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## TECHNICAL MEMORANDUM

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**TO:** CHRIS TAYLOR, ZILKHA RENEWABLE RESOURCES  
**FROM:** RANDALL KRICHBAUM, EAGLE CAP CONSULTING INC.  
**SUBJECT:** KITTITAS VALLEY WIND POWER PROJECT RARE PLANT REPORT ADDENDUM #1  
**DATE:** MAY 23, 2003  
**CC:**

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**Introduction:** This technical memorandum describes the results of additional rare plant surveys conducted for the proposed Kittitas Valley Wind Power Project. In the spring and summer of 2002 rare plant surveys were conducted within the project area, as proposed at that time. The results of these surveys are documented in a previous technical report (*An Investigation of Rare Plant Resources Associated with the Proposed Kittitas Valley Wind Power Project*, prepared by Eagle Cap Consulting Inc. and CH2M HILL, dated April 17, 2003). These surveys covered the project area as proposed through July of 2002. However, subsequent changes to the project layout resulted in proposed facilities that were not covered during the original surveys. In order to adequately evaluate project-related rare plant impacts, additional field surveys were conducted in May of 2003. This memorandum, which addresses these additional 2003 surveys, serves as an addendum to the original rare plant report.

**Study Area:** The 2003 rare plant surveys covered the proposed project facilities corridors that had not been surveyed in 2002. This included areas where additional proposed facilities had been added, as well as areas where the proposed facilities had been moved significantly. Overall, 28 polygons, totaling 331 acres of ground were surveyed in May 2003. These ranged from small areas (less than one acre) along the edges of previously surveyed corridors, to larger full corridors (over 100 acres) where proposed project facilities had been added.

The surveys were based on the project layout as proposed through May 9, 2003 (see Figure 1 for a map of the proposed layout). As with the original 2002 surveys, a 50 meter buffer corridor was used as the study area. Figure 2 presents a map of the original 2002 survey corridor, as well as the additional areas surveyed in May of 2003.

**Methods:** The general study methods were similar to those used for the original surveys (see the original technical report for details). However, the target species list for the 2003 surveys was slightly different than the original study, due to listing changes made in early 2003 by the Washington Natural Heritage Program (WNHP). The revised list is presented in Table 1. Of particular note to this project is that white-margined knotweed (*Polygonum polygaloides* ssp. *kelloggii*) has been dropped from the WNHP list. This was the only special status plant species found within the project area during the original surveys.

The 2003 field surveys were conducted from May 13 through 15 by botanists Randall Krichbaum and Margaret Horvath of Eagle Cap Consulting Inc. (see the original technical report for a summary of these investigators' qualifications). All areas shown in Figure 2 were searched by pedestrian transect using the same survey patterns and intensities used in the 2002 field work.

**Results:** The 2003 field surveys did not locate any US Fish and Wildlife Service (USFWS) Endangered, Threatened, Proposed, or Candidate plant species. Marginal potential habitat was found, however, for a number of federal 'Species of Concern'. These include Columbia milkvetch (*Astragalus columbianus*), Hoover's desert-parsley (*Lomatium tuberosum*), least phacelia (*Phacelia minutissima*), and Seely's silene (*Silene seelyi*). In all cases, where potential habitat was found for these species, the area was searched carefully, with negative results.

Likewise, the field surveys did not locate any plants listed as Endangered, Threatened, Sensitive, Extirpated, or Review by the WNHP. However, potential habitat was found for a number of these species throughout the project area. These habitats were also searched thoroughly for the presence of the target species, but none was found.

**Discussion:** The timing of the May 2003 survey was thought to be sufficient to identify all of the upland target rare plant species within the areas surveyed. However, several small riparian areas are present within the 2003 study area, and the majority of the target riparian species would not have been identifiable at the time of the May survey. Presently, these riparian areas are not expected to be disturbed by the project, and it is not expected that a summer survey will be necessary. However, if riparian impacts are expected in these areas, a summer survey of these habitats should be performed.

In combination, the 2002 and 2003 surveys have covered all areas proposed for disturbance by the project as designed through May 9, 2003. Should subsequent project changes propose disturbance outside these corridors, additional rare plant surveys should be conducted in these areas at the appropriate time of year.

**Potential Impacts:** Due to the absence of known populations within the project area as surveyed to date, no project-related impacts are anticipated to any federally Endangered, Threatened, Proposed, or Candidate plant species. Likewise, no project-related impacts are predicted for any Washington State Endangered, Threatened, Sensitive, or Extirpated plant species. In addition, with the dropping of white-margined knotweed from the WNHP Review list, the project is now not expected to have any direct impacts on WNHP Review species.

**Recommended Mitigation:** Because no direct project-related impacts to any federal or state Endangered, Threatened, Sensitive, Proposed, Candidate, or Review plant species are anticipated, no species-specific mitigation measures are proposed at this time. However, the two recommended mitigation measures included in the original rare plant report for indirect impacts are still valid, and should be applied to the project. These two (noxious weed control planning, and wildfire control planning) are still recommended to mitigate possible indirect effects to other species of concern (if any) potentially in the project vicinity, outside of the survey corridors.

**Conclusion:** The revised project, as mitigated, is not expected to have direct impacts on any federal or state special status plant species (including WNHP Review species). Likewise, the mitigated project is not anticipated to produce significant indirect impacts (resulting from noxious weed increases or fire frequency changes) to local populations of any special status plants.

