i>	Narrowleaf goldenbush	Native
		<i>Eriophyllum wallacei</i>	Wallace eriophyllum	Native
		<i>Gutierrezia sarothrae</i>	Broom snakeweed	Native
		<i>Helianthus annuus</i>	Common sunflower	Native
		<i>Helianthus gracilentus</i>	Slender sunflower	Native
		<i>Heterotheca sessiliflora</i> subsp. <i>fastigiata</i>		Native
		<i>Hypochaeris glabra</i>	Smooth cat's ear	Naturalized
		<i>Lactuca serriola</i>	Prickly lettuce	Naturalized

Major Clade	Family	Scientific Name	Common Name	Nativity
		<i>Lepidospartum squamatum</i>	California scale broom	Native
		<i>Logfia gallica</i>	Narrowleaf cottonrose	Naturalized
		<i>Micropus californicus</i>	Slender Cottonweed	Native
		<i>Oncosiphon piluliferum</i>	Stinknet	Naturalized
		<i>Senecio flaccidus</i>	Threadleaf ragwort	Native
		<i>Silybum marianum</i>	Blessed milkthistle	Naturalized
		<i>Stephanomeria exigua</i>	Small wirelettuce	Native
		<i>Stephanomeria pauciflora</i>	Wire-lettuce	Native
		<i>Uropappus lindleyi</i>	Lindley's silverpuffs	Native
		<i>Xanthium strumarium</i>	Rough cocklebur	Native
	Boraginaceae (Borage family)			
		<i>Amsinckia intermedia</i>	Common fiddleneck	Native
		<i>Amsinckia menziesii</i>	Menzies' fiddleneck	Native
		<i>Cryptantha intermedia</i>	Clearwater cryptantha	Native
		<i>Cryptantha micrantha</i>	Redroot cryptantha	Native
		<i>Emmenanthe penduliflora</i>	Whisperingbells	Native
		<i>Eriodictyon trichocalyx</i>	Hairy yerba santa	Native
		<i>Eucrypta chrysanthemifolia</i>	Spotted hideseed	Native
		<i>Pectocarya penicillata</i>	Sleeping combseed	Native
		<i>Phacelia distans</i>	Distant phacelia	Native
		<i>Phacelia minor</i>	Wild canterbury bells	Native
		<i>Phacelia ramosissima</i>	Branching phacelia	Native
	Brassicaceae (Mustard family)			
		<i>Brassica fruticulosa</i>	Mediterranean cabbage	Naturalized
		<i>Brassica tournefortii</i>	Saharan mustard	Naturalized
		<i>Hirschfeldia incana</i>	Shortpod mustard	Naturalized
		<i>Lepidium nitidum</i>	Shining pepperweed	Native
		<i>Sisymbrium irio</i>	London rocket	Naturalized
		<i>Thysanocarpus curvipes</i>	Sand fringe pod	Native
	Cactaceae (Cactus family)			
		<i>Cylindropuntia bernardina</i>	Browns pined pricklypear	Native
		<i>Opuntia sp.</i>	Pricklypear	Native
		<i>Opuntia ×vaseyi</i>	Vasey's coastal pricklypear	Native
		<i>Opuntia littoralis</i>	Coastal pricklypear	Native
	Crassulaceae (Stonecrop family)			
		<i>Dudleya lanceolata</i>	Lanceleaf liveforever	Native

Major Clade	Family	Scientific Name	Common Name	Nativity
	Cucurbitaceae (Cucumber family)			
		<i>Cucurbita foetidissima</i>	Missouri gourd	Native
		<i>Marah macrocarpa</i>	Cucamonga manroot	Native
	Euphorbiaceae (Spurge family)			
		<i>Croton californicus</i>	California croton	Native
		<i>Ricinus communis</i>	Castorbean	Naturalized
	Fabaceae (Pea family)			
		<i>Acemisson glaber</i>	Common deerweed	Native
		<i>Acemisson strigosus</i>	Strigose bird's-foot trefoil	Native
		<i>Lupinus hirsutissimus</i>	Stinging annual lupine	Native
		<i>Lupinus truncatus</i>	Collared annual lupine	Native
		<i>Melilotus indicus</i>	Sourclover	Naturalized
		<i>Spartium junceum</i>	Spanish broom	Naturalized
	Geraniaceae (Geranium family)			
		<i>Erodium botrys</i>	Longbeak stork's bill	Naturalized
		<i>Erodium cicutarium</i>	Redstem stork's bill	Naturalized
	Juglandaceae (Walnut family)			
		<i>Juglans californica</i>	Southern california black walnut	Native
	Lamiaceae (Mint family)			
		<i>Salvia apiana</i>	White sage	Native
		<i>Salvia columbariae</i>	Chia	Native
	Montiaceae (Miner's lettuce family)			
		<i>Calandrinia menziesii</i>	Redmaids	Native
		<i>Calyptridium monandrum</i>	Pussy paws	Native
	Nyctaginaceae (Four o'clock family)			
		<i>Mirabilis laevis</i> var. <i>crassifolia</i>	California four o'clock	Native
	Onagraceae (Evening Primrose family)			
		<i>Camissoniopsis bistorta</i>	Southern suncup	Native
		<i>Clarkia purpurea</i> subsp. <i>quadrivulnera</i>	Four-spot	Native
		<i>Eulobus californicus</i>	California suncup	Native
	Polemoniaceae (Phlox family)			
		<i>Eriastrum densifolium</i> subsp. <i>sanctorum</i>	Santa ana river woollystar	Native
		<i>Eriastrum sapphirinum</i>	Sapphire woollystar	Native
	Polygonaceae (Buckwheat family)			
		<i>Chorizanthe parryi</i> var. <i>parryi</i>	San Bernardino spineflower	Native
		<i>Eriogonum fasciculatum</i>	Eastern Mojave buckwheat	Native
		<i>Eriogonum gracile</i> var. <i>gracile</i>	Slender woolly buckwheat	Native

Major Clade	Family	Scientific Name	Common Name	Nativity
Eudicots		<i>Eriogonum thurberi</i>	Thurber's buckwheat	Native
		<i>Lastarriaea coriacea</i>	Leather spineflower	Native
		<i>Pterostegia drymarioides</i>	Woodland pterostegia	Native
	Rhamnaceae (Buckthorn family)			
		<i>Ceanothus crassifolius</i>	Hoaryleaf ceanothus	Native
		<i>Rhamnus crocea</i>	Redberry buckthorn	Native
	Rosaceae (Rose family)			
		<i>Adenostoma fasciculatum</i>	Chamise	Native
		<i>Prunus ilicifolia</i>	Hollyleaf cherry	Native
		<i>Rubus ulmifolius</i>	Elmleaf blackberry	Naturalized
	Rubiaceae (Madder family)			
		<i>Galium angustifolium</i>	Narrowleaf bedstraw	Native
		<i>Galium aparine</i>	Stickywilly	Native
	Salicaceae (Willow family)			
		<i>Salix exigua</i> var. <i>hindsiana</i>	Hinds' willow	Native
		<i>Salix gooddingii</i>	Goodding's willow	Native
		<i>Salix lasiolepis</i>	Arroyo willow	Native
	Scrophulariaceae (Figwort family)			
		<i>Verbascum thapsus</i>	Common mullein	Naturalized
	Solanaceae (Potato family)			
		<i>Datura wrightii</i>	Sacred thorn-apple	Native
		<i>Nicotiana glauca</i>	Tree tobacco	Naturalized
		<i>Solanum douglasii</i>	Greenspot nightshade	Native
		<i>Solanum xanti</i>	Chaparral nightshade	Native
	Tamaricaceae (Tamarix family)			
		<i>Tamarix ramosissima</i>	Saltcedar	Naturalized
	Urticaceae (Nettle family)			
		<i>Urtica dioica</i>	Stinging nettle	Native
	Viscaceae (Christmas Mistletoe family)			
		<i>Phoradendron bolleanum</i>	Fir mistletoe	Native
Monocots				
Agavaceae (Century-plant family)				
	<i>Hesperoyucca whipplei</i>	Chaparral yucca	Native	
	<i>Yucca schidigera</i>	Mojave yucca	Native	
Arecaceae (Palm family)				
	<i>Washingtonia robusta</i>	Washington fan palm	Naturalized	
Cyperaceae (Sedge family)				
	<i>Cyperus eragrostis</i>	Tall flatsedge	Native	

Major Clade	Family	Scientific Name	Common Name	Nativity
	Poaceae (Grass family)			
		<i>Avena barbata</i>	Lopsided oat	Naturalized
		<i>Bromus diandrus</i>	Ripgut brome	Naturalized
		<i>Bromus hordeaceus</i>	Soft brome	Naturalized
		<i>Bromus madritensis subsp. rubens</i>	Red brome	Naturalized
		<i>Bromus tectorum</i>	Cheatgrass	Naturalized
		<i>Cynodon dactylon</i>	Bermudagrass	Naturalized
		<i>Festuca myuros</i>	Rat-tail fescue	Naturalized
		<i>Pennisetum setaceum</i>	Crimson fountaingrass	Naturalized
		<i>Schismus arabicus</i>	Arabian schismus	Naturalized
		<i>Stipa miliacea var. miliacea</i>	Smilograss	Naturalized
	Themidaceae (Brodiaea family)			
		<i>Dipterostemon capitatus</i>	Bluedicks	Native

Appendix B

Key to the Alliances and Associations of SBVWCD Vegetation

Appendix B

Key to the Alliances and Associations of SBVWCD Vegetation

HOW TO USE THIS KEY

This key is first arranged by stratum class (i.e., tree, shrub, and herb). Following these stratum-level breaks are subsequent group-level keys based on macroscale biotic and abiotic relationships. The stratum- and group-level keys are dichotomous, while the keys within each group are multichotomous. The multichotomous keys have been deliberately ordered and are intended to be read from top to bottom.

Dominance is used in several manners within this key. First, the term dominance is used with respect to species cover. This key relies on relative species cover, not absolute species cover. Unless otherwise specified, a dominant species meets the criterion for dominance stated in the glossary within a specific stratum (e.g., “shrub species X is dominant” is synonymous with “shrub species X is dominant within the shrub stratum”). Dominance can also be attributed to an entire stratum (e.g., “the shrub stratum is dominant”)—see the glossary of terms below for specific dominance thresholds.

