

Vegetation, Noxious Weeds, and Special Status Plants

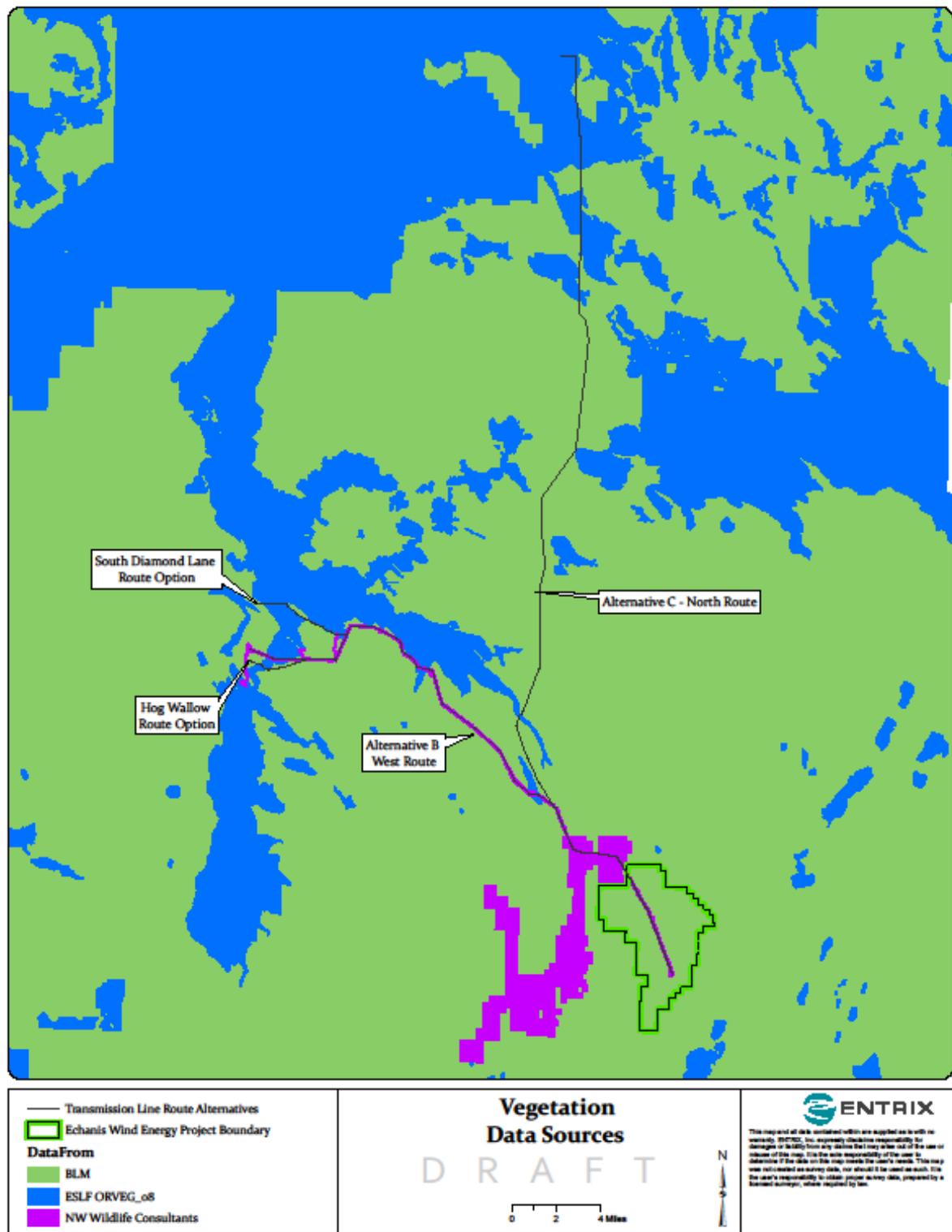


Figure B-1 Vegetation Data Sources

Table B-1 Federal Special-status Plant Species Potentially Occurring in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Bastard kentrophyta <i>Astragalus tegetarioides</i>	SC, OR-C	Dry pine forests and sagebrush communities at ca 1350-1550 m in the Little Juniper Mountain and upper Silvies River, in west central and north Harney County north of Burns. (Welsh 1998)	Reported range of the species is west and north of the Project Area. Not expected to occur.
Crenulate grape fern <i>Botrychium crenulatum</i>	SC, OR-C	Scattered locations in eastern Oregon (FNA 1993). Marshes and spring areas; at elevations from 3,935 to 8,200 feet. Harney County (USDA 2010).	Locations are scattered and species is difficult to locate. Not reported along any of the transmission line alternatives or at the Echanis site to date, but may be present in Project Area
Peck's mariposa lily <i>Calochortus longebarbatus var. peckii</i>	SC, OR-C	Grassy margins of wet meadows and under pines. It is found in the Ochoco Mountains. Known only from Wheeler and Crook Counties in Oregon (WNHP 1999).	Reported range of the species is outside the Project Area. Not expected to occur.
Dwarf evening-primrose <i>Camissonia pygmaea</i>	SC, OR-C	Sagebrush-steppe in unstable soil or gravel in steep talus, dry washes, banks and roadcuts. Found in eastern Oregon in Gilliam, Grant, Harney, and Wheeler counties. (WNHP 1999).	May occur in the Project Area.
Slender wild cabbage <i>Caulanthus major var. nevadensis</i>	SC, OR-C	Dryish, often rocky slopes, sometimes in shade. Alpin County and southern Modoc Plateau in California to northern and western Nevada and southeastern Oregon. [Hickman 1993].	May occur in the Project Area.
Golden buckwheat <i>Eriogonum chrysops</i>	SC, OR-T	Sagebrush communities on gravelly slopes in rhyolitic or basaltic soils, 3,935 to 4,595 feet.. Occurs in the Skull Creek area of Malheur County (FNA 2005).	Reported range of the species is outside the Project Area. Not expected to occur.