**Table 1: Rare Plant Species with Potential for Occurrence in the Kittitas Valley Wind Power Project Area (updated as of May 2003)**

<b>Name</b>	<b>Status<sup>1</sup></b>	<b>Typical Habitat</b>	<b>ID Period<sup>2</sup></b>
<i>Agoseris elata</i> <b>tall agoseris</b>	S	Meadows, open woods, and exposed rocky ridgetops	June-August
<i>Anemone nuttalliana</i> <b>Pasque flower</b>	T	Prairies to mountain slopes, mostly on well-drained soil	May-August
<i>Astragalus arrectus</i> <b>Palouse milk-vetch</b>	T	Grassy hillsides, sagebrush flats, river bluffs, and openings in open ponderosa pine and Douglas fir forests	April-July
<i>Astragalus columbianus</i> <b>Columbia milk-vetch</b>	S (SC)	Sagebrush-steppe	March-June
<i>Astragalus misellus</i> var. <i>pauper</i> <b>Pauper milk-vetch</b>	S	Open ridgetops and slopes	April-mid June
<i>Camissonia pygmaea</i> <b>dwarf evening-primrose</b>	S	Unstable soil or gravel in steep talus, dry washes, banks and roadcuts	June-August
<i>Camissonia scapoidea</i> <b>naked-stemmed evening-primrose</b>	S	Sagebrush desert, mostly in sandy, gravelly areas	May-July
<i>Carex comosa</i> <b>bristly sedge</b>	S	Marshes, lake shores, and wet meadows	May-July
<i>Collomia macrocalyx</i> <b>bristle-flowered collomia</b>	S	Dry, open habitats	late May-early June
<i>Cryptantha leucophaea</i> <b>gray cryptantha</b>	S (SC)	Unstable sandy substrate along the Columbia River	May-June
<i>Cryptantha rostellata</i> <b>beaked cryptantha</b>	T	Very dry microsites within sagebrush-steppe	late April-mid June
<i>Cyperus bipartitus</i> <b>shining flatsedge</b>	S	Streambanks and other wet, low places in valleys and lowlands	August-September
<i>Cypripedium fasciculatum</i> <b>clustered lady's slipper</b>	S (SC)	Mid- to late seral Douglas fir or ponderosa pine forest	early May-mid June
<i>Delphinium viridescens</i> <b>Wenatchee larkspur</b>	T (SC)	Moist meadows, moist microsites in open coniferous forest, springs, seeps, and riparian areas	July
<i>Eatonella nivea</i> <b>white eatonella</b>	T	Dry, sandy, or volcanic areas within sagebrush-steppe	May
<i>Erigeron basalticus</i> <b>basalt daisy</b>	T (C)	Crevice in basalt cliffs on canyon walls	May-June
<i>Erigeron piperianus</i> <b>Piper's daisy</b>	S	Dry, open places, often with sagebrush	May-June

Name	Status <sup>1</sup>	Typical Habitat	ID Period <sup>2</sup>
<i>Hackelia hispida</i> var. <i>disjuncta</i> <b>sagebrush stickseed</b>	S	Rocky talus	May-June
<i>Iliamna longisepala</i> <b>longsepal globemallow</b>	S	Sagebrush-steppe and open ponderosa pine and Douglas fir forest	June-August
<i>Lomatium tuberosum</i> <b>Hoover's desert-parsley</b>	S (SC)	Loose talus and drainage channels of open ridgetops within sagebrush-steppe	March-early April
<i>Mimulus suksdorfii</i> <b>Suksdorf's monkey-flower</b>	S	Open, moist to rather dry places within sagebrush-steppe	mid April-July
<i>Nicotiana attenuata</i> <b>coyote tobacco</b>	S	Dry, sandy bottom lands, dry rocky washes, and other dry open places	June-September
<i>Oenothera cespitosa</i> ssp. <i>cespitosa</i> <b>cespitose evening-primrose</b>	S	Open sites on talus or other rocky slopes, roadcuts, and the Columbia River terrace	late April-mid June
<i>Ophioglossum pusillum</i> <b>adder's-tongue</b>	T	Terrestrial in pastures, old fields, roadside ditches, and flood plain woods, in seasonally wet soil	June-September
<i>Pediocactus simpsonii</i> var. <i>robustior</i> <b>hedgehog cactus</b>	R1	Desert valleys and low mountains	May-July
<i>Pellaea breweri</i> <b>Brewer's cliff-brake</b>	S	Rock crevices, ledges, talus slopes, and open rocky soil	April-August
<i>Penstemon eriantherus</i> var. <i>whitedii</i> <b>fuzzytongue penstemon</b>	S	Dry open places	May-July
<i>Phacelia minutissima</i> <b>least phacelia</b>	E (SC)	Moist to fairly dry open places	July
<i>Pyrrocoma hirta</i> var. <i>sonchifolia</i> <b>sticky goldenweed</b>	R1	Meadows and open or sparsely wooded slopes	July-August
<i>Sidalcea oregana</i> var. <i>calva</i> <b>Oregon checker-mallow</b>	E (LE)	Moist meadows, open coniferous stands, and along the edge of shrub and hardwood thickets	mid June-late July
<i>Silene seelyi</i> <b>Seely's silene</b>	S (SC)	Shaded crevices in ultramafic to basaltic cliffs and rock outcrops, and among boulders in talus	May-August
<i>Spiranthes porrifolia</i> <b>western ladies-tresses</b>	S	Wet meadows, streams, bogs, and seepage slopes	May-August
<i>Tauschia hooveri</i> <b>Hoover's tauschia</b>	T (SC)	basalt lithosols within sagebrush-steppe	March-mid April

**Status<sup>1</sup>:** Washington State Status (with USFWS status in parenthesis if applicable)

**E: State Endangered.** Taxa that are in danger of becoming extinct in Washington within the near future if factors contributing to their decline continue.