Key to Stratum Classes

1.	Trees open to continuous, often dominant; if trees 5–10% absolute cover, shrubs gen < continuous [Note: the MCV treats <i>Juniperus californica</i> as a tree taxon and the species <i>Salix lasiolepis</i> and <i>Baccharis salicifolia</i> as shrubs.]	Stratum Class A (Forest and Woodland Vegetation)
1'	Trees absent or trace, <u>or</u> trees 5–10% absolute cover and shrubs ± continuous	
2.	Shrubs open to continuous, often dominant; if shrubs 5–10% absolute cover, herbs gen < continuous	Stratum Class B (Shrubland Vegetation)
2'	Shrubs absent or trace, <u>or</u> shrubs 5–10% absolute cover and herbs ± continuous	Stratum Class C (Herbaceous Vegetation)

STRATUM CLASS A: FOREST AND WOODLAND VEGETATION

1	Trees dominated by <i>Juniperus californica</i> ; occurring on upland slopes or terraces.	<i>Juniperus californica</i> Forest & Woodland Alliance
2	Shrubs < trace	<i>Juniperus californica</i> / herbaceous Association
2'	Shrubs > trace, incl microphyllous, succulent, or drought-deciduous, soft-leaved genera incl <i>Artemisia</i> , <i>Encelia</i> , <i>Eriogonum</i> , <i>Opuntia</i> , <i>Salvia</i> , and/or <i>Acmispon</i>	<i>Juniperus californica</i> / <i>Eriogonum fasciculatum</i> - <i>Artemisia californica</i> Association
1'	Trees dominated by <i>Salix gooddingii</i> ; occurring on bottomlands or adjacent to episodic streams (riparian); shrub stratum often well developed, incl <i>S. lasiolepis</i> , <i>S. exigua</i> , <i>Baccharis salicifolia</i> , and/or <i>Sambucus nigra</i> .	<i>Salix gooddingii</i> - <i>Salix laevigata</i> Forest & Woodland Alliance <i>Salix gooddingii</i> / <i>Baccharis salicifolia</i> Association

STRATUM CLASS B. SHRUBLAND VEGETATION

Key to Groups

1	Shrubs dominated by nonhydrophytic species, gen occurring on upland slopes or terraces; can occur on bottomlands with arid conditions and/or ephemeral hydrologic regimes	
2	Shrubs dominated by sclerophyllous genera incl <i>Adenostoma</i> , <i>Rhus</i> and/or <i>Ceanothus</i>	Group 1 (Sclerophyllous, Evergreen Shrublands)
2'	Shrubs dominated by microphyllous, succulent, or drought-deciduous, soft-leaved or succulent genera incl <i>Artemisia</i> , <i>Encelia</i> , <i>Eriogonum</i> , <i>Opuntia</i> , and/or <i>Acmispon</i>	Group 2 (Soft-Leaved, Drought-Deciduous Shrublands)
1'	Shrubs dominated by hydrophytic genera, including <i>Baccharis</i> , and/or <i>Sambucus</i> , gen occurring in bottomlands, channels, or areas adjacent to episodic streams.	Group 3 (Riparian Shrublands)

Group 1: Sclerophyllous, Evergreen Shrublands

A	<i>Ceanothus crassifolius</i> codominant to subdominant with other chaparral or scrub genera, incl <i>Adenostoma</i> , <i>Rhus</i> and/or <i>Eriodyctyon</i>	<i>Ceanothus crassifolius</i> Shrubland Alliance <i>Ceanothus crassifolius</i> - <i>Adenostoma fasciculatum</i> - <i>Rhus ovata</i> Association
B	<i>Rhus ovata</i> dominant	<i>Rhus ovata</i> Shrubland Alliance <i>Rhus ovata</i> Association
C	<i>Adenostoma fasciculatum</i> dominant, <u>or</u> <i>Adenostoma fasciculatum</i> accounts for more shrub cover than any other single shrub genus, microphyllous, succulent, or drought-deciduous, soft-leaved genera incl <i>Artemisia</i> , <i>Encelia</i> , <i>Eriogonum</i> , <i>Opuntia</i> , and/or <i>Acmispon</i> gen present	<i>Adenostoma fasciculatum</i> Shrubland Alliance <i>Adenostoma fasciculatum</i> - <i>Salvia apiana</i> - <i>Artemisia californica</i> Association

Group 2: Soft-Leaved, Drought-Deciduous Shrublands

A	<i>Opuntia</i> spp. strongly dominant	<i>Opuntia littoralis</i> - <i>Opuntia oricola</i> - <i>Cylindropuntia prolifera</i> Shrubland Alliance (Alliance Only)
B	<i>Encelia farinosa</i> dominant or codominant with <i>Eriogonum fasciculatum</i> , <i>Artemisia californica</i> and/or <i>Acmispon glaber</i>	<i>Encelia farinosa</i> Shrubland Alliance <i>Encelia farinosa</i> - <i>Eriogonum fasciculatum</i> Association
C	<i>Acmispon glaber</i> (<i>Lotus scoparius</i>) dominant to strongly dominant; regenerating microphyllous, succulent, or drought-deciduous soft-leaved shrubs such as <i>Eriogonum fasciculatum</i> , <i>Artemisia californica</i> , and/or <i>Salvia apiana</i> gen present; typically post-disturbance and/or fire-following conditions	<i>Lotus scoparius</i> - <i>Lupinus albifrons</i> - <i>Eriodictyon</i> spp. Alliance <i>Lotus scoparius</i> Association
D	<i>Lepidospartum squamatum</i> diagnostically present with <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> , <i>Eriodictyon trichocalyx</i> , <i>Eriogonum fasciculatum</i> , <i>Brickellia californica</i> , <i>Ericameria linearifolia</i> , <i>Artemisia californica</i> and/or <i>Acmispon glaber</i> ; alluvial environments	<i>Lepidospartum squamatum</i> Shrubland Alliance
D.1	<i>Lepidospartum squamatum</i> codominant with <i>Eriogonum fasciculatum</i> , <i>Eriodictyon trichocalyx</i> and <i>Artemisia californica</i> absent or trace	<i>Lepidospartum squamatum</i> - <i>Eriogonum fasciculatum</i> Association
D.1	<i>Lepidospartum squamatum</i> codominant with <i>Artemisia californica</i> , <i>Eriodictyon trichocalyx</i> and absent or trace	<i>Lepidospartum squamatum</i> - <i>Artemisia californica</i> Association
D.2	<i>Lepidospartum squamatum</i> codominant with <i>Eriodictyon trichocalyx</i>	<i>Lepidospartum squamatum</i> - <i>Eriodictyon trichocalyx</i> - <i>Hesperoyucca whipplei</i> Association

Group 3: Riparian Shrublands

A	<i>Baccharis salicifolia</i> dominant	<i>Baccharis salicifolia</i> Alliance <i>Baccharis salicifolia</i> Association
B	<i>Sambucus nigra</i> dominant or codominant with other riparian shrubs	<i>Baccharis salicifolia</i> Alliance <i>Baccharis salicifolia</i> – <i>Sambucus nigra</i> Association

STRATUM CLASS C: HERBACEOUS VEGETATION

A	Herbs dominated by <i>Heterotheca sessiliflora</i>	<i>Heterotheca (oregona, sessiliflora)</i> Herbaceous Alliance <i>Heterotheca sessiliflora</i> Association
B	<i>Pennisetum setaceum</i> dominant	<i>Pennisetum setaceum</i> - <i>Pennisetum ciliare</i> Herbaceous Semi-Natural Alliance <i>Pennisetum setaceum</i> Association
C	<i>Bromus</i> spp. dominant or codominant with other nonnative grass and forb species	<i>Avena</i> spp. - <i>Bromus</i> spp. Herbaceous Semi-Natural Alliance
	C.1 <i>Bromus tectorum</i> dominant, or <i>B. tectorum</i> codominant with <i>Avena</i> spp., <i>Brassica</i> spp., or other nonnative grass and forb species	<i>Bromus hordeaceus</i> - <i>Bromus tectorum</i> Association
	C.2 <i>Bromus diandrus</i> dominant, or <i>B. diandrus</i> codominant with <i>Erodium</i> spp., or other nonnative grass and forb species	<i>Bromus diandrus</i> Association

Definitions and Abbreviations for Classification Key

<i>Terms that apply to species cover</i>	
strongly dominant	Species with ≥ 75% relative cover.
dominant	Species with ≥ 50% and < 75% relative cover.
codominant	Species with ≥ 30% and < 50% relative cover.
subdominant	Species with < 30% relative cover. A generic term encompassing “sparse” and “trace” (see below).
sparse	Species with ≥ 5% and < 30% relative cover.
trace	Species with < 5% relative cover.
<i>Terms that apply to species frequency</i>	
diagnostic	Species with > 80% constancy within a vegetation type (i.e., there is a >80% probability of finding a diagnostic species with the associated vegetation type).
<i>Terms that apply to overall stratum cover</i>	
dominant	Stratum with the highest percent cover.
subdominant	All strata other than the dominant stratum.
continuous	Strata containing ≥ 66% absolute cover.
Intermittent	Strata containing ≥ 33% and < 66% absolute cover.
open	Strata containing ≥ 5% and < 33% absolute cover.
<i>Abbreviations used in the key</i>	
exc	Except; Exception(s)
gen	Generally
incl	Including

Appendix C

Alliance and Association Descriptions

Appendix C

Alliance and Association Descriptions

Woodland

Juniperus californica Forest & Woodland Alliance

Juniperus californica / *Eriogonum fasciculatum* - *Artemisia californica* Association



Photo 1. Plot SBV-031 facing north.



Photo 2. Plot SBV-031 facing EAST.

Samples Used in Type Description:

Total number of all stands = 4

Number of SBVWCD stands = 1: SBV-031

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	53 (38)	38-85 (38-38)
Herb cover (%)	26 (9)	9-66 (9-9)
Shrub cover (%)	26 (10)	10-39 (10-10)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	20 (20)	20-20 (20-20)
Litter cover (%)	15 (7)	3-35 (7-7)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1551 (1430)	1313-2031 (1430-1430)
Slope (degrees)	9 (0)	3-18 (0-0)

Aspect: N 1 (-), SSW 1 (-)

Macrotopography: Bottom 1 (1), Lower 1/3 of slope 3 (-)

Parent material: Colluvial 1 (1), Granitic 2 (-), Mixed alluvium 1 (-)

Soil texture: Loamy Sand (1 (1), Medium to very fine, sandy loam (3 (-)