Crosby's buckwheat <i>Eriogonum crosbyae</i>	SC, OR-T	White tuffaceous volcanic outcrops, flats, washes and slopes in saltbush and sagebrush communities. In Oregon, reported only for Guano and Coleman Valleys in southern Lake County (FNA 2005).	Reported range of the species is outside the Project Area. Not expected to occur.
Cusick's buckwheat <i>Eriogonum cusickii</i>	SC, OR-C	Volcanic flats, mixed grassland and sagebrush communities, montane conifer woodlands. Fairly common in scattered portions of Deschutes, Harney, Klamath, and Lake counties (Mansfield 2000, FNA 2005).	May occur in the Project Area.
Prostrate buckwheat <i>Eriogonum prociduum</i>	SC, OR-C	Sagebrush, mixed grassland and pinyon juniper communities on volcanic, sandy, or gravelly slopes, 4,595 to 8,860 feet (FNA 2005). Two subspecies: Prostrate buckwheat (<i>Eriogonum prociduum var. prociduum</i>) from Lake and Baker Counties in Oregon (FNA 2005). Pueblo Mountains wild buckwheat (<i>Eriogonum prociduum var. mystrium</i>): Oregon Canyon, Pueblo, Steens, and Trout Creek mountains of Harney County, Oregon. Trout Creek Mountains of Harney County (FNA 2005).	May occur in the Project Area.
Green buckwheat <i>Eriogonum umbellatum var. glaberrimum</i>	SC	Sandy to gravelly slopes, sagebrush communities, aspen and montane conifer woodlands. Localized and known with certainty from only five locations in the Warner Mountains of Lake County, Oregon (FNA 2005).	Reported range of the species is outside the Project Area. Not expected to occur.
Shelly's ivesia <i>Ivesia rhypara var. shellyi</i>	SC	Grows in pockets of boulders and outcrops of pumiceous welded ash-flow tuff rather than soil. Occurs near the border of Harney and Lake Counties, and in Lesley Gulch in Malheur County in Oregon.	Reported range of the species is outside the Project Area Not expected to occur.