**T: State Threatened.** Taxa that are likely to become Endangered in Washington within the near future if factors contributing to their decline continue.

**S: State Sensitive.** Taxa that are vulnerable or declining, and could become Endangered or Threatened in Washington without active management or removal of threats.

**R1: State Review Group 1:** Taxa for which there is insufficient data to support listing in Washington as Threatened, Endangered, or Sensitive.

**R2: State Review Group 2:** Taxa for which taxonomic questions exist.

**X: State Extirpated.** Taxa possibly extirpated from Washington.

**(LE): Federal Listed Endangered:** Taxa in danger of Extinction throughout all or a significant portion of their range.

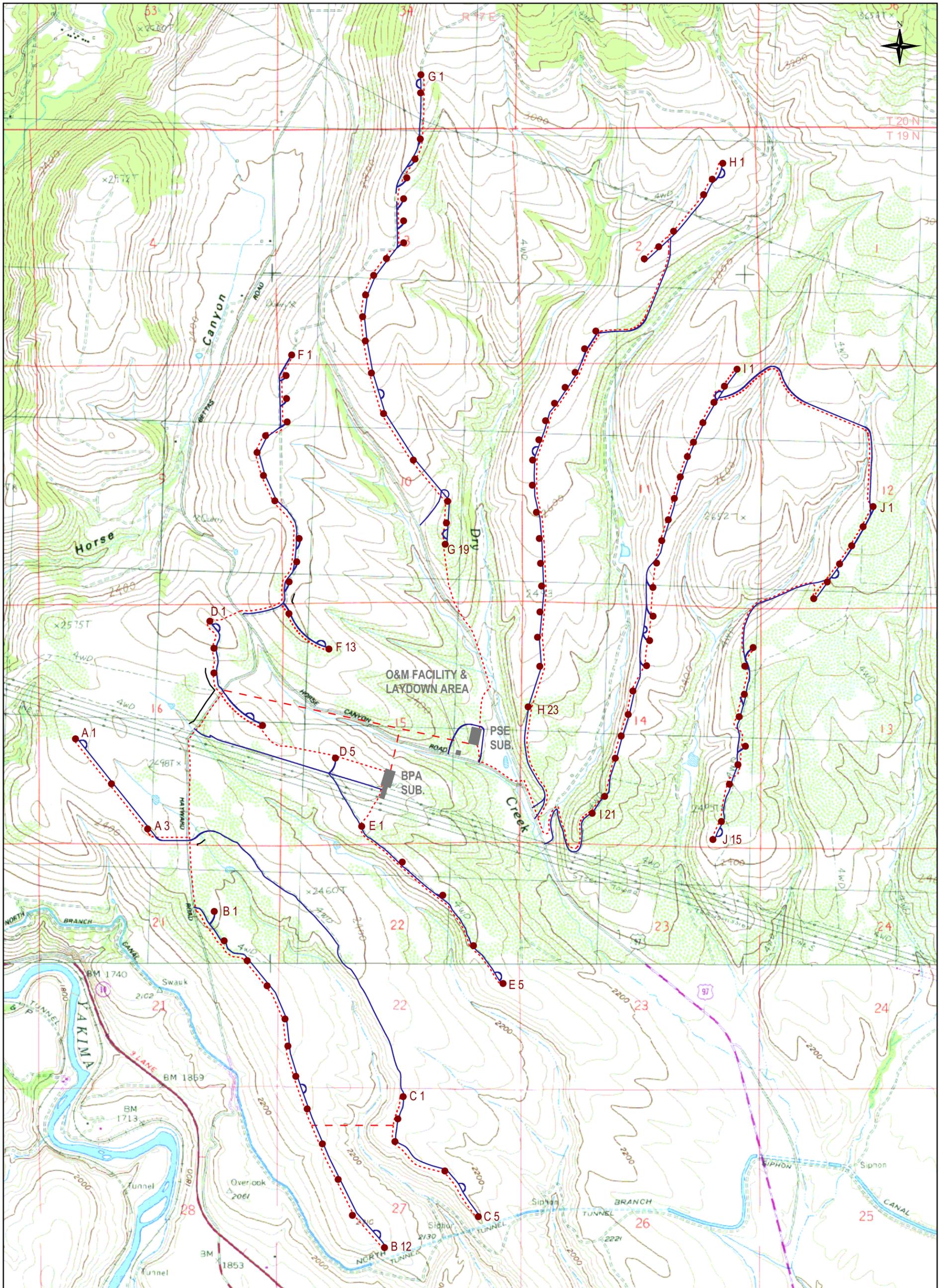
**(LT): Federal Listed Threatened:** Taxa likely to be classified as Endangered within the foreseeable future throughout all or a significant portion of their range.

**(PE): Federal Proposed Endangered:** Taxa proposed to be listed as Endangered (formal rulemaking in progress).

**(C): Federal Candidate:** Taxa that are candidates for formal listing as Endangered or Threatened.

**(SC): Federal Species of Concern:** Available information supports tracking the status and threats to these species because of one or more of the following factors: negative population trends have been documented; habitat is declining or threats to the habitat are known; subpopulations or closely related taxa have been documented to be declining; competition or genetic implications from introduction/stocking of exotic species; identified as a species of concern by agencies or professional societies; or in combination with any of the other criteria, information is needed on status or threats to these species.

**ID Period<sup>2</sup>:** The normal peak period during which the species is identifiable in the field.



**Figure 1: Kittitas Valley Wind Power Project Area**

- Proposed WTG Locations
- Proposed Overhead Electrical Lines
- A 1 String Name and Turbine Count
- Proposed Underground Electrical Lines
- Proposed Access Roads & Turn-Around Areas
- Contour Interval: 40 ft.