***Juniperus californica* / *Eriogonum fasciculatum* - *Artemisia californica* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Salix gooddingii</i>	25 (-)	1 (-)	1-1 (-)
	<i>Juniperus californica</i>	100 (100)	20 (20)	7-33 (20-20)
Shrubs				
	<i>Artemisia californica</i>	100 (100)	2.8 (1)	1-4 (1-1)
	<i>Eriogonum fasciculatum</i>	100 (100)	3.8 (3)	2-7 (3-3)
	<i>Acemispom glaber</i>	25 (100)	1 (1)	1-1 (1-1)
	<i>Cylindropuntia bernardina</i>	25 (100)	2 (2)	2-2 (2-2)
	<i>Eriodictyon trichocalyx</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Hesperoyucca whipplei</i>	25 (100)	1 (1)	1-1 (1-1)
	<i>Opuntia littoralis</i>	25 (100)	3 (3)	3-3 (3-3)
	<i>Phoradendron bolleanum</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Rhus ovata</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Keckiaella antirrhinoides</i>	25 (-)	3 (-)	3-3 (-)
	<i>Nicotiana glauca</i>	25 (-)	4 (-)	4-4 (-)
	<i>Opuntia parryi</i>	25 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Salvia apiana</i>	25 (-)	4 (-)	4-4 (-)
	<i>Salvia mellifera</i>	25 (-)	2 (-)	2-2 (-)
Herbs				
	<i>Marah macrocarpa</i>	50 (100)	1.1 (0.2)	0.2-2 (0.2-0.2)
	<i>Phacelia distans</i>	50 (100)	1.1 (0.2)	0.2-2 (0.2-0.2)
	<i>Bromus madritensis</i>	50 (-)	6 (-)	2-10 (-)
	<i>Erodium cicutarium</i>	50 (-)	4.5 (-)	2-7 (-)
	<i>Lasthenia californica</i>	50 (-)	0.6 (-)	0.2-1 (-)
	<i>Lessingia filaginifolia</i>	50 (-)	1.1 (-)	0.2-2 (-)
	<i>Bromus diandrus</i>	25 (100)	5 (5)	5-5 (5-5)
	<i>Bromus rubens</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Bromus tectorum</i>	25 (100)	1 (1)	1-1 (1-1)
	<i>Chaenactis glabriuscula</i>	25 (100)	1 (1)	1-1 (1-1)
	<i>Chorizanthe parryi</i> var <i>parryi</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Cryptantha intermedia</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriastrum sapphirinum</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum gracile</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Festuca myuros</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Lastarriaea coriacea</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Mirabilis laevis</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Pterostegia drymarioides</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Stephanomeria exigua</i>	25 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Amsinckia menziesii</i>	25 (-)	5 (-)	5-5 (-)
	<i>Calandrinia ciliata</i>	25 (-)	9 (-)	9-9 (-)
	<i>Centaurea melitensis</i>	25 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Gilia angelensis</i>	25 (-)	15 (-)	15-15 (-)
	<i>Helianthus</i> sp.	25 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Hirschfeldia incana</i>	25 (-)	3 (-)	3-3 (-)
	<i>Nemophila menziesii</i>	25 (-)	3 (-)	3-3 (-)
	<i>Plagiobothrys</i>	25 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Plagiobothrys collinus</i>	25 (-)	5 (-)	5-5 (-)
	<i>Schismus barbatus</i>	25 (-)	5 (-)	5-5 (-)

Woodland

Juniperus californica Forest & Woodland Alliance

Juniperus californica / herbaceous Association



Photo 1. Plot SBV-007 facing west.



Photo 2. Plot SBV-010 facing south.

Samples Used in Type Description:

Total number of all stands = 11

Number of SBVWCD stands = 3: SBV-007, SBV-010, SBV-030

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	58 (16)	13-90 (13-18)
Herb cover (%)	41 (5)	3-85 (3-8)
Shrub cover (%)	17 (5)	1-50 (1-11)
Understory tree cover (%)	7 (7)	7-7 (7-7)
Overstory tree cover (%)	15 (15)	15-15 (15-15)
Litter cover (%)	32 (9)	2-85 (2-15)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1450 (1386)	1299-1555 (1299-1496)
Slope (degrees)	6 (0)	2-15 (0-0)

Aspect: N 1 (-), S 3 (-), WNW 1 (-)

Macrotopography: Bottom 3 (3), Lower 1/3 of slope 5 (-), Middle 1/3 of slope 3 (-)

Parent material: Colluvial 3 (3), Granitic 3 (-), Igneous 3 (-), Marble 1 (-), Sedimentary 1 (-)

Soil texture: Fine sandy clay (1 (-), Medium silt loam (2 (-), Medium to very fine, sandy loam (1 (-), Moderately coarse, sandy loam (1 (-), Moderately fine sandy clay loam (2 (-), Moderately fine silty clay loam (1 (-), Sand (3 (3)

***Juniperus californica* / herbaceous Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees	<i>Juniperus californica</i>	100 (100)	17.6 (12)	1-49 (10-15)
Shrubs	<i>Eriogonum fasciculatum</i>	64 (100)	1.2 (0.5)	0.2-3 (0.2-1)
	<i>Opuntia parryi</i>	45 (-)	0.6 (-)	0.2-2 (-)
	<i>Ericameria palmeri</i>	36 (-)	0.9 (-)	0.2-2 (-)
	<i>Opuntia littoralis</i>	18 (67)	0.6 (0.6)	0.2-1 (0.2-1)
	<i>Stephanomeria pauciflora</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Artemisia californica</i>	18 (-)	0.6 (-)	0.2-1 (-)
	<i>Lycium andersonii</i>	18 (-)	2 (-)	2-2 (-)
Herbs	<i>Hirschfeldia incana</i>	82 (100)	3.6 (0.2)	0.2-17 (0.2-0.2)
	<i>Bromus diandrus</i>	64 (33)	8.6 (0.2)	0.2-15 (0.2-0.2)
	<i>Bromus madritensis</i>	64 (-)	17.4 (-)	8-30 (-)
	<i>Avena fatua</i>	45 (-)	7.4 (-)	2-15 (-)
	<i>Erodium cicutarium</i>	36 (67)	1.6 (0.2)	0.2-4 (0.2-0.2)
	<i>Salvia columbariae</i>	27 (67)	0.5 (0.2)	0.2-1 (0.2-0.2)
	<i>Bromus rubens</i>	27 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Chaenactis glabriuscula</i>	27 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Cryptantha</i> sp.	27 (-)	1.1 (-)	0.2-2 (-)
	<i>Hemizonia fasciculata</i>	27 (-)	12.7 (-)	1-29 (-)
	<i>Bromus tectorum</i>	18 (67)	2.6 (2.6)	0.2-5 (0.2-5)
	<i>Camissoniopsis bistorta</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum gracile</i>	18 (67)	0.6 (0.6)	0.2-1 (0.2-1)
	<i>Festuca myuros</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Pellaea mucronata</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Phacelia distans</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Selaginella bigelovii</i>	18 (67)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Dipterostemon capitatus</i>	18 (-)	0.6 (-)	0.2-1 (-)
	<i>Erodium</i> sp.	18 (-)	8 (-)	6-10 (-)
	<i>Erodium moschatum</i>	18 (-)	36 (-)	30-42 (-)
	<i>Hemizonia</i> sp.	18 (-)	1.6 (-)	0.2-3 (-)
	<i>Hordeum marinum</i>	18 (-)	6.5 (-)	1-12 (-)
	<i>Lupinus bicolor</i>	18 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Plagiobothrys</i>	18 (-)	1.5 (-)	1-2 (-)

Woodland

Salix gooddingii - *Salix laevigata* Forest & Woodland Alliance

Salix gooddingii / *Baccharis salicifolia* Association



Photo 1. Plot SBV-021 facing west.



Photo 2. Plot SBV-025 facing south.

Samples Used in Type Description:

Total number of all stands = 9

Number of SBVWCD stands = 2: SBV-021, SBV-025

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	73 (78)	60-80 (75-80)
Herb cover (%)	18 (16)	1-40 (5-27)
Shrub cover (%)	25 (31)	12-45 (30-32)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	38 (33)	13-60 (25-40)
Litter cover (%)	52 (70)	15-100 (40-100)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1543 (1882)	1266-2080 (1684-2080)
Slope (degrees)	1 (3)	0-3 (3-3)

Aspect: E 1 (1), ESE 1 (-), NE 1 (-), S 1 (-), SW 1 (-)

Macrotopography: Bottom 7 (2), Lower 1/3 of slope 2 (-)

Parent material: Colluvial 2 (2), Granitic 1 (-), Mixed alluvium 1 (-), Sandy alluvium 3 (-), Silty alluvium 2 (-)

Soil texture: Medium sand (1 (-), Medium silt loam (1 (-), Medium to very fine, loamy sand (1 (-), Medium to very fine, sandy loam (1 (-), Moderately fine silty clay loam (2 (-), Sand (1 (1), Sandy Loam (1 (1), Unknown (1 (-)

***Salix gooddingii* / *Baccharis salicifolia* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Salix gooddingii</i>	100 (100)	25.5 (22.5)	5-60 (20-25)
	<i>Salix laevigata</i>	67 (-)	10 (-)	2-38 (-)
	<i>Populus fremontii</i>	33 (50)	0.8 (0.2)	0.2-2 (0.2-0.2)
	<i>Eucalyptus</i>	33 (-)	0.7 (-)	0.2-1 (-)
Shrubs				
	<i>Baccharis salicifolia</i>	100 (100)	14.7 (27.5)	5-30 (25-30)
	<i>Salix lasiolepis</i>	56 (50)	7 (20)	0.2-20 (20-20)
	<i>Nicotiana glauca</i>	33 (50)	5.1 (0.2)	0.2-11 (0.2-0.2)
	<i>Baccharis emoryi</i>	33 (-)	4.7 (-)	1-7 (-)
	<i>Tamarix ramosissima</i>	22 (50)	1.6 (0.2)	0.2-3 (0.2-0.2)
	<i>Sambucus nigra</i> subsp. <i>caerulea</i>	22 (100)	2.5 (2.5)	1-4 (1-4)
	<i>Tamarix</i> sp.	22 (-)	1.6 (-)	0.2-3 (-)
Herbs				
	<i>Hirschfeldia incana</i>	44 (100)	9.1 (0.2)	0.2-30 (0.2-0.2)
	<i>Bromus diandrus</i>	33 (50)	10.4 (0.2)	0.2-16 (0.2-0.2)
	<i>Urtica dioica</i>	33 (50)	2.1 (0.2)	0.2-5 (0.2-0.2)
	<i>Helianthus annuus</i>	22 (50)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Anthriscus caucalis</i>	22 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Phacelia ramosissima</i>	22 (100)	12.6 (12.6)	0.2-25 (0.2-25)
	<i>Ambrosia psilostachya</i>	22 (-)	3.5 (-)	2-5 (-)
	<i>Bromus madritensis</i>	22 (-)	4 (-)	1-7 (-)
	<i>Helianthus</i> sp.	22 (-)	2 (-)	2-2 (-)

Shrubland

Adenostoma fasciculatum - *Salvia* spp. Shrubland Alliance

Adenostoma fasciculatum - *Salvia apiana* - *Artemisia californica* Association



Photo 1. Plot SBV-019 facing north.



Photo 2. Plot SBV-029 facing west.