Table B-1 Federal Special-status Plant Species Potentially Occurring in the Project Vicinity

Species	Status	Habitat Description	Potential to Occur
Disappearing monkeyflower <i>Mimulus evanescens</i>	SC, OR-C	Ecotone between the edge of the sagebrush-juniper shrub zone, and the semi-aquatic sedges near the water, along intermittent streams, or near the edges of small lakes and ponds, below 5,580 feet (BLM 2010, Mansfield 2000).	May occur in the Project Area.
Playa phacelia <i>Phacelia inundata</i>	SC, BLM-S	Southeastern Oregon (Cronquist, et al., 1984; Mansfield 2000.) on alkali flats and on the margins of fluctuating lakes, sinks, and playas, 4,800 – 6,400 feet (Cronquist, et al., 1984).	May occur in the Project Area.
Williams combleaf <i>Polycytenium williamsiae</i>	SC	Oregon (CNPS 2010). Playas, alkali marshes, and vernal pools perched over siliceous volcanic bedrock, 4,215 to 8,935 feet (CDFG 2010)	Range extends into southeastern Oregon. May occur in the Project Area.
Columbia yellow cress <i>Rorippa columbiae</i>	BLM-S, OR-C	Occurs near many types of water bodies, including the Columbia River, intermittent snow-fed streams, permanent lakes, snow-fed lakes, internally-drained lakes, wet meadows, irrigation ditches and roadside ditches moist locations along ponds, lakes, streams, and ditches (Holmgren, et al., 2005).	Found on the Malheur Lake shoreline in the vicinity of the project, but not reported from the project area. Could occur along streams or wet meadows in the project area.
Biennial stanleya <i>Stanleya confertiflora</i>	SC	Endemic to lower confines of Snake River Canyon and adjacent slopes in Oregon. Barren clay slopes in sagebrush communities, heavy clay flats, loose soil mounds, dry sandy grounds, alkaline meadows and flats; of conservation concern; 1,970 to - 4,925 feet; Baker, Harney, and Malheur Counties in Oregon (FNA 2010).	Reported range of the species is outside the Project Area and generally below the project elevations. Not expected to occur.
Malheur wire-lettuce <i>Stephanomeria malheurensis</i>	FE, OR-E	Known only from the top of a dry, broad hill on volcanic soil intermixed with layers of limestone in the high desert of the northern portion of the Great Basin, located in an area south of Burns, Oregon. (ODA 2009a)	No critical habitat in the Project Area. Reported range of the species is outside the project area. Not expected to occur.
Howell's spectacular thelypody <i>Thelypodium howellii</i> ssp. <i>spectabilis</i>	SC, OR-E	Moist alkaline meadow habitats, within a fairly narrow elevation range of 3281 to 3,610 ft. Restricted to the Willow Creek Valley in Malheur County. (ODA 2009a)	Reported range of the species is outside the Project Area and below the project elevations. Not expected to occur.
Leiberg's Clover <i>Trifolium leibergii</i>	SC, OR-C	Grows on a distinct habitat characterized by a thin, gravelly soil layer consisting of decomposing volcanic ash. In Oregon, restricted to an area that ranges 2 miles on either side of the Middle Fork of the Malheur River and continues for approximately 10 miles (CPC 2010).	Reported range of the species is outside the Project Area. Not expected to occur.

Key: FE = Federally listed as endangered; SC = Federal Species of Concern; S = BLM Oregon Sensitive Species, OR-E = state-listed as endangered, OR-T = state-listed as threatened, OR-C = state candidate for listing

