

Appendix B.
Wyoming Basins Ecoregion
Vascular Plant Taxa Excluded From Analysis

The following vascular plant taxa are listed as species of special concern in at least one state within the WBE or are regional endemics that are not presently tracked by any state. For purposes of this analysis, these plants have not been treated as targets for site designation..

Species	Grank	Range	Rationale for Exclusion
<i>Abies concolor</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Androstephium breviflorum</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Antennaria aromatica</i>	G3G4	Reg End	S3S4 in MT and S2 in WY, primarily a subalpine to alpine species that barely (if at all) enters the WBE in Montana.
<i>Aquilegia barnebyi</i>	G4	Reg End	S3 in UT, SR in CO (not tracked), most of range is outside the WBE.
<i>Arabis demissa</i> var. <i>languida</i>	G5T4	Wide	S1 peripheral in MT, S3 in WY (not tracked), SR in CO and UT (not tracked). More common in WBE than once thought (especially in WY).
<i>Arabis vivariensis</i> [<i>A. fernaldiana</i>]	G2G3 Q	Nar End	S1 in UT and S2 in CO, found just outside WBE in Dinosaur area of the Utah/Wyoming Rocky Mountains Ecoregion.
<i>Artemisia nova</i> var. <i>duchesnicola</i>	G5T3?	Nar End	S3? In UT, endemic to WBE but not tracked by Utah Heritage, may be a coarse filter community element.
<i>Artemisia pedatifida</i>	G4	Reg End	Abundant (often dominant) in clay or sandy basins.
<i>Asclepias hallii</i>	G4	Wide	S1 peripheral in SE Wyoming, not of regional or rangewide conservation concern.
<i>Asclepias incarnata</i>	G5	Wide	S1 peripheral in MT, S2 in WY (not tracked), not of regional or rangewide conservation concern.
<i>Aster glaucodes</i>	G3G4	Wide	S2 peripheral in MT, montane species found mostly outside the WBE.
<i>Astragalus</i> [<i>sericoleucus</i> var.] <i>aretioides</i>	G4	Reg End	S1 in CO, S2 in MT, SR in UT, and S3 in WY. Sufficiently abundant in WY to be considered secure.
<i>Astragalus calycosus</i> var. <i>calycosus</i>	G5T4?	Wide	S1S2 peripheral in WY, not of regional conservation concern.
<i>Astragalus geyeri</i>	G4?	Wide	S2 peripheral in MT, not of regional conservation concern
<i>Astragalus hyalinus</i>	G4	Reg End	S3 in MT (no longer tracked), mostly found outside the WBE in the Great Plains, secure in WY (S3).
<i>Astragalus lentiginosus</i> var. <i>salinus</i>	G5T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Astragalus lutosus</i>	G4	Reg End	S3 in UT and S3S4 in CO, sufficiently abundant to be considered secure.
<i>Astragalus pubentissimus</i> var. <i>pubentissimus</i>	G4	Reg End	S3 in WY and sufficiently abundant to be considered secure, not tracked in CO or UT.
<i>Atriplex falcata</i>	G4Q	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Brickellia microphylla</i> var. <i>scabra</i>	G4G5 T4?	Wide	S1 sparse distribution in WY, secure elsewhere in WBE.
<i>Camissonia andina</i>	G4	Wide	S1 peripheral in MT, S1 in CO (but range is outside WBE), not of conservation concern (and probably

			overlooked) elsewhere in WBE.
<i>Camissonia minor</i>	G4	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern.
<i>Camissonia parvula</i>	G4	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern
<i>Carex parryana</i> var. <i>parryana</i>	G4T4	Wide	S2 sparse distribution in WY, found mostly outside of the WBE.
<i>Carex torreyi</i>	G4	Wide	S3 peripheral in MT (no longer tracked), not of regional or rangewide conservation concern.
<i>Castilleja pilosa</i> var. <i>longispica</i>	G4?T4	Reg End	S3 in MT (no longer tracked), found mostly outside of the WBE.
<i>Ceanothus martinii</i>	G4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Cercocarpus ledifolius</i> var. <i>intricatus</i>	G5T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Chamaechaenactis scaposa</i>	G4	Wide	S1S2 peripheral in WY, more abundant in UT and CO and not considered a high priority species of concern in the WBE.
<i>Chrysothamnus greenei</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Cirsium pulcherrimum</i>	G5	Reg End	Widespread and abundant in C and SW WY, not of conservation concern in WBE.
<i>Cleome lutea</i>	G5	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern.
<i>Collomia grandiflora</i>	G5	Wide	SH peripheral in WY, not of regional or rangewide conservation concern.
<i>Cryptantha barnebyi</i>	G3	Nar End	S3 in UT, found just outside the SE border of the WBE
<i>Cryptantha flavoculata</i>	G5	Wide	S3 peripheral in MT (no longer tracked), not of regional or rangewide concern.
<i>Cryptantha gracilis</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Cryptantha scoparia</i>	G4	Wide	S1 peripheral in MT, S1 in UT, S2 in WY (no longer tracked), not of regional or rangewide conservation concern (and probably overlooked).
<i>Cryptantha sericea</i>	G4	Reg End	Widespread and abundant in WY and UT.
<i>Cryptantha spiculifera</i>	G4	Wide	S1 peripheral in WY and S1 in UT, occurrences in both states are just outside the WBE boundary.
<i>Cuscuta occidentalis</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Cymopterus longipes</i>	G4?	Reg End	S3S4 in WY (not tracked), abundant in WBE and adjacent ecoregions.
<i>Delphinium bicolor</i> ssp. <i>calcicola</i>	G5T3	Reg End	S3 in MT and not tracked. May occur mostly outside of the WBE?
<i>Dichanthelium acuminatum</i> var. <i>lanuginosum</i>	G5T?	Wide	S3 peripheral in MT (no longer tracked), not of regional or rangewide conservation concern.
<i>Downingia laeta</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Eleocharis rostellata</i>	G5	Wide	S2 peripheral in MT, mostly found outside of the WBE
<i>Ephedra viridis</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Epipactis gigantea</i>	G4	Wide	S2 peripheral in MT, (also in hanging gardens in NE UT and