Samples Used in Type Description:

Total number of all stands = 13

Number of SBVWCD stands = 2: SBV-019, SBV-029

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	65 (43)	40-90 (40-45)
Herb cover (%)	23 (28)	2-60 (23-32)
Shrub cover (%)	48 (17)	13-78 (13-20)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	42 (13)	10-65 (10-15)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1105 (1821)	681-2123 (1518-2123)
Slope (degrees)	18 (2)	2-38 (2-2)

Aspect: E 1 (-), ESE 3 (-), SE 1 (-), SW 1 (-), WNW 1 (-), WSW 3 (1)

Macrotopography: Bottom 2 (2), Lower 1/3 of slope 1 (-), Middle 1/3 of slope 7 (-), Upper 1/3 of slope 3 (-)

Parent material: Colluvial 2 (2), Granitic 8 (-), Mixed igneous 2 (-)

Soil texture: Clay (2 (-), Loamy Sand (1 (1), Medium loam (1 (-), Medium to very fine, sandy loam (4 (-), Moderately fine clay loam (3 (-), Moderately fine sandy clay loam (1 (-), Sandy Loam (1 (1)

***Adenostoma fasciculatum* - *Salvia apiana* - *Artemisia californica* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Adenostoma fasciculatum</i>	100 (100)	27.8 (11.5)	5-57 (5-18)
	<i>Artemisia californica</i>	92 (50)	13.3 (2)	2-39 (2-2)
	<i>Salvia apiana</i>	92 (50)	4.5 (0.2)	0.2-20 (0.2-0.2)
	<i>Yucca whipplei</i>	85 (-)	1 (-)	0.2-2 (-)
	<i>Malosma laurina</i>	54 (-)	1.4 (-)	0.2-5 (-)
	<i>Eriogonum fasciculatum</i>	38 (-)	3.4 (-)	1-6 (-)
	<i>Galium angustifolium</i>	23 (-)	2 (-)	1-4 (-)
	<i>Salvia mellifera</i>	23 (-)	1.4 (-)	0.2-3 (-)
Herbs	<i>Centaurea melitensis</i>	54 (50)	1.7 (0.2)	0.2-4 (0.2-0.2)
	<i>Mirabilis californica</i>	54 (-)	1.5 (-)	0.2-4 (-)
	<i>Cryptantha intermedia</i>	46 (50)	3.7 (0.2)	0.2-10 (0.2-0.2)
	<i>Hirschfeldia incana</i>	46 (50)	10.7 (0.2)	0.2-25 (0.2-0.2)
	<i>Pterostegia drymarioides</i>	46 (50)	6 (1)	1-10 (1-1)
	<i>Marah macrocarpa</i>	38 (50)	0.4 (0.2)	0.2-1 (0.2-0.2)
	<i>Bromus madritensis</i>	31 (-)	14.8 (-)	10-20 (-)

Shrubland

Baccharis salicifolia Shrubland Alliance

Baccharis salicifolia – *Sambucus nigra* Association



Photo 1. Plot SBV-024 facing east.



Photo 2. Plot SBV-024 facing south.

Samples Used in Type Description:

Total number of all stands = 5

Number of SBVWCD stands = 1: SBV-024

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	56 (36)	21-80 (36-36)
Herb cover (%)	19 (2)	2-50 (2-2)
Shrub cover (%)	43 (34)	18-65 (34-34)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	14 (0)	4-23 (0-0)
Litter cover (%)	37 (35)	6-50 (35-35)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1794 (1652)	800-3622 (1652-1652)
Slope (degrees)	2 (1)	1-5 (1-1)

Aspect: NW 1 (1), SSE 1 (-), SW 1 (-), WSW 2 (-)

Macrotopography: Bottom 4 (-), Channel bed 1 (1)

Parent material: Colluvial 1 (1), Granitic 1 (-), Metamorphic 1 (-), Mixed alluvium 1 (-), Sandy alluvium 1 (-)

Soil texture: Medium sand (2 (-), Moderately coarse, sandy loam (1 (-), Moderately fine sandy clay loam (1 (-), Sand (1 (1)

***Baccharis salicifolia* – *Sambucus nigra* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Salix laevigata</i>	40 (-)	3 (-)	2-4 (-)
	<i>Populus fremontii</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Quercus wislizeni</i>	20 (-)	1 (-)	1-1 (-)
Shrubs				
	<i>Baccharis salicifolia</i>	100 (100)	32.6 (0.2)	0.2-60 (0.2-0.2)
	<i>Sambucus mexicana</i>	80 (-)	7.3 (-)	1-21 (-)
	<i>Nicotiana glauca</i>	60 (-)	1.4 (-)	0.2-3 (-)
	<i>Acemisson glaber</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Encelia farinosa</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Lepidospartum squamatum</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Opuntia littoralis</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Ricinus communis</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Sambucus nigra</i> subsp. <i>caerulea</i>	20 (100)	33 (33)	33-33 (33-33)
	<i>Artemisia californica</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Artemisia tridentata</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Baccharis emoryi</i>	20 (-)	5 (-)	5-5 (-)
	<i>Eriogonum fasciculatum</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Malacothamnus fasciculatus</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Mimulus guttatus</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Salix</i> sp.	20 (-)	4 (-)	4-4 (-)
Herbs				
	<i>Bromus diandrus</i>	80 (100)	10.1 (0.2)	0.2-30 (0.2-0.2)
	<i>Hirschfeldia incana</i>	60 (-)	2.7 (-)	0.2-5 (-)
	<i>Bromus rubens</i>	40 (100)	0.6 (0.2)	0.2-1 (0.2-0.2)
	<i>Camissoniopsis bistorta</i>	40 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Bromus madritensis</i>	40 (-)	11 (-)	10-12 (-)
	<i>Bromus tectorum</i>	40 (-)	1.5 (-)	1-2 (-)
	<i>Erodium cicutarium</i>	40 (-)	0.6 (-)	0.2-1 (-)
	<i>Ambrosia acanthicarpa</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Avena barbata</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eulobus californicus</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Heterotheca sessiliflora</i> subsp. <i>fastigiata</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Marah macrocarpa</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Pennisetum setaceum</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Stipa miliacea</i> var. <i>miliacea</i>	20 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Ambrosia psilostachya</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Amsinckia menziesii</i>	20 (-)	1 (-)	1-1 (-)
	<i>Chaenactis glabriuscula</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Erigeron canadensis</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Eucrypta chrysanthemifolia</i>	20 (-)	2 (-)	2-2 (-)
	<i>Heliotropium curassavicum</i>	20 (-)	1 (-)	1-1 (-)
	<i>Hordeum murinum</i>	20 (-)	20 (-)	20-20 (-)
	<i>Lamarckia aurea</i>	20 (-)	2 (-)	2-2 (-)
	<i>Lessingia filaginifolia</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Malva parviflora</i>	20 (-)	2 (-)	2-2 (-)
	<i>Melilotus indicus</i>	20 (-)	1 (-)	1-1 (-)
	<i>Polypogon monspeliensis</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Urtica dioica</i>	20 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

Baccharis salicifolia Shrubland Alliance

Baccharis salicifolia Association



Photo 1. Plot SBV-020 facing east.



Photo 2. Plot SBV-020 facing south.

Samples Used in Type Description:

Total number of all stands = 26

Number of SBVWCD stands = 1: SBV-020

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	49 (22)	15-90 (22-22)
Herb cover (%)	17 (0)	0-72 (0-0)
Shrub cover (%)	31 (20)	0-74 (20-20)
Understory tree cover (%)	0 (0)	0.2-0.2 (0-0)
Overstory tree cover (%)	2 (2)	0.2-10 (2-2)
Litter cover (%)	47 (0)	1-95 (0-0)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	241 (2108)	13-2108 (2108-2108)
Slope (degrees)	2 (2)	0-15 (2-2)

Aspect: N 2 (-), NE 1 (-), NNW 1 (-), NW 1 (-), S 3 (-), SE 1 (1), SSE 1 (-), SSW 3 (-), SW 2 (-), WSW 1 (-)

Macrotopography: Bottom 19 (-), Channel bed 1 (1), Lower 1/3 of slope 4 (-), Middle 1/3 of slope 1 (-)

Parent material: Clayey alluvium 1 (-), Colluvial 1 (1), Gravelly alluvium 1 (-), Mixed alluvium 6 (-), Sandstone 3 (-), Sandy alluvium 6 (-), Sedimentary 1 (-), Silty alluvium 3 (-)

Soil texture: Coarse sand (4 (-), Coarse, loamy sand (1 (-), Fine clay (1 (-), Fine silty clay (1 (-), Loam (1 (-), Medium sand (3 (-), Medium silt loam (2 (-), Medium to very fine, loamy sand (1 (-), Medium to very fine, sandy loam (2 (-), Moderately coarse, sandy loa

***Baccharis salicifolia* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Salix gooddingii</i>	27 (100)	1.4 (2)	0.2-4 (2-2)
	<i>Platanus racemosa</i>	19 (-)	1 (-)	0.2-4 (-)
	<i>Quercus agrifolia</i>	19 (-)	0.6 (-)	0.2-2 (-)
Shrubs				
	<i>Baccharis salicifolia</i>	100 (100)	26.7 (20)	8-72 (20-20)
	<i>Artemisia californica</i>	35 (100)	0.6 (0.2)	0.2-1 (0.2-0.2)
	<i>Salix lasiolepis</i>	31 (-)	1.5 (-)	0.2-3 (-)
	<i>Sambucus nigra subsp. caerulea</i>	27 (-)	2.3 (-)	0.2-6 (-)
	<i>Tamarix</i> sp.	27 (-)	0.4 (-)	0.2-1 (-)
	<i>Baccharis pilularis</i>	23 (-)	2.1 (-)	0.2-7 (-)
	<i>Baccharis sarothroides</i>	19 (-)	4.3 (-)	0.2-11 (-)
	<i>Isocoma menziesii</i>	19 (-)	7.2 (-)	0.2-27 (-)
	<i>Toxicodendron diversilobum</i>	19 (-)	0.6 (-)	0.2-2 (-)
Herbs				
	<i>Ambrosia psilostachya</i>	38 (-)	1 (-)	0.2-4 (-)
	<i>Hirschfeldia incana</i>	38 (-)	1.4 (-)	0.2-4 (-)
	<i>Centaurea melitensis</i>	31 (-)	0.8 (-)	0.2-2 (-)
	<i>Avena barbata</i>	27 (-)	5.5 (-)	0.2-31 (-)
	<i>Bromus diandrus</i>	27 (-)	3.3 (-)	0.2-8 (-)
	<i>Bromus madritensis</i>	23 (-)	1.9 (-)	0.2-5 (-)
	<i>Lactuca serriola</i>	23 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Melilotus indicus</i>	19 (100)	2.9 (0.2)	0.2-9 (0.2-0.2)
	<i>Artemisia douglasiana</i>	19 (-)	9.8 (-)	1-40 (-)
	<i>Bromus hordeaceus</i>	19 (-)	3.6 (-)	0.2-11 (-)
	<i>Xanthium strumarium</i>	19 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

Ceanothus crassifolius Shrubland Alliance

Ceanothus crassifolius - *Adenostoma fasciculatum* - *Rhus ovata* Association



Photo 1. Plot SBV-033 facing north.



Photo 2. Plot SBV-033 facing west.