Table B-2 Synonyms for Scientific and Common Names Used for Plants in the EIS

Scientific Name	Common Name	Synonyms: Scientific Name	Synonyms: Common Name
<i>Achillea millefolium</i>	Common Yarrow		Yarrow
<i>Achnatherum</i> spp.	Needlegrasses		
<i>Acnatherum</i> sp.	Needlegrass		
<i>Acroptilon repens</i>	Russian Knapweed		
<i>Agastache</i> spp.	Horsemint		
<i>Agropyron cristatum</i>	Crested Wheatgrass		
<i>Agrostis stolonifera</i>	Creeping Bentgrass		
<i>Aleopecurus pratensis</i>	Meadow Foxtail		
<i>Alnus incana</i>	Mountain Alder		
<i>Amelanchier</i> sp.	Serviceberry		
<i>Anlennaria</i> spp.	Pussytoes		
<i>Arenaria</i> spp.	Sandwort		
<i>Arrhenatherum elatius</i>	Tall Oatgrass		
<i>Artemisia arbuscula</i>	Low Sagebrush		
<i>Artemisia cana</i>	Silver Sagebrush		
<i>Artemisia nova</i>	Black Sagebrush		Black Sage
<i>Artemisia rigida</i>	Rigid Sagebrush		
<i>Artemisia spinescens</i>	Budsage		
<i>Artemisia tridentata</i>	Big Sagebrush		
<i>Artemisia tridentata</i> ssp. <i>vaseyana</i>	Mountain Big Sagebrush		
<i>Artemisia tripartita</i>	Three-Tip Sage		
<i>Artemisia tridentata</i> ssp. <i>wyomingensis</i>	Wyoming Big Sagebrush		
<i>Aster</i> spp.	Aster		
<i>Atriplex confertifolia</i>	Shadscale		
<i>Atriplex nuttallii</i>	Saltbush		
<i>Balsamorhiza serrata</i>	Serrate Balsamroot		
<i>Betula occidentalis</i>	Water Birch		
<i>Botrychium crenulatum</i>	Crenulate Grape Fern		
<i>Bromus carinatus</i>	California Brome	Includes <i>Bromus Marginatus</i>	Mountain Brome
<i>Bromus</i> spp.	Perennial Bromes		
<i>Bromus tectorum</i>	Cheatgrass		
<i>Calamagrostis rubescens</i>	Pinegrass		
<i>Camissonia pygmaea</i>	Dwarf Evening-Primrose		
<i>Cardaria draba</i>	Whitetop	<i>Lepidium Draba</i>	Hoary Cress
<i>Carduus nutans</i>	Musk Thistle		
<i>Carex atherodes</i>	Wheat Sedge		
<i>Carex nebrascensis</i>	Nebraska Sedge		
<i>Carex</i> spp.	Sedges		

Table B-2 Synonyms for Scientific and Common Names Used for Plants in the EIS

Scientific Name	Common Name	Synonyms: Scientific Name	Synonyms: Common Name
<i>Castilleja</i> spp.	Paintbrushes		
<i>Caulanthus major</i> var. <i>nevadensis</i>	Slender Wild Cabbage		
<i>Ceanothus velutinus</i> var. <i>velutinus</i>	Snowbrush Ceanothus		
<i>Centaurea biebersteinii</i>	Spotted Knapweed	<i>Centaurea Stoebe</i> , <i>C. Maculosa</i>	
<i>Centaurea diffusa</i>	Diffuse Knapweed		
<i>Centaurea solstitialis</i>	Yellow Starthistle		
<i>Cercocarpus ledifolius</i>	Curl-Leaf Mountain Mahogany		Curl-Leaf Mahogany
<i>Chondrilla juncea</i>	Rush Skeleton Weed		
<i>Cirsium arvense</i>	Canada Thistle		
<i>Cirsium vulgare</i>	Bull Thistle		
<i>Convolvulus arvensis</i>	Field Bindweed		Morning Glory
<i>Crepis</i> spp.	Hawksbeards		
<i>Cyperus</i> sp.	Flatsedge		
<i>Danthonia unispicata</i>	Onespike Oatgrass		
<i>Distichlis spicata</i>	Saltgrass		
<i>Eleocharis palustris</i>	Common Spikerush		
<i>Eleocharis quinqueflora</i>	Few-Flower Spikerush		
<i>Elymus glaucous</i>	Blue Wildrye		
<i>Elytrigia</i> spp.	Wheatgrasses		
<i>Ephedra viridis</i>	Mormon Tea		
<i>Ericameria nauseosa</i>	Common Rabbitbrush	<i>Chrysothamnus Nauseosus</i>	Rubber Rabbitbrush, Gray Rabbitbrush, Grey Rabbitbrush
<i>Ericameria viscidiflora</i>	Green Rabbitbrush	<i>Chrysothamnus Viscidiflorus</i>	Yellow Rabbitbrush
<i>Eriogonum chrysops</i>	Golden Buckwheat		
<i>Eriogonum crosbyae</i>	Crosby's Buckwheat		
<i>Eriogonum cusickii</i>	Cusick's Buckwheat		
<i>Eriogonum prociduum</i>	Prostrate Buckwheat		
<i>Euphorbia esula</i>	Leafy Spurge		
<i>Festuca arundinacea</i>	Tall Fescue		
<i>Festuca idahoensis</i>	Idaho Fescue		
<i>Galium</i> spp.	Bedstraw		
<i>Grayia spinosa</i>	Hopsage		
<i>Halogeton glomeratus</i>	Halogeton		
<i>Hypericum perforatum</i>	St John's Wort		
<i>Juncus balticus</i>	Baltic Rush		
<i>Juncus</i> spp.	Rushes		
<i>Juniperus occidentalis</i>	Western Juniper		
<i>Kochia americana</i>	Red Sage		Greenmolly
<i>Kochia scoparia</i>	Kochia		