1500 0 1500 3000 4500 Feet



May 19, 2003

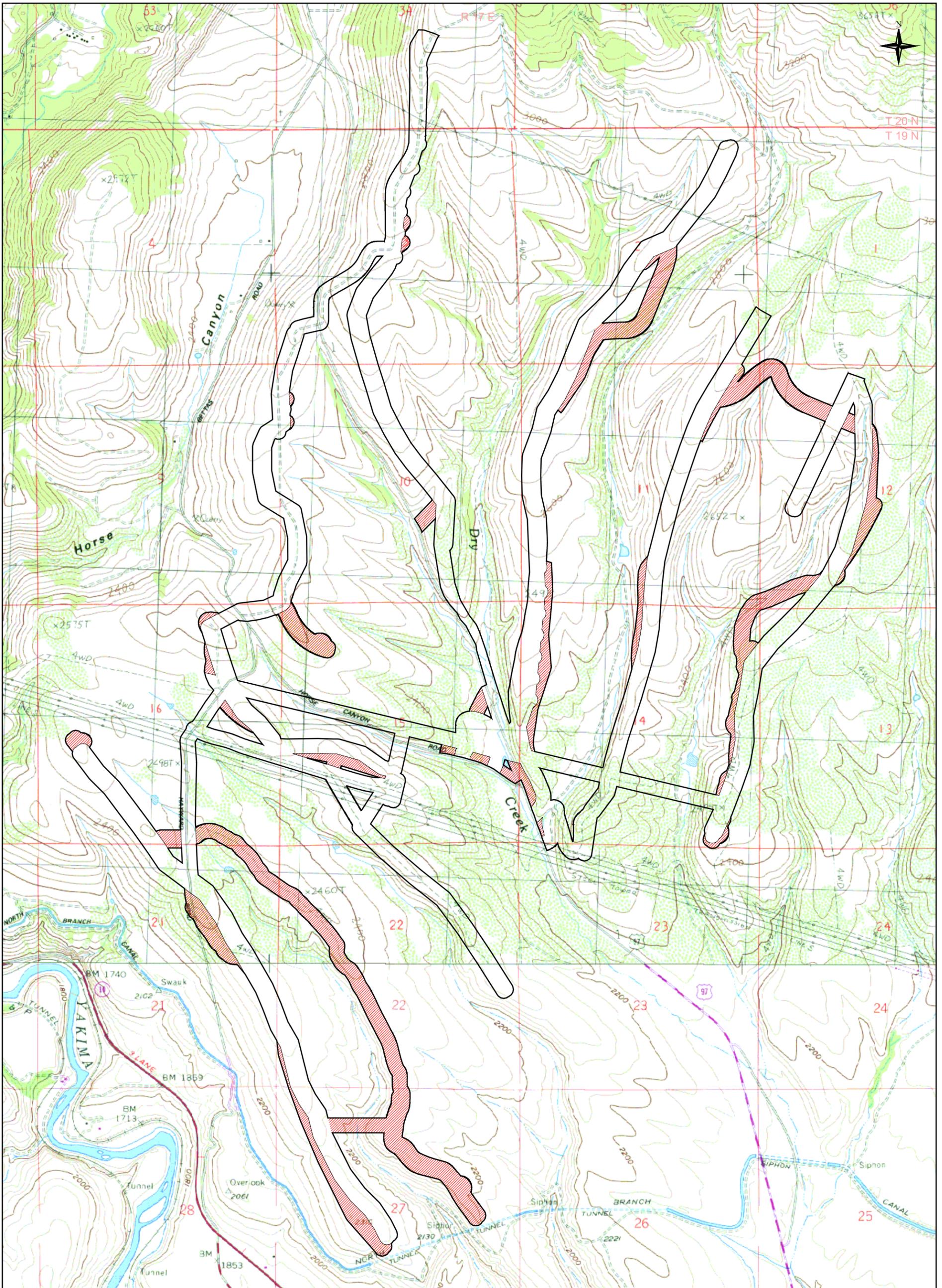


Figure 2: Area Surveyed for Rare Plant Species within the Kittitas Valley Wind Power Project Area

-  Total Area Surveyed for Rare Plants
-  Area Surveyed for Rare Plants in May 2003

Contour Interval: 40 ft.

1500 0 1500 3000 4500 Feet



May 19, 2003

**Vascular Plant Species**  
**Kittitas Valley Wind Power Project**  
 Survey Date(s): 4/26/02 through 5/14/03

Botanical nomenclature follows the USDA Natural Resources Conservation Service PLANTS Database (<http://plants.usda.gov>)