Samples Used in Type Description:

Total number of all stands = 25

Number of SBVWCD stands = 1: SBV-033

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	56 (50)	27-78 (50-50)
Herb cover (%)	7 (30)	0-31 (30-30)
Shrub cover (%)	53 (22)	22-70 (22-22)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	1 (0)	0.2-1 (0-0)
Litter cover (%)	52 (5)	5-93 (5-5)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1716 (1466)	289-2542 (1466-1466)
Slope (degrees)	23 (0)	7-40 (0-0)

Aspect: N 1 (-), NNE 3 (-), NNW 4 (-), NW 1 (-), S 2 (-), SW 5 (-), WNW 1 (-)

Macrotopography: Bottom 1 (1), Lower 1/3 of slope 11 (-), Middle 1/3 of slope 4 (-), Upper 1/3 of slope 9 (-)

Parent material: Colluvial 1 (1), Gneiss 1 (-), Granitic 20 (-), Igneous 1 (-), Sedimentary 2 (-)

Soil texture: Coarse, loamy sand (1 (-), Loamy Sand (1 (-), Medium loam (5 (-), Medium silt loam (2 (-), Medium to very fine, sandy loam (7 (-), Sand (1 (-), Sandy Loam (5 (1), Silt Loam (1 (-)

***Ceanothus crassifolius* - *Adenostoma fasciculatum* - *Rhus ovata* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Quercus agrifolia</i>	20 (-)	0.4 (-)	0.2-1 (-)
Shrubs				
	<i>Adenostoma fasciculatum</i>	100 (100)	21.9 (2)	0.3-57 (2-2)
	<i>Ceanothus crassifolius</i>	100 (100)	21.4 (3)	3-48 (3-3)
	<i>Rhus ovata</i>	80 (100)	3.6 (12)	0.2-14 (12-12)
	<i>Eriogonum fasciculatum</i>	52 (100)	4.2 (1)	0.2-10 (1-1)
	<i>Rhamnus crocea</i>	36 (100)	0.4 (0.2)	0.2-1 (0.2-0.2)
	<i>Malosma laurina</i>	32 (-)	2.5 (-)	0.2-7 (-)
	<i>Salvia mellifera</i>	24 (-)	2.1 (-)	0.2-5 (-)
	<i>Hesperoyucca whipplei</i>	20 (-)	0.4 (-)	0.2-1 (-)
	<i>Heteromeles arbutifolia</i>	20 (-)	1.1 (-)	0.2-3 (-)
	<i>Yucca schidigera</i>	20 (-)	0.9 (-)	0.2-2 (-)
	<i>Arctostaphylos glauca</i>	16 (-)	2.6 (-)	0.2-7 (-)
	<i>Quercus xacutidens</i>	16 (-)	8.1 (-)	0.2-19 (-)
Herbs				
	<i>Bromus madritensis</i>	40 (-)	3.6 (-)	0.2-15 (-)
	<i>Amsinckia menziesii</i>	16 (-)	0.8 (-)	0.2-1 (-)
	<i>Leymus condensatus</i>	16 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

Encelia farinosa Shrubland Alliance

Encelia farinosa - *Eriogonum fasciculatum* Association



Photo 1. Plot SBV-018 facing east.



Photo 2. Plot SBV-012 facing south.

Samples Used in Type Description:

Total number of all stands = 14

Number of SBVWCD stands = 3: SBV-012, SBV-018, SBV-022

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	49 (28)	22-85 (22-35)
Herb cover (%)	26 (9)	6-65 (6-13)
Shrub cover (%)	28 (19)	15-45 (15-27)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	14 (9)	1-45 (5-12)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1633 (1954)	1046-2147 (1842-2147)
Slope (degrees)	18 (1)	1-40 (1-1)

Aspect: ESE 1 (-), NW 1 (-), S 1 (-), SE 2 (-), SSE 3 (-), WSW 3 (1)

Macrotopography: Bottom 3 (3), Lower 1/3 of slope 9 (-), Middle 1/3 of slope 2 (-)

Parent material: Colluvial 3 (3), Granitic 4 (-), Igneous 5 (-), Mixed igneous 1 (-), Sedimentary 1 (-)

Soil texture: Loam (1 (1), Loamy Sand (2 (2), Moderately coarse, sandy loam (2 (-), Moderately fine clay loam (1 (-), Moderately fine sandy clay loam (7 (-)

***Encelia farinosa* - *Eriogonum fasciculatum* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Encelia farinosa</i>	100 (100)	12.4 (8.7)	1-27 (3-17)
	<i>Eriogonum fasciculatum</i>	100 (100)	10.3 (8.3)	1-23 (7-10)
	<i>Artemisia californica</i>	79 (33)	2.7 (1)	0.2-9 (1-1)
	<i>Acmispon glaber</i>	29 (100)	1.6 (1.7)	0.2-4 (0.2-4)
	<i>Gutierrezia sarothrae</i>	29 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Salvia apiana</i>	29 (-)	0.6 (-)	0.2-1 (-)
	<i>Opuntia parryi</i>	21 (-)	0.7 (-)	0.2-1 (-)
Herbs	<i>Bromus madritensis</i>	64 (-)	9.3 (-)	1-30 (-)
	<i>Hirschfeldia incana</i>	57 (67)	2 (0.2)	0.2-8 (0.2-0.2)
	<i>Cryptantha intermedia</i>	50 (100)	3.8 (0.2)	0.2-12 (0.2-0.2)
	<i>Erodium cicutarium</i>	36 (67)	15.7 (0.2)	0.2-55 (0.2-0.2)
	<i>Avena barbata</i>	36 (100)	0.4 (0.2)	0.2-1 (0.2-0.2)
	<i>Erodium</i> sp.	36 (-)	4.2 (-)	1-10 (-)
	<i>Pterostegia drymarioides</i>	29 (100)	0.6 (0.5)	0.2-1 (0.2-1)
	<i>Amsinckia menziesii</i>	21 (33)	4.1 (0.2)	0.2-12 (0.2-0.2)
	<i>Bromus rubens</i>	21 (100)	3.3 (3.3)	1-5 (1-5)
	<i>Bromus tectorum</i>	21 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Mirabilis laevis</i>	21 (100)	0.5 (0.5)	0.2-1 (0.2-1)
	<i>Salvia columbariae</i>	21 (-)	1.4 (-)	0.2-3 (-)
	<i>Schismus barbatus</i>	21 (-)	10.3 (-)	3-18 (-)

Shrubland

Lepidospartum squamatum Shrubland Alliance

Lepidospartum squamatum - *Artemisia californica* Association



Photo 1. Plot SBV-013 facing east.



Photo 2. Plot SBV-013 facing west.

Samples Used in Type Description:

Total number of all stands = 6

Number of SBVWCD stands = 1: SBV-013

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	39 (16)	16-52 (16-16)
Herb cover (%)	22 (3)	3-38 (3-3)
Shrub cover (%)	20 (14)	14-33 (14-14)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	1 (0)	1-1 (0-0)
Litter cover (%)	6 (6)	6-6 (6-6)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	595 (1286)	201-1286 (1286-1286)
Slope (degrees)	7 (0)	0-25 (0-0)

Aspect: N 1 (-), S 1 (-), SSW 2 (-), W 1 (-)

Macrotopography: Bottom 5 (1), Lower 1/3 of slope 1 (-)

Parent material: Colluvial 1 (1), Mixed alluvium 2 (-), Sandstone 1 (-), Sandy alluvium 1 (-), Silty alluvium 1 (-)

Soil texture: Coarse, loamy sand (1 (-), Medium sand (1 (-), Medium to very fine, sandy loam (1 (-), Moderately coarse, sandy loam (1 (-), Moderately fine sandy clay loam (1 (-), Sand (1 (1)

***Lepidospartum squamatum* - *Artemisia californica* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees	<i>Juniperus californica</i>	33 (-)	3.1 (-)	0.2-6 (-)
	<i>Platanus racemosa</i>	17 (-)	1 (-)	1-1 (-)
	<i>Quercus douglasii</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
Shrubs	<i>Artemisia californica</i>	100 (100)	8.8 (2)	1-17 (2-2)
	<i>Lepidospartum squamatum</i>	100 (100)	5.7 (4)	0.2-14 (4-4)
	<i>Eriogonum fasciculatum</i>	83 (100)	1.6 (2)	0.2-3 (2-2)
	<i>Acemispom glaber</i>	50 (100)	0.8 (0.2)	0.2-2 (0.2-0.2)
	<i>Ericameria linearifolia</i>	33 (-)	2 (-)	1-3 (-)
	<i>Eriodictyon californicum</i>	33 (-)	0.6 (-)	0.2-1 (-)
	<i>Hazardia squarrosa</i>	33 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Salvia leucophylla</i>	33 (-)	0.6 (-)	0.2-1 (-)
	<i>Salvia mellifera</i>	33 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Encelia farinosa</i>	17 (100)	8 (8)	8-8 (8-8)
	<i>Gutierrezia sarothrae</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Opuntia</i> sp.	17 (100)	1 (1)	1-1 (1-1)
	<i>Stephanomeria pauciflora</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Baccharis salicifolia</i>	17 (-)	1 (-)	1-1 (-)
	<i>Brickellia californica</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Ephedra californica</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Ericameria nauseosa</i>	17 (-)	5 (-)	5-5 (-)
	<i>Gutierrezia californica</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Malosma laurina</i>	17 (-)	2 (-)	2-2 (-)
	<i>Opuntia littoralis</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Rhamnus ilicifolia</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Solanum umbelliferum</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
Herbs	<i>Bromus rubens</i>	67 (100)	2.8 (0.2)	0.2-6 (0.2-0.2)
	<i>Bromus hordeaceus</i>	67 (-)	13.3 (-)	1-30 (-)
	<i>Erodium cicutarium</i>	50 (100)	7.4 (0.2)	0.2-18 (0.2-0.2)
	<i>Centaurea melitensis</i>	50 (-)	3 (-)	1-6 (-)
	<i>Pectocarya penicillata</i>	33 (100)	0.6 (0.2)	0.2-1 (0.2-0.2)
	<i>Acemispom wrangelianus</i>	33 (-)	2.5 (-)	1-4 (-)
	<i>Vulpia myuros</i>	33 (-)	3 (-)	2-4 (-)
	<i>Brassica tournefortii</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Camissoniopsis bistorta</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Chaenactis glabriuscula</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Cryptantha intermedia</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Emmenanthe penduliflora</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriastrum sapphirinum</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum gracile</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eulobus californicus</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Phacelia distans</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Schismus arabicus</i>	17 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Amsinckia menziesii</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Filago gallica</i>	17 (-)	3 (-)	3-3 (-)
	<i>Hirschfeldia incana</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Lasthenia californica</i>	17 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Uropappus lindleyi</i>	17 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

Lepidospartum squamatum Shrubland Alliance

Lepidospartum squamatum - *Eriodictyon trichocalyx* - *Hesperoyucca whipplei* Association



Photo 1. Plot SBV-001 facing west.



Photo 2. Plot SBV-005 facing west.