Table B-2 Synonyms for Scientific and Common Names Used for Plants in the EIS

Scientific Name	Common Name	Synonyms: Scientific Name	Synonyms: Common Name
<i>Koeleria macrantha</i>	Prairie Junegrass	<i>Koeleria Cristata</i>	
<i>Krascheninnikovia lanata</i>	Winterfat	<i>Erolia Lanata</i>	
<i>Lactuca serriola</i>	Prickly Lettuce		
<i>Lepidium latifolium</i>	Perennial Pepperweed		
<i>Lepidium</i> spp.	Pepperweeds		
<i>Lewisia rediviva</i>	Oregon Bitterroot		
<i>Linaria genistifolia</i> ssp. <i>dalmatica</i>	Dalmatian Toadflax	<i>Linaria Dalmatica</i>	
<i>Lomatium cous</i>	Cous		Cous Biscuit-Root
<i>Lomatium</i> spp.	Lomatiums		Desert Parsleys, Desert Parsleys, Biscuit-Roots
<i>Lupinus</i> spp.	Lupines		
<i>Lythrum salicaria</i>	Purple Loosestrife		
<i>Medicago lupulina</i>	Black Medic		
<i>Medicago sativa</i>	Alfalfa		
<i>Mimulus evanescens</i>	Disappearing Monkeyflower		
<i>Myriophyllum</i> spp.	Watermilfoil		
<i>Onopordum acanthium</i>	Scotch Thistle		
<i>Osmorhiza</i> spp.	Sweet Cicely		
<i>Penstemon pratensis</i>	Western Whiteflower Beardtongue		
<i>Perideridia gairdneri</i> ssp. <i>borealis</i>	Common Yampah		
<i>Phacelia inundata</i>	Playa Phacelia		
<i>Poa bulbosa</i>	Bulbous Bluegrass		
<i>Poa pratensis</i>	Kentucky Bluegrass		
<i>Poa secunda</i>	Sandberg's Bluegrass		Sandberg Bluegrass
<i>Polyctenium williamsiae</i>	Williams Combleaf		
<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	Black Cottonwood		
<i>Populus tremuloides</i>	Quaking Aspen		
<i>Polamogeton</i> spp.	Pondweed		
<i>Pseudoroegneria spicata</i>	Bluebunch Wheatgrass	<i>Agropyron Spicatum</i>	
<i>Purshia tridentata</i>	Antelope Bitterbrush		
<i>Ranunculus flammula</i>	Creeping Buttercup		
<i>Ribes cereum</i>	Wax Currant		
<i>Rorippa columbiae</i>	Columbia Yellow Cress		
<i>Rudbeckia</i> spp.	Coneflower		
<i>Salix scouleriana</i>	Scouler's Willow		
<i>Salix</i> spp.	Willow		
<i>Salvia aethiops</i>	Mediterranean Sage		
<i>Sambucus nigra</i>	Elderberry		
<i>Sarcobatus vermiculatus</i>	Black Greasewood		

Table B-2 Synonyms for Scientific and Common Names Used for Plants in the EIS

Scientific Name	Common Name	Synonyms: Scientific Name	Synonyms: Common Name
<i>Senecio jacobaea</i>	Tansy Ragwort		
<i>Senecio</i> spp.	Senecio		
<i>Sisymbrium altissimum</i>	Tall Tumble Mustard		
<i>Sitanion hystrix</i>	Bottlebrush Squirreltail		
<i>Symphoricarpos</i> sp.	Snowberry		
<i>Taeniatherum caput-medusae</i>	Medusahead Rye		
<i>Thalictrum</i> spp.	Meadowrue		
<i>Tribulus terrestris</i>	Puncturevine		
<i>Valeriana</i> spp.	Valerian		