\* = introduced plants

Family	Scientific Name	Common Name
ACERACEAE	<i>Acer glabrum</i>	Rocky Mountain maple
ALISMATACEAE	<i>Alisma triviale</i>	northern water plantain
AMARANTHACEAE	<i>Amaranthus blitoides</i>	mat amaranth
APIACEAE	<i>Cicuta douglasii</i>	western water-hemlock
	<i>Heracleum maximum</i>	cow-parsnip
	<i>Lomatium canbyi</i>	Canby's desert-parsley
	<i>Lomatium dissectum</i>	fern-leaved lomatium
	<i>Lomatium farinosum</i> var. <i>hambleniae</i>	Hamblen's lomatium
	<i>Lomatium geyeri</i>	Geyer's lomatium
	<i>Lomatium gormanii</i>	Gorman's desert-parsley
	<i>Lomatium macrocarpum</i>	big-fruited lomatium
	<i>Lomatium nudicaule</i>	pestle parsnip
	<i>Lomatium triternatum</i>	nine-leaf lomatium
	<i>Osmorhiza berteroi</i>	mountain sweet-root
	<i>Osmorhiza occidentalis</i>	western sweet-root
	<i>Perideridia gairdneri</i> ssp. <i>borealis</i>	Gairdner's yampah
APOCYNACEAE	<i>Apocynum</i> sp.	dogbane
ASCLEPIADACEAE	<i>Asclepias fascicularis</i>	Mexican milkweed
ASTERACEAE	<i>Achillea millefolium</i>	common yarrow
	<i>Agoseris grandiflora</i>	large-flowered agoseris
	<i>Agoseris heterophylla</i>	annual agoseris
	<i>Antennaria dimorpha</i>	low pussy-toes
	<i>Antennaria flagellaris</i>	stolonous everlasting
	<i>Antennaria luzuloides</i>	woodrush pussy-toes
	<i>Antennaria microphylla</i>	rosy pussy-toes
	<i>Antennaria stenophylla</i>	narrow-leaf pussy-toes
	* <i>Anthemis cotula</i>	mayweed chamomile
	<i>Arnica cordifolia</i>	heart-leaved arnica
	<i>Arnica fulgens</i>	orange arnica

Family	Scientific Name	Common Name
ASTERACEAE	* <i>Artemisia absinthium</i>	wormwood
	<i>Artemisia douglasiana</i>	Douglas' sagewort
	<i>Artemisia rigida</i>	stiff sagebrush
	<i>Balsamorhiza hookeri</i> var. <i>lagocephala</i>	Hooker's balsamroot
	<i>Balsamorhiza sagittata</i>	arrow-leaf balsamroot
	<i>Cacaliopsis nardosmia</i>	silvercrown luina
	* <i>Centaurea biebersteinii</i>	spotted knapweed
	* <i>Centaurea diffusa</i>	diffuse knapweed
	<i>Chaenactis douglasii</i>	hoary chaenactis
	* <i>Cichorium intybus</i>	wild succory
	* <i>Cirsium arvense</i>	Canada thistle
	<i>Cirsium hookerianum</i>	Hooker's thistle
	* <i>Cirsium vulgare</i>	bull thistle
	<i>Crepis atribarba</i>	slender hawksbeard
	<i>Crepis modocensis</i> ssp. <i>rostrata</i>	low hawksbeard
	<i>Crocidium multicaule</i>	spring-gold
	<i>Ericameria nauseosa</i> ssp. <i>nauseosa</i>	gray rabbitbrush
	<i>Erigeron bloomeri</i>	scabland fleabane
	<i>Erigeron filifolius</i> var. <i>filifolius</i>	thread-leaf fleabane
	<i>Erigeron linearis</i>	line-leaf fleabane
	<i>Erigeron poliospermus</i> var. <i>poliospermus</i>	cushion fleabane
	<i>Erigeron pumilus</i> ssp. <i>intermedius</i>	shaggy fleabane
	<i>Eriophyllum lanatum</i>	common eriophyllum
	<i>Gnaphalium palustre</i>	lowland cudweed
	<i>Grindelia squarrosa</i>	resin-weed
	<i>Helianthella uniflora</i>	Rocky Mountain helianthella
	<i>Hieracium cynoglossoides</i>	hounds-tounge hawkweed
	* <i>Lactuca serriola</i>	prickly lettuce
	<i>Lagophylla ramosissima</i>	slender hareleaf
	<i>Leucanthemum vulgare</i>	oxeye-daisy
	<i>Madia citriodora</i>	lemon-scented tarweed
	<i>Madia exigua</i>	little tarweed
	<i>Madia glomerata</i>	mountain tarweed
	<i>Madia gracilis</i>	gum-weed
	<i>Matricaria discoidea</i>	pineapple weed
	<i>Microseris nutans</i>	nodding microseris
	<i>Nothocalais troximoides</i>	false-agoseris
	<i>Pyrrocoma carthamoides</i> var. <i>carthamoides</i>	large-flowered goldenweed
	<i>Rigiopappus leptocladus</i>	bristle-head
	<i>Senecio hydrophiloides</i>	sweetmarsh butterweed
	<i>Senecio integerrimus</i> var. <i>exaltatus</i>	western groundsel
<i>Stenotus lanuginosus</i> var. <i>lanuginosus</i>	woolly goldenweed	
<i>Stenotus stenophyllus</i>	narrow-leaf goldenweed	
<i>Symphyotrichum foliaceum</i>	leafy aster	