Samples Used in Type Description:

Total number of all stands = 21

Number of SBVWCD stands = 8: SBV-001, SBV-003, SBV-004, SBV-005, SBV-008, SBV-011, SBV-015, SBV-026

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	35 (14)	8-80 (8-20)
Herb cover (%)	14 (3)	1-53 (1-6)
Shrub cover (%)	22 (11)	6-52 (6-17)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	9 (9)	1-25 (1-25)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	871 (1329)	229-1713 (1186-1713)
Slope (degrees)	2 (2)	1-3 (1-2)

Aspect: E 1 (-), ESE 1 (-), N 2 (1), S 1 (-), SE 2 (-), SSE 1 (-), SSW 1 (-), SW 1 (-), W 4 (1), WSW 1 (-)

Macrotopography: Bottom 19 (6), Channel wall 2 (2)

Parent material: Colluvial 8 (8), Gravelly alluvium 2 (-), Mixed alluvium 5 (-), Sandy alluvium 5 (-), Silty alluvium 1 (-)

Soil texture: Coarse sand (1 (-), Coarse, loamy sand (1 (-), Fine sand (4 (-), Loamy Sand (1 (1), Medium sand (2 (-), Medium to very fine, loamy sand (4 (-), Medium to very fine, sandy loam (1 (-), Sand (7 (7)

***Lepidospartum squamatum* - *Eriodictyon trichocalyx* - *Hesperoyucca whipplei* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Eriogonum fasciculatum</i>	86 (75)	5.4 (1.1)	0.2-19 (0.2-4)
	<i>Eriodictyon trichocalyx</i>	76 (75)	9.7 (6.4)	0.2-34 (0.2-10)
	<i>Lepidospartum squamatum</i>	67 (63)	7.3 (4.6)	0.2-16 (0.2-9)
	<i>Acmispon glaber</i>	57 (63)	2.9 (1.2)	0-17 (0.2-3)
	<i>Opuntia littoralis</i>	48 (50)	0.8 (0.4)	0.2-3 (0.2-1)
	<i>Stephanomeria pauciflora</i>	38 (25)	0.9 (0.2)	0.2-5 (0.2-0.2)
	<i>Yucca whipplei</i>	38 (-)	1.4 (-)	0.2-3 (-)
	<i>Encelia farinosa</i>	33 (38)	2.2 (1.1)	0.2-10 (0.2-3)
	<i>Hesperoyucca whipplei</i>	29 (75)	0.8 (0.8)	0.2-2 (0.2-2)
	<i>Cylindropuntia bernardina</i>	29 (38)	0.3 (0.2)	0.2-1 (0.2-0.2)
	<i>Ericameria linearifolia</i>	19 (13)	2.8 (1)	1-5 (1-1)
Herbs	<i>Bromus rubens</i>	95 (100)	2.4 (0.5)	0.2-10 (0.2-2)
	<i>Erodium cicutarium</i>	76 (88)	1.2 (0.2)	0.2-7 (0.2-0.2)
	<i>Camissoniopsis bistorta</i>	71 (63)	0.4 (0.2)	0.2-1 (0.2-0.2)
	<i>Cryptantha intermedia</i>	67 (63)	0.7 (0.2)	0-2 (0.2-0.2)
	<i>Salvia columbariae</i>	57 (75)	1.3 (0.2)	0.2-13 (0.2-0.2)
	<i>Hirschfeldia incana</i>	57 (50)	0.2 (0.2)	0-1 (0.2-0.2)
	<i>Filago californica</i>	57 (-)	0.5 (-)	0-2 (-)
	<i>Chaenactis glabriuscula</i>	48 (38)	1.1 (0.2)	0.2-7 (0.2-0.2)
	<i>Eriogonum gracile</i>	48 (25)	0.2 (0.2)	0-1 (0.2-0.2)
	<i>Bromus tectorum</i>	48 (-)	1 (-)	0.2-2 (-)
	<i>Vulpia myuros</i>	48 (-)	1.5 (-)	0.2-5 (-)
	<i>Avena barbata</i>	43 (25)	0.6 (0.2)	0.2-1 (0.2-0.2)
	<i>Bromus diandrus</i>	43 (13)	1.6 (0.2)	0.2-10 (0.2-0.2)
	<i>Phacelia distans</i>	38 (38)	0.6 (0.2)	0.2-2 (0.2-0.2)
	<i>Schismus barbatus</i>	38 (-)	1.7 (-)	0.2-5 (-)
	<i>Crassula connata</i>	33 (-)	5.2 (-)	0-30 (-)
	<i>Croton californicus</i>	29 (38)	1.1 (0.2)	0.2-5 (0.2-0.2)
	<i>Microseris lindleyi</i>	29 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Mirabilis laevis</i>	24 (38)	0.7 (0.2)	0.2-2 (0.2-0.2)
	<i>Stylocline gnaphaloides</i>	24 (-)	0.7 (-)	0.2-2 (-)
	<i>Schismus arabicus</i>	19 (50)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Stephanomeria exigua</i>	19 (25)	0.2 (0.2)	0-0.2 (0.2-0.2)
	<i>Cryptantha muricata</i>	19 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Melica imperfecta</i>	19 (-)	0.4 (-)	0.2-1 (-)

Shrubland

Lepidospartum squamatum Shrubland Alliance

Lepidospartum squamatum - *Eriogonum fasciculatum* Association



Photo 1. Plot SBV-006 facing north.



Photo 2. Plot SBV-006 facing south.

Samples Used in Type Description:

Total number of all stands = 33

Number of SBVWCD stands = 1: SBV-006

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	35 (10)	8-70 (10-10)
Herb cover (%)	14 (3)	1-40 (3-3)
Shrub cover (%)	25 (8)	7-52 (8-8)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	1 (0)	0.2-1 (0-0)
Litter cover (%)	12 (2)	2-20 (2-2)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	987 (1191)	168-3828 (1191-1191)
Slope (degrees)	2 (0)	1-6 (0-0)

Aspect: E 1 (-), ESE 2 (-), N 3 (-), NNE 1 (-), NNW 1 (-), S 2 (-), SE 1 (-), SSE 6 (-), SSW 1 (-), SW 2 (-), W 2 (-), WSW 3 (-)

Macrotopography: Bottom 30 (1), Lower 1/3 of slope 3 (-)

Parent material: Colluvial 1 (1), Granitic 6 (-), Gravelly alluvium 6 (-), Mixed alluvium 9 (-), Sandstone 1 (-), Sandy alluvium 9 (-)

Soil texture: Coarse sand (8 (-), Coarse, loamy sand (4 (-), Fine sand (4 (-), Medium sand (8 (-), Medium to very fine, loamy sand (5 (-), Medium to very fine, sandy loam (3 (-), Sand (1 (1)

***Lepidospartum squamatum* - *Eriogonum fasciculatum* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Eriogonum fasciculatum</i>	100 (100)	7.2 (2)	0.2-25 (2-2)
	<i>Lepidospartum squamatum</i>	100 (100)	10.9 (3)	0.2-50 (3-3)
	<i>Acemispom glaber</i>	52 (100)	1.8 (2)	0.2-6 (2-2)
	<i>Yucca whipplei</i>	39 (-)	0.9 (-)	0.2-6 (-)
	<i>Artemisia californica</i>	33 (-)	1.4 (-)	0.2-7 (-)
	<i>Eriodictyon trichocalyx</i>	21 (-)	5.3 (-)	0.2-14 (-)
	<i>Opuntia littoralis</i>	21 (-)	0.9 (-)	0.2-3 (-)
	<i>Brickellia californica</i>	18 (-)	1.1 (-)	0.2-3 (-)
	<i>Opuntia parryi</i>	18 (-)	6.3 (-)	3-11 (-)
	<i>Prunus ilicifolia</i>	18 (-)	0.8 (-)	0.2-2 (-)
	<i>Salvia apiana</i>	18 (-)	0.5 (-)	0.2-2 (-)
	<i>Sambucus mexicana</i>	18 (-)	1.1 (-)	0.2-2 (-)
	<i>Stephanomeria pauciflora</i>	18 (-)	0.5 (-)	0.2-2 (-)
Herbs	<i>Bromus diandrus</i>	67 (100)	1.9 (0.2)	0.2-15 (0.2-0.2)
	<i>Hirschfeldia incana</i>	64 (100)	0.6 (0.2)	0-2 (0.2-0.2)
	<i>Bromus rubens</i>	58 (100)	3.1 (1)	0.2-10 (1-1)
	<i>Cryptantha intermedia</i>	58 (-)	1.1 (-)	0-4 (-)
	<i>Erodium cicutarium</i>	55 (100)	1 (0.2)	0.2-5 (0.2-0.2)
	<i>Avena barbata</i>	55 (-)	2.5 (-)	0-20 (-)
	<i>Bromus tectorum</i>	52 (-)	4 (-)	0.2-14 (-)
	<i>Filago californica</i>	42 (-)	0.4 (-)	0.2-2 (-)
	<i>Vulpia myuros</i>	42 (-)	1.1 (-)	0.2-3 (-)
	<i>Camissoniopsis bistorta</i>	36 (100)	1.4 (0.2)	0.2-5 (0.2-0.2)
	<i>Chaenactis glabriuscula</i>	36 (-)	0.8 (-)	0.2-5 (-)
	<i>Centaurea melitensis</i>	30 (-)	0.5 (-)	0.2-2 (-)
	<i>Salvia columbariae</i>	27 (100)	0.5 (0.2)	0-3 (0.2-0.2)
	<i>Acemispom strigosus</i>	27 (-)	0.6 (-)	0.2-1 (-)
	<i>Dudleya lanceolata</i>	24 (-)	0.3 (-)	0.2-1 (-)
	<i>Microseris lindleyi</i>	24 (-)	0.2 (-)	0-0.2 (-)
	<i>Phacelia distans</i>	24 (-)	0.6 (-)	0.2-2 (-)
	<i>Schismus barbatus</i>	24 (-)	0.4 (-)	0.2-1 (-)
	<i>Senecio flaccidus</i>	21 (100)	1.3 (0.2)	0.2-2 (0.2-0.2)
	<i>Bromus madritensis</i>	21 (-)	1.9 (-)	0.2-4 (-)
	<i>Eriogonum gracile</i>	21 (-)	0.4 (-)	0.2-1 (-)
	<i>Hypochaeris glabra</i>	21 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Lupinus concinnus</i>	21 (-)	1 (-)	0-2 (-)
	<i>Phacelia cicutaria</i>	21 (-)	0.5 (-)	0.2-2 (-)
	<i>Artemisia dracunculul</i>	18 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Crassula connata</i>	18 (-)	0.3 (-)	0.2-1 (-)
	<i>Cryptantha muricata</i>	18 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Eulobus californicus</i>	18 (-)	0.4 (-)	0-1 (-)

Shrubland

Lotus scoparius - *Lupinus albifrons* - *Eriodictyon* spp. Shrubland Alliance
Lotus scoparius Association



Photo 1. Plot SBV-032 facing north.



Photo 2. Plot SBV-035 facing south.