Table B-3 Crosswalk Table for Vegetation Types from Three Data Sources

EIS Category	NWC ¹	BLM ²	ESLF-ORVEG ³
Agriculture	Agriculture - Hay Field		Cultivated Crops
Agriculture	Agriculture - Hay Field	Crested Wheatgrass	Pasture/Hay
Big Sagebrush Steppe	Big Sagebrush Steppe	Big Sagebrush Steppe	Sagebrush Shrublands and Steppe
Big Sagebrush Steppe	Big Sagebrush Steppe	Big Sagebrush/Annual Grassland	
Big Sagebrush Steppe	Big Sagebrush Steppe	Big Sagebrush/Crested Wheatgrass	
Big Sagebrush Steppe	Big Sagebrush Steppe	Big Sagebrush/Perennial Grassland	
Big Sagebrush Steppe	Big Sagebrush Steppe	Mountain Big Sagebrush/Grassland	
Disturbed/Developed	Disturbed/Developed	Disturbed/Developed	Rural Residential
Disturbed/Developed	Disturbed/Developed		Suburban
Dwarf Shrub-Steppe	Dwarf Shrub-Steppe	Low Sagebrush/Grassland	
Escarpment/Talus	Escarpment/Talus		
Exotic Annual Grassland	Exotic Annual Grassland	Exotic Annual Grassland	Exotics
Native Grassland	Native Grassland	Native Grassland	Columbia Basin Grasslands and Prairie
Juniper Woodland	Juniper Woodland	Juniper/Big Sagebrush	
Juniper Woodland	Juniper Woodland	Juniper/Low Sagebrush	
Lake/Pond	Lake/Pond		
Riparian Meadow	Riparian Meadow		
Riparian Shrub-Woodland	Riparian Shrub-Woodland		Montane Riparian Forests and Shrublands
Salt Desert Shrub		Salt Desert Shrub/Grassland	Salt Desert Scrub
Alpine and Subalpine			Alpine and Subalpine Habitats
Deserts, Playas and Ash Beds			Deserts, Playas and Ash Beds
Marshes, Bogs and Emergent Wetlands			Marshes, Bogs and Emergent Wetlands
Lava Flows			Lava Flows
Quaking Aspen		Quaking Aspen	
Rabbitbrush Steppe		Rabbitbrush/Grassland	

¹ WNC = Northwest Wildlife Consultants (2010a)

² BLM = Bureau of Land Management (2003)

³ ESLF-ORVEG = Oregon Natural Heritage Information Center (2008)

REFERENCES

- Center for Plant Conservation (CPC) 2010. *Trifolium leibergii*. Updated on March 4, 2010. Available at: [http://www.centerforplantconservation.org/Collection/CPC_ViewProfile.asp?CPCNum=4325].
- Cronquist, A., A. H. Holmgren, N. H. Holmgren, J. L. Reveal, and P. K. Holmgren. 1989. *Intermountain Flora: Vascular Plants of The Intermountain West*, U.S. A. Volume 3, Part B. New York: The New York Botanical Garden.
- Flora of North America (FNA). 2010. *Magnoliophyta: Caryophyllidae*, part 2. Volume 7. Available at: [http://www.efloras.org/volume_page.aspx?volume_id=1007&flora_id=1]
- Hickman J. C., ed. 1993. The Jepson manual. Berkeley: University of California Press.
- Washington Natural Heritage Program (WNHP). 1999. Field guide to selected rare vascular plants: *Calochortus longebarbatus* var. *longebarbatus*. Washington Natural Heritage Program and U.S.D.I. Bureau of Land Management. September 22, 2006. Available at: [<http://www1.dnr.wa.gov/nhp/refdesk/fguide/pdf/calochortus.pdf>].
- Welsh, S. L. (n.d.) *Astragalus* (*Leguminosae*): Nomenclatural Proposals and New Taxa. Great Basin Naturalist 58(1):45-53