Family	Scientific Name	Common Name
ASTERACEAE	<i>Symphyotrichum spathulatum</i>	western mountain aster
	* <i>Taraxacum laevigatum</i>	red seeded dandelion
	* <i>Taraxacum officinale</i>	common dandelion
	* <i>Tragopogon dubius</i>	salsify
	<i>Wyethia amplexicaulis</i>	northern wyethia
	<i>Xanthium strumarium</i>	common cocklebur
BERBERIDACEAE	<i>Mahonia aquifolium</i>	shining Oregongrape
BETULACEAE	<i>Alnus viridis</i>	Sitka alder
	<i>Betula sp.</i>	birch
	<i>Corylus cornuta</i>	hazelnut
BORAGINACEAE	<i>Amsinckia lycopsoides</i>	tarweed fiddleneck
	<i>Amsinckia menziesii</i>	Menzies' fiddleneck
	* <i>Asperugo procumbens</i>	madwort
	* <i>Buglossoides arvensis</i>	corn gromwell
	<i>Cryptantha torreyana</i>	Torrey's cryptantha
	<i>Lithospermum ruderale</i>	Columbia puccoon
	<i>Mertensia oblongifolia</i>	leafy bluebells
	<i>Myosotis laxa</i>	small-flowered forget-me-not
	* <i>Myosotis stricta</i>	blue scorpion-grass
	<i>Plagiobothrys scouleri</i>	Scouler's plagiobothrys
<i>Plagiobothrys tenellus</i>	slender popcorn-flower	
BRASSICACEAE	* <i>Alyssum alyssoides</i>	pale alyssum
	<i>Arabis sparsiflora var. atrorubens</i>	elegant rockcress
	<i>Athysanus pusillus</i>	sandweed
	* <i>Capsella bursa-pastoris</i>	shepherd's-purse
	<i>Cardaria draba</i>	heart-podded hoarycress
	<i>Descurainia incana</i>	mountain tansymustard
	<i>Draba verna</i>	spring whitlow-grass
	<i>Idahoia scapigera</i>	scalegod
	* <i>Lepidium campestre</i>	fieldpeppergrass
	<i>Phoenicaulis cheiranthoides</i>	daggerpod
	<i>Rorippa curvisiliqua</i>	western yellowcress
	* <i>Rorippa nasturtium-aquaticum</i>	water-cress
	* <i>Sisymbrium altissimum</i>	Jim Hill mustard
* <i>Thlaspi arvense</i>	fanweed	
CAPRIFOLIACEAE	<i>Lonicera ciliosa</i>	trumpet honeysuckle
	<i>Sambucus nigra ssp. cerulea</i>	blue elderberry
	<i>Symphoricarpos albus</i>	common snowberry

Family	Scientific Name	Common Name
CAPRIFOLIACEAE	<i>Symphoricarpos oreophilus</i> var. <i>utahensis</i>	mountain snowberry
CARYOPHYLLACEAE	<i>Arenaria congesta</i> var. <i>prolifera</i> <i>Cerastium nutans</i> * <i>Dianthus armeria</i> * <i>Holosteum umbellatum</i> <i>Moehringia macrophylla</i> <i>Sagina saginoides</i> * <i>Silene latifolia</i> ssp. <i>alba</i> <i>Silene menziesii</i> ssp. <i>menziesii</i> * <i>Spergularia rubra</i> <i>Stellaria longipes</i> * <i>Stellaria media</i>	capitate sandwort nodding chickweed grass pink jagged chickweed bigleaf sandwort alpine pearlwort white campion Menzie's silene red sandspurry longstalk starwort chickweed
CELASTRACEAE	<i>Paxistima myrsinites</i>	myrtle boxwood
CHENOPODIACEAE	<i>Chenopodium album</i> <i>Chenopodium leptophyllum</i> <i>Chenopodium</i> sp. * <i>Salsola kali</i>	lamb's quarters slimleaf goosefoot lamb's quarters Russian thistle
CONVOLVULACEAE	* <i>Convolvulus arvensis</i>	field bindweed
CORNACEAE	<i>Cornus sericea</i>	red-osier dogwood
CRASSULACEAE	<i>Sedum lanceolatum</i>	lance-leaved stonecrop
CYPERACEAE	<i>Carex aquatilis</i> <i>Carex bebbii</i> <i>Carex geyeri</i> <i>Carex lenticularis</i> <i>Carex microptera</i> <i>Carex multicosata</i> <i>Carex pachystachya</i> <i>Carex pellita</i> <i>Carex praegracilis</i> <i>Carex retrorsa</i> <i>Carex stipata</i> <i>Eleocharis palustris</i> <i>Scirpus microcarpus</i>	water sedge Bebb's sedge elk sedge lakeshore sedge small winged sedge many-ribbed sedge thick headed sedge wooly sedge graceful sedge retorse sedge sawbeak sedge common spike-rush small-fruited bulrush
EQUISETACEAE	<i>Equisetum arvense</i>	common horsetail

Family	Scientific Name	Common Name
FABACEAE	<i>Astragalus reventiformis</i>	Yakima milkvetch
	* <i>Daucus carota</i>	Queen Anne's lace
	<i>Lathyrus pauciflorus</i> var. <i>pauciflorus</i>	few-flowered peavine
	<i>Lotus pinnatus</i>	meadow deervetch
	<i>Lupinus argenteus</i> ssp. <i>argenteus</i> var. <i>laxiflorus</i>	spurred lupine
	<i>Lupinus lepidus</i>	prairie lupine
	<i>Lupinus sericeus</i> ssp. <i>sericeus</i> var. <i>flexuosus</i>	silky lupine
	* <i>Medicago lupulina</i>	hop clover
	* <i>Melilotus alba</i>	white sweet-clover
	<i>Trifolium cyathiferum</i>	cup clover
	* <i>Trifolium hybridum</i>	alsike clover
	<i>Trifolium macrocephalum</i>	big-headed clover
	* <i>Trifolium pratense</i>	red clover
	<i>Vicia americana</i> ssp. <i>americana</i>	American vetch
FAGACEAE	<i>Quercus garryana</i>	Oregon white oak
GERANIACEAE	* <i>Erodium cicutarium</i>	filaree
	<i>Geranium viscosissimum</i>	sticky purple geranium
GROSSULARIACEAE	<i>Ribes cereum</i> var. <i>cereum</i>	squaw currant
HYDRANGEACEAE	<i>Philadelphus lewisii</i>	mockorange
HYDROPHYLLACEAE	<i>Hesperochiron pumilus</i>	dwarf hesperochiron
	<i>Hydrophyllum capitatum</i>	ball-head waterleaf
	<i>Nemophila breviflora</i>	great basin nemophila
	<i>Nemophila parviflora</i> var. <i>austiniae</i>	small-flowered nemophila
	<i>Phacelia hastata</i>	silverleaf phacelia
	<i>Phacelia linearis</i>	threadleaf phacelia
	<i>Phacelia procera</i>	tall phacelia
HYPERICACEAE	* <i>Hypericum perforatum</i>	common St. Johnswort
IRIDACEAE	<i>Iris missouriensis</i>	western blue fleur-de-lis
	<i>Olsynium douglasii</i>	Douglas' grasswidow
JUNCACEAE	<i>Juncus articulatus</i>	jointed rush
	<i>Juncus balticus</i>	Baltic rush
	<i>Juncus brachyphyllus</i>	shortleaved rush
	<i>Juncus bufonius</i>	toad rush