Samples Used in Type Description:

Total number of all stands = 20

Number of SBVWCD stands = 2: SBV-032, SBV-035

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	41 (24)	8-83 (20-28)
Herb cover (%)	19 (9)	1-78 (3-15)
Shrub cover (%)	25 (15)	5-47 (5-25)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	22 (9)	2-70 (2-15)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	647 (1409)	140-2431 (1364-1453)
Slope (degrees)	18 (3)	0-40 (3-3)

Aspect: N 1 (-), NE 3 (-), NNE 1 (-), NNW 1 (-), NW 1 (-), SSE 1 (-), SW 1 (-), W 1 (-), WNW 1 (-), WSW 3 (1)

Macrotopography: Bottom 1 (1), Lower 1/3 of slope 3 (-), Middle 1/3 of slope 10 (1), Upper 1/3 of slope 6 (-)

Parent material: Colluvial 2 (2), Granitic 9 (-), Igneous 3 (-), Metamorphic 1 (-), Sandstone 2 (-)

Soil texture: Clay Loam (1 (-), Coarse, loamy sand (1 (-), Fine sandy clay (2 (-), Loamy Sand (1 (1), Medium loam (1 (-), Medium silt loam (1 (-), Medium to very fine, sandy loam (5 (-), Moderately coarse, sandy loam (3 (-), Moderately fine clay loam (1 (-), Sand (1 (1

***Lotus scoparius* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Acemisson glaber</i>	100 (100)	18.6 (15)	4-30 (5-25)
	<i>Eriogonum fasciculatum</i>	65 (50)	1.4 (0.2)	0.2-5 (0.2-0.2)
	<i>Artemisia californica</i>	55 (-)	2.2 (-)	0.2-12 (-)
	<i>Salvia apiana</i>	35 (-)	0.7 (-)	0.2-1 (-)
	<i>Malosma laurina</i>	30 (-)	0.6 (-)	0.2-2 (-)
	<i>Hazardia squarrosa</i>	25 (-)	2.4 (-)	1-6 (-)
	<i>Malacothamnus fasciculatus</i>	25 (-)	0.9 (-)	0.2-2 (-)
	<i>Salvia mellifera</i>	25 (-)	0.7 (-)	0.2-2 (-)
	<i>Opuntia littoralis</i>	20 (-)	0.4 (-)	0.2-1 (-)
Herbs	<i>Hirschfeldia incana</i>	50 (50)	3.3 (0.2)	0.2-15 (0.2-0.2)
	<i>Bromus madritensis</i>	50 (-)	10.5 (-)	0.2-37 (-)
	<i>Hypochaeris glabra</i>	40 (50)	0.7 (0.2)	0.2-3 (0.2-0.2)
	<i>Calystegia macrostegia</i>	35 (-)	0.4 (-)	0.2-1 (-)
	<i>Erodium cicutarium</i>	30 (50)	5.4 (0.2)	0.2-15 (0.2-0.2)
	<i>Erodium botrys</i>	25 (100)	1.5 (3.5)	0.2-5 (2-5)
	<i>Cryptantha intermedia</i>	25 (-)	2.3 (-)	0.2-6 (-)
	<i>Acemisson strigosus</i>	20 (-)	5.3 (-)	0.2-20 (-)
	<i>Centaurea melitensis</i>	20 (-)	7.8 (-)	2-18 (-)
	<i>Erigeron canadensis</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Eucrypta chrysanthemifolia</i>	20 (-)	0.4 (-)	0.2-1 (-)
	<i>Logfia gallica</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Marah macrocarpa</i>	20 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Nuttallanthus texanus</i>	20 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

***Opuntia littoralis* - *Opuntia oricola* - *Cylindropuntia prolifera* Shrubland Alliance**
(Alliance Only)



Photo 1. Plot SBV-023 facing north.



Photo 2. Plot SBV-023 facing south.

Samples Used in Type Description:

Total number of all stands = 2

Number of SBVWCD stands = 1: SBV-023

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	60 (39)	39-80 (39-39)
Herb cover (%)	36 (6)	6-65 (6-6)
Shrub cover (%)	27 (34)	20-34 (34-34)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	10 (15)	5-15 (15-15)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1561 (1734)	1388-1734 (1734-1734)
Slope (degrees)	12 (0)	12-12 (0-0)

Aspect: SSE 1 (-)

Macrotopography: Bottom 1 (1), Lower 1/3 of slope 1 (-)

Parent material: Colluvial 1 (1), Granitic 1 (-)

Soil texture: Loamy Sand (1 (1), Moderately coarse, sandy loam (1 (-)

***Opuntia littoralis* - *Opuntia oricola* - *Cylindropuntia prolifera* Shrubland Alliance**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Encelia farinosa</i>	100 (100)	1.1 (0.2)	0.2-2 (0.2-0.2)
	<i>Eriogonum fasciculatum</i>	100 (100)	6 (2)	2-10 (2-2)
	<i>Opuntia littoralis</i>	100 (100)	19.5 (30)	9-30 (30-30)
	<i>Acmispon glaber</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Artemisia californica</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriodictyon trichocalyx</i>	50 (100)	1 (1)	1-1 (1-1)
	<i>Gutierrezia sarothrae</i>	50 (100)	1 (1)	1-1 (1-1)
	<i>Hesperoyucca whipplei</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
Herbs	<i>Bromus rubens</i>	50 (100)	3 (3)	3-3 (3-3)
	<i>Cryptantha intermedia</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Cucurbita foetidissima</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriastrum sapphirinum</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum gracile</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Lastarriaea coriacea</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Mirabilis laevis</i>	50 (100)	2 (2)	2-2 (2-2)
	<i>Amsinckia menziesii</i>	50 (-)	2 (-)	2-2 (-)
	<i>Avena barbata</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Bromus madritensis</i>	50 (-)	10 (-)	10-10 (-)
	<i>Centaurea melitensis</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Dipterostemon capitatus</i>	50 (-)	1 (-)	1-1 (-)
	<i>Erodium cicutarium</i>	50 (-)	25 (-)	25-25 (-)
	<i>Erodium moschatum</i>	50 (-)	25 (-)	25-25 (-)
	<i>Hemizonia</i> sp.	50 (-)	5 (-)	5-5 (-)
	<i>Pectocarya linearis</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Stipa pulchra</i>	50 (-)	0.2 (-)	0.2-0.2 (-)

Shrubland

Rhus ovata Shrubland Alliance

Rhus ovata Shrubland Association



Photo 1. Plot SBV-028 facing south.



Photo 2. Plot SBV-028 facing west.

Samples Used in Type Description:

Total number of all stands = 9

Number of SBVWCD stands = 1: SBV-028

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	31 (27)	21-39 (27-27)
Herb cover (%)	13 (8)	7-26 (8-8)
Shrub cover (%)	22 (19)	13-29 (19-19)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	16 (5)	2-26 (5-5)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	954 (1550)	793-1550 (1550-1550)
Slope (degrees)	7 (0)	1-20 (0-0)

Aspect: E 1 (-), S 3 (-), SW 1 (-), WNW 1 (-), WSW 2 (-)

Macrotopography: Bottom 1 (1), Lower 1/3 of slope 5 (-), Middle 1/3 of slope 2 (-), Upper 1/3 of slope 1 (-)

Parent material: Colluvial 1 (1), Granitic 5 (-), Gravelly alluvium 2 (-), Sandy alluvium 1 (-)

Soil texture: Coarse, loamy sand (1 (-), Loamy Sand (1 (1), Medium sand (1 (-), Medium to very fine, loamy sand (1 (-), Medium to very fine, sandy loam (2 (-), Moderately coarse, sandy loam (2 (-)

***Rhus ovata* Shrubland Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Acemispom glaber</i>	100 (100)	5.6 (0.2)	0.2-16 (0.2-0.2)
	<i>Eriogonum fasciculatum</i>	100 (100)	4.9 (0.2)	0.2-8 (0.2-0.2)
	<i>Rhus ovata</i>	100 (100)	7.4 (17)	4-17 (17-17)
	<i>Encelia actoni</i>	56 (-)	0.7 (-)	0.2-1 (-)
	<i>Salvia apiana</i>	56 (-)	0.5 (-)	0.2-1 (-)
	<i>Sambucus nigra subsp. caerulea</i>	56 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Adenostoma fasciculatum</i>	44 (100)	1.2 (0.2)	0.2-4 (0.2-0.2)
	<i>Prunus ilicifolia</i>	44 (100)	0.7 (2)	0.2-2 (2-2)
	<i>Cylindropuntia ganderi</i>	44 (-)	3.3 (-)	3-4 (-)
	<i>Yucca schidigera</i>	44 (-)	1.1 (-)	0.2-2 (-)
	<i>Adenostoma sparsifolium</i>	33 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Keckia antirrhinoides</i>	33 (-)	3.1 (-)	0.2-8 (-)
	<i>Cylindropuntia</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Echinocereus engelmannii</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Gutierrezia californica</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Hesperoyucca whipplei</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Simmondsia chinensis</i>	22 (-)	3.5 (-)	2-5 (-)
Herbs	<i>Antirrhinum coulterianum</i>	78 (-)	0.7 (-)	0.2-4 (-)
	<i>Mirabilis laevis</i>	78 (-)	0.8 (-)	0.2-2 (-)
	<i>Camissoniopsis bistorta</i>	67 (100)	0.3 (0.2)	0.2-1 (0.2-0.2)
	<i>Marah macrocarpa</i>	67 (100)	0.5 (0.2)	0.2-2 (0.2-0.2)
	<i>Bromus rubens</i>	67 (-)	8.5 (-)	4-17 (-)
	<i>Chaenactis glabriuscula</i>	56 (100)	3.6 (1)	0.2-8 (1-1)
	<i>Erigeron foliosus</i>	56 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Erodium cicutarium</i>	44 (100)	0.9 (0.2)	0.2-2 (0.2-0.2)
	<i>Phacelia distans</i>	44 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Cryptantha intermedia</i>	44 (-)	0.7 (-)	0.2-2 (-)
	<i>Stephanomeria exigua</i>	33 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum gracile</i>	22 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eulobus californicus</i>	22 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Lastarriaea coriacea</i>	22 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Bromus madritensis</i>	22 (-)	7.5 (-)	7-8 (-)
	<i>Chaenactis artemisiifolia</i>	22 (-)	0.6 (-)	0.2-1 (-)
	<i>Eriastrum sapphirinum</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Euphorbia albomarginata</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Lupinus truncatus</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Pectocarya linearis</i>	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Phacelia</i> sp.	22 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Schismus</i> sp.	22 (-)	1 (-)	1-1 (-)
	<i>Stipa speciosa</i>	22 (-)	0.2 (-)	0.2-0.2 (-)

Herbaceous vegetation

Avena spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance
Bromus diandrus Association



Photo 1. Plot SBV-009 facing north.



Photo 2. Plot SBV-027 facing south.

Samples Used in Type Description:

Total number of all stands = 22

Number of SBVWCD stands = 2: SBV-009, SBV-027

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	56 (35)	30-90 (30-40)
Herb cover (%)	54 (35)	30-90 (30-40)
Shrub cover (%)	1 (0)	0-7 (0-0)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	69 (13)	5-95 (5-20)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	384 (1496)	-29-1573 (1419-1573)
Slope (degrees)	8 (0)	0-22 (0-0)

Aspect: E 2 (-), ENE 1 (-), ESE 1 (-), NNE 1 (-), NW 1 (-), S 5 (-), SE 1 (-), SSE 1 (-), SSW 2 (-), W 1 (-)

Macrotopography: Bottom 4 (2), Lower 1/3 of slope 8 (-), Middle 1/3 of slope 3 (-), Upper 1/3 of slope 7 (-)

Parent material: Colluvial 2 (2), Granitic 4 (-), Sandstone 13 (-), Sedimentary 1 (-), Silty alluvium 1 (-)

Soil texture: Clay (3 (-), Loam (2 (1), Medium loam (1 (-), Medium silt loam (1 (-), Medium to very fine, sandy loam (4 (-), Moderately coarse, sandy loam (2 (-), Moderately fine clay loam (4 (-), Moderately fine sandy clay loam (1 (-), Moderately fine silty clay loam

***Bromus diandrus* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Baccharis pilularis</i>	23 (-)	1.8 (-)	0.2-6 (-)
	<i>Eriogonum fasciculatum</i>	23 (-)	0.7 (-)	0.2-2 (-)
	<i>Isocoma menziesii</i>	23 (-)	0.7 (-)	0.2-1 (-)
	<i>Opuntia littoralis</i>	23 (-)	0.4 (-)	0.2-1 (-)
	<i>Sambucus nigra</i> subsp. <i>caerulea</i>	23 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Artemisia californica</i>	18 (-)	0.4 (-)	0.2-1 (-)
Herbs	<i>Bromus diandrus</i>	100 (100)	43.6 (30)	17-83 (25-35)
	<i>Brassica nigra</i>	55 (-)	6.5 (-)	1-18 (-)
	<i>Avena barbata</i>	41 (50)	4.2 (0.2)	0.2-10 (0.2-0.2)
	<i>Hirschfeldia incana</i>	32 (50)	1.5 (0.2)	0.2-5 (0.2-0.2)
	<i>Croton setiger</i>	27 (-)	2.9 (-)	0.2-10 (-)
	<i>Bromus hordeaceus</i>	23 (-)	2.6 (-)	0.2-7 (-)
	<i>Lactuca serriola</i>	23 (-)	0.6 (-)	0.2-2 (-)
	<i>Erodium botrys</i>	18 (50)	5.3 (4)	0.2-15 (4-4)
	<i>Carduus pycnocephalus</i>	18 (-)	0.6 (-)	0.2-1 (-)
	<i>Cynara cardunculus</i>	18 (-)	0.7 (-)	0.2-2 (-)
	<i>Silybum marianum</i>	18 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Stipa pulchra</i>	18 (-)	0.4 (-)	0.2-1 (-)

Herbaceous vegetation

Avena spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance

Bromus hordeaceus - *Bromus tectorum* Association



Photo 1. Plot SBV-016 facing north.