Family	Scientific Name	Common Name
JUNCACEAE	<i>Juncus covillei</i> var. <i>obtusatus</i>	Coville's rush
	<i>Juncus effusus</i>	common rush
	<i>Juncus ensifolius</i>	dagger leaved rush
	<i>Juncus longistylis</i>	long styled rush
LAMIACEAE	<i>Mentha arvensis</i>	field mint
	<i>Monardella odoratissima</i> ssp. <i>discolor</i>	mountain monardella
	<i>Prunella vulgaris</i> ssp. <i>lanceolata</i>	self-heal
LEMNACEAE	<i>Lemna minor</i>	water lentil
LILIACEAE	<i>Allium acuminatum</i>	tapertip onion
	<i>Allium douglasii</i>	Douglas' onion
	<i>Allium macrum</i>	rock onion
	<i>Allium tolmiei</i>	Tolmie's onion
	<i>Calochortus</i> sp.	mariposa
	<i>Camassia quamash</i>	common camas
	<i>Fritillaria pudica</i>	yellow bell
	<i>Maianthemum racemosum</i> ssp. <i>amplexicaule</i>	western Solomon-plume
	<i>Maianthemum stellatum</i>	starry Solomon-plume
	<i>Triteleia grandiflora</i> var. <i>howellii</i>	Howell's triteleia
LOASACEAE	<i>Veratrum californicum</i>	California false hellebore
	<i>Zigadenus venenosus</i>	meadow death camas
MALVACEAE	<i>Mentzelia dispersa</i>	small-flowered mentzelia
	<i>Malva neglecta</i>	dwarf mallow
ONAGRACEAE	<i>Sidalcea oregana</i> ssp. <i>oregana</i> var. <i>NOT calva</i>	Oregon checker-mallow
	<i>Camissonia andina</i>	sun cup
	<i>Chamerion angustifolium</i>	fireweed
	<i>Epilobium brachycarpum</i>	tall annual willow-weed
	<i>Epilobium ciliatum</i>	purple-leaved willowherb
OROBANCHACEAE	<i>Epilobium densiflorum</i>	dense spike-primrose
	<i>Epilobium minutum</i>	small flowered willow-weed
	<i>Orobanche uniflora</i>	naked broomrape
PAEONIACEAE	<i>Paeonia brownii</i>	Brown's peony
PINACEAE	<i>Pinus ponderosa</i>	ponderosa pine
	<i>Pseudotsuga menziesii</i>	Douglas-fir

Family	Scientific Name	Common Name
PLANTAGINACEAE	* <i>Plantago lanceolata</i>	ribwort
POACEAE	<i>Achnatherum lemmonii</i> var. <i>lemmonii</i>	Lemmon's needlegrass
	<i>Agrostis exarata</i>	spike bentgrass
	* <i>Agrostis gigantea</i>	redtop
	* <i>Alopecurus pratensis</i>	meadow foxtail
	<i>Bromus carinatus</i>	California brome
	* <i>Bromus commutatus</i>	hairy chess
	* <i>Bromus diandrus</i>	ripgut
	* <i>Bromus hordeaceus</i> ssp. <i>hordeaceus</i>	soft brome
	<i>Bromus inermis</i>	smooth brome
	* <i>Bromus japonicus</i>	Japanese brome
	* <i>Bromus tectorum</i>	cheatgrass
	<i>Bromus vulgaris</i> var. <i>vulgaris</i>	Columbia brome
	* <i>Dactylis glomerata</i>	orchard grass
	<i>Danthonia unispicata</i>	one-spike oatgrass
	<i>Deschampsia danthonioides</i>	annual hairgrass
	<i>Deschampsia elongata</i>	slender hairgrass
	<i>Elymus elymoides</i>	bottlebrush squirreltail
	<i>Elymus glaucus</i>	western rye-grass
	<i>Elymus multisetus</i>	big squirreltail
	* <i>Elymus repens</i>	quack grass
	<i>Festuca idahoensis</i>	idaho fescue
	<i>Glyceria striata</i>	fowl mannagrass
	<i>Hordeum brachyantherum</i>	meadow barley
	* <i>Hordeum marinum</i>	Mediterranean barley
	<i>Leymus cinereus</i>	giant wildrye
	* <i>Lolium pratense</i>	meadow ryegrass
	<i>Melica bulbosa</i>	oniongrass
	<i>Melica fugax</i>	little oniongrass
	<i>Phalaris arundinacea</i>	reed canarygrass
	* <i>Phleum pratense</i>	timothy
	* <i>Poa bulbosa</i>	bulbous bluegrass
	<i>Poa pratensis</i>	Kentucky bluegrass
	<i>Poa secunda</i>	Sandberg's bluegrass
	<i>Poa wheeleri</i>	Wheeler's bluegrass
	<i>Pseudoroegneria spicata</i>	blue-bunch wheatgrass
	* <i>Ventenata dubia</i>	ventenata
	* <i>Vulpia bromoides</i>	brome fescue
POLEMONIACEAE	<i>Collomia grandiflora</i>	large flowered collomia
	<i>Collomia linearis</i>	narrow-leaf collomia
	<i>Navarretia intertexta</i> ssp. <i>propinqua</i>	needle-leaf navarretia

Family	Scientific Name	Common Name
POLEMONIACEAE	<i>Phlox gracilis ssp. humilis</i>	slender phlox
	<i>Phlox hoodii</i>	Hood's phlox
	<i>Phlox speciosa</i>	showy phlox
	<i>Polemonium micranthum</i>	littlebells polemonium
POLYGONACEAE	<i>Eriogonum compositum var. leianthum</i>	northern buckwheat
	<i>Eriogonum douglasii</i>	Douglas' buckwheat
	<i>Eriogonum elatum</i>	tall buckwheat
	<i>Eriogonum heracleoides</i>	Wyeth's buckwheat
	<i>Eriogonum strictum ssp. proliferum</i>	strict buckwheat
	<i>Eriogonum thymoides</i>	thyme buckwheat
	<i>Polygonum aviculare</i>	doorweed
	<i>Polygonum douglasii</i>	Douglas' knotweed
	<i>Polygonum polygaloides ssp. kelloggii</i>	white-margined knotweed
	* <i>Rumex acetosella</i>	field sorrel
<i>Rumex salicifolius var. mexicanus</i>	willow dock	
POLYPODIACEAE	<i>Cystopteris fragilis</i>	bladder-fern
PORTULACACEAE	<i>Claytonia lanceolata var. lanceolata</i>	western springbeauty
	<i>Claytonia perfoliata</i>	miner's lettuce
	<i>Lewisia rediviva</i>	bitterroot
	<i>Montia fontana</i>	water chickweed
	<i>Montia linearis</i>	line-leaf montia
PRIMULACEAE	<i>Dodecatheon conjugens</i>	desert shooting-star
RANUNCULACEAE	* <i>Ceratocephala testiculata</i>	hornseed buttercup
	<i>Delphinium multiplex</i>	Kittitas larkspur
	<i>Delphinium nuttallianum</i>	larkspur
	<i>Myosurus minimus</i>	tiny mouse-tail
	<i>Ranunculus aquatilis</i>	white water-buttercup
	<i>Ranunculus sceleratus</i>	celeryleaved buttercup
	<i>Ranunculus uncinatus</i>	little buttercup
RHAMNACEAE	<i>Ceanothus sanguineus</i>	redstem ceanothus
	<i>Ceanothus velutinus var. velutinus</i>	snowbrush
ROSACEAE	<i>Amelanchier alnifolia</i>	western service berry
	<i>Crataegus douglasii</i>	black hawthorn
	<i>Geum triflorum</i>	old man's whiskers
	<i>Holodiscus discolor</i>	oceanspray

Family	Scientific Name	Common Name
ROSACEAE	<i>Potentilla glandulosa</i>	sticky cinquefoil
	<i>Potentilla gracilis</i> var. <i>fastigiata</i>	slender cinquefoil
	<i>Potentilla gracilis</i> var. <i>flabelliformis</i>	cinquefoil
	<i>Prunus emarginata</i>	bittercherry
	<i>Prunus virginiana</i>	chokecherry
	<i>Purshia tridentata</i>	bitter-brush
	<i>Rosa nutkana</i>	Nootka rose
	<i>Rosa woodsii</i>	Wood's rose
	<i>Rubus parviflorus</i>	thimbleberry
	<i>Sanguisorba occidentalis</i>	annual burnet
RUBIACEAE	<i>Galium aparine</i>	cleavers
	<i>Galium boreale</i>	northern bedstraw
	<i>Galium trifidum</i>	small bedstraw
SALICACEAE	<i>Populus balsamifera</i> ssp. <i>trichocarpa</i>	black cottonwood
	<i>Populus tremuloides</i>	aspen
	<i>Salix exigua</i>	coyote willow
	<i>Salix lucida</i> ssp. <i>caudata</i>	whiplash willow
	<i>Salix prolixa</i>	Mackenzie willow
SANTALACEAE	<i>Comandra umbellata</i>	bastard toad flax
SAXIFRAGACEAE	<i>Lithophragma glabrum</i>	bulbiferous fringecup
	<i>Lithophragma parviflorum</i>	prairie star
	<i>Saxifraga integrifolia</i>	swamp saxifrage
SCROPHULARIACEAE	<i>Castilleja hispida</i> var. <i>hispida</i>	harsh paintbrush
	<i>Castilleja tenuis</i>	hairy indian-paintbrush
	<i>Castilleja thompsonii</i>	Thompson's paintbrush
	<i>Collinsia parviflora</i>	blue-eyed mary
	<i>Mimulus breviflorus</i>	short-flowered monkey-flower
	<i>Mimulus moschatus</i> var. <i>moschatus</i>	musk-plant
	<i>Penstemon gairdneri</i> var. <i>gairdneri</i>	Gairdner's penstemon
	<i>Penstemon richardsonii</i> var. <i>richardsonii</i>	Richardson's penstemon
	<i>Penstemon rydbergii</i>	Rydberg's penstemon
	* <i>Verbascum thapsus</i>	common mullein
	<i>Veronica americana</i>	American brooklime
<i>Veronica peregrina</i> ssp. <i>xalapensis</i>	purslane speedwell	
SOLANACEAE	<i>Solanum triflorum</i>	cut-leaved nightshade

<b>Family</b>	<b>Scientific Name</b>	<b>Common Name</b>
VIOLACEAE	<i>Viola nuttallii</i>	yellow violet
	<i>Viola trinervata</i>	sagebrush violet