Photo 2. Plot SBV-034 facing north.

Samples Used in Type Description:

Total number of all stands = 37

Number of SBVWCD stands = 3: SBV-016, SBV-017, SBV-034

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	39 (55)	8-85 (40-70)
Herb cover (%)	28 (55)	11-70 (40-70)
Shrub cover (%)	3 (0)	0-15 (0-0)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	10 (10)	10-10 (10-10)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	1465 (1900)	892-2157 (1406-2157)
Slope (degrees)	9 (2)	0-60 (1-2)

Aspect: E 1 (-), ENE 2 (-), ESE 5 (-), N 8 (-), NE 3 (-), NNE 2 (-), NNW 2 (-), NW 1 (-), S 2 (-), SSW 2 (-), SW 2 (-), WSW 3 (2)

Macrotopography: Bottom 12 (3), Lower 1/3 of slope 9 (-), Middle 1/3 of slope 7 (-), Ridge top 1 (-), Upper 1/3 of slope 8 (-)

Parent material: Basalt 6 (-), Colluvial 3 (3), General volcanic extrusives 3 (-), Granitic 4 (-), Silty alluvium 1 (-)

Soil texture: Coarse, loamy sand (2 -), Fine clay (4 -), Fine sandy clay (3 -), Fine silty clay (3 -), Loam (3 (2), Loamy Sand (5 (1), Medium loam (2 -), Medium to very fine, sandy loam (3 -), Moderately fine clay loam (1 -), Moderately fine sandy clay loam (4 (

***Bromus hordeaceus* - *Bromus tectorum* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Quercus chrysolepis</i>	19 (-)	1.2 (-)	0.2-3 (-)
Shrubs				
	<i>Artemisia tridentata</i>	19 (-)	0.4 (-)	0.1-2 (-)
Herbs				
	<i>Bromus tectorum</i>	100 (100)	23.7 (28.3)	0.1-62.5 (20-35)
	<i>Elymus elymoides</i>	49 (-)	2 (-)	0.1-12 (-)
	<i>Sisymbrium altissimum</i>	46 (-)	2.9 (-)	0.1-37.5 (-)
	<i>Poa secunda</i>	41 (-)	0.9 (-)	0.1-3.5 (-)
	<i>Erodium cicutarium</i>	32 (67)	5.4 (0.6)	0.1-37.5 (0.2-1)
	<i>Descurainia sophia</i>	24 (-)	16.7 (-)	0.2-85 (-)
	<i>Elymus spicatus</i>	22 (-)	0.8 (-)	0.1-3.5 (-)
	<i>Blepharipappus scaber</i>	19 (-)	0.9 (-)	0.2-5 (-)
	<i>Tragopogon dubius</i>	19 (-)	0.1 (-)	0.1-0.2 (-)
	<i>Elymus caput-medusae</i>	16 (-)	1.6 (-)	0.2-3 (-)
	<i>Epilobium brachycarpum</i>	16 (-)	0.2 (-)	0.1-0.2 (-)
	<i>Holosteum umbellatum</i>	16 (-)	0.2 (-)	0.1-0.2 (-)
	<i>Lactuca serriola</i>	16 (-)	0.2 (-)	0.1-0.2 (-)
	<i>Microsteris gracilis</i>	16 (-)	2 (-)	0.1-6 (-)

Herbaceous vegetation

Heterotheca (oregona, sessiliflora) Herbaceous Alliance

Heterotheca sessiliflora Association



Photo 1. Plot SBV-002 facing north.



Photo 2. Plot SBV-002 facing east.

Samples Used in Type Description:

Total number of all stands = 9

Number of SBVWCD stands = 1: SBV-002

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	27 (3)	3-45 (3-3)
Herb cover (%)	3 (3)	3-3 (3-3)
Shrub cover (%)	0 (0)	0-0 (0-0)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	0 (0)	0.2-0.2 (0.2-0.2)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	477 (1212)	299-1212 (1212-1212)
Slope (degrees)	7 (0)	0-28 (0-0)

Aspect: E 1 (-), N 2 (-), NW 1 (-), S 1 (-), SSE 1 (-), SSW 1 (-), WSW 1 (-)

Macrotopography: Channel bed 1 (1), Lower 1/3 of slope 1 (-), Middle 1/3 of slope 6 (-), Upper 1/3 of slope 1 (-)

Parent material: Colluvial 1 (1), Granitic 1 (-), Mixed alluvium 6 (-), Sandy alluvium 1 (-)

Soil texture: Clay 1 (-), Coarse sand (2 (-), Coarse, loamy sand (1 (-), Fine clay (1 (-), Fine sand (1 (-), Sand (3 (1)

***Heterotheca sessiliflora* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Trees				
	<i>Pinus sabiniana</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
Shrubs				
	<i>Eriogonum fasciculatum</i>	44 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Eriogonum elongatum</i>	22 (-)	1.8 (-)	0.5-3 (-)
Herbs				
	<i>Heterotheca sessiliflora</i> ssp.			
	<i>echioides</i>	89 (-)	13.8 (-)	7-25 (-)
	<i>Bromus hordeaceus</i>	78 (-)	6.5 (-)	0.5-20 (-)
	<i>Bromus rubens</i>	67 (100)	1.6 (0.2)	0.2-5 (0.2-0.2)
	<i>Avena barbata</i>	67 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Erodium cicutarium</i>	56 (100)	0.7 (0.2)	0.2-2 (0.2-0.2)
	<i>Bromus diandrus</i>	56 (-)	1.8 (-)	0.5-5 (-)
	<i>Clarkia purpurea</i>	56 (-)	0.7 (-)	0.5-1 (-)
	<i>Hypochaeris glabra</i>	44 (-)	1.4 (-)	0.5-4 (-)
	<i>Hypochaeris radicata</i>	44 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Penstemon centranthifolius</i>	44 (-)	0.9 (-)	0.5-2 (-)
	<i>Vulpia myuros</i>	44 (-)	2.4 (-)	0.5-5 (-)
	<i>Bromus arenarius</i>	33 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Eriogonum elegans</i>	33 (-)	0.7 (-)	0.5-1 (-)
	<i>Erodium brachycarpum</i>	33 (-)	7 (-)	1-15 (-)
	<i>Euphorbia ocellata</i>	33 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Plagiobothrys nothofulvus</i>	33 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Acemispom americanus</i>	22 (-)	1.3 (-)	0.5-2 (-)
	<i>Calystegia collina</i> ssp. <i>venusta</i>	22 (-)	2.3 (-)	0.5-4 (-)
	<i>Castilleja exserta</i> ssp. <i>exserta</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Clarkia</i> sp.	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Cuscuta californica</i>	22 (-)	0.8 (-)	0.5-1 (-)
	<i>Eschscholzia californica</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Filago gallica</i>	22 (-)	0.8 (-)	0.5-1 (-)
	<i>Loeflingia squarrosa</i> ssp.			
	<i>squarrosa</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Lupinus bicolor</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Orobancha californica</i> ssp. <i>jepsonii</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Plantago erecta</i>	22 (-)	0.5 (-)	0.5-0.5 (-)
	<i>Stephanomeria virgata</i>	22 (-)	0.5 (-)	0.5-0.5 (-)

Herbaceous vegetation

Pennisetum setaceum - *Pennisetum ciliare* Herbaceous Semi-Natural Alliance

Pennisetum setaceum Association



Photo 1. Plot SBV-014 facing east.



Photo 2. Plot SBV-014 facing west.

Samples Used in Type Description:

Total number of all stands = 2

Number of SBVWCD stands = 1: SBV-014

Vegetation Description All stands (SBVWCD stands)

	Average	Range
Total vegetation cover (%)	40 (25)	25-55 (25-25)
Herb cover (%)	37 (25)	25-49 (25-25)
Shrub cover (%)	1 (1)	0-1 (1-1)
Understory tree cover (%)	0 (0)	0-0 (0-0)
Overstory tree cover (%)	0 (0)	0-0 (0-0)
Litter cover (%)	12 (0)	12-12 (0-0)

Environmental Description All stands (SBVWCD stands)

	Average	Range
Elevation (ft.)	936 (1759)	112-1759 (1759-1759)
Slope (degrees)	17 (5)	5-28 (5-5)

Aspect: S 1 (-), WSW 1 (1)

Macrotopography: Channel bed 1 (1), Upper 1/3 of slope 1 (-)

Parent material: Colluvial 1 (1)

Soil texture: Coarse, loamy sand (1 (-), Sand (1 (1)

***Pennisetum setaceum* Association**
(continued)

Plant Constancy and Cover Data All stands (SBVWCD stands)

	Taxon	% Constancy	% Cover Average	% Cover Range
Shrubs	<i>Bebbia juncea</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Encelia farinosa</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Eriogonum fasciculatum</i>	50 (100)	1 (1)	1-1 (1-1)
	<i>Hesperoyucca whipplei</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Lepidospartum squamatum</i>	50 (100)	0.2 (0.2)	0.2-0.2 (0.2-0.2)
	<i>Artemisia californica</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Bahiopsis laciniata</i>	50 (-)	5 (-)	5-5 (-)
	<i>Malosma laurina</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Rhus integrifolia</i>	50 (-)	1 (-)	1-1 (-)
	<i>Sambucus nigra</i> subsp. <i>caerulea</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
Herbs	<i>Pennisetum setaceum</i>	100 (100)	36.5 (24)	24-49 (24-24)
	<i>Centaurea melitensis</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Datura wrightii</i>	50 (-)	0.2 (-)	0.2-0.2 (-)
	<i>Salicornia pacifica</i>	50 (-)	0.2 (-)	0.2-0.2 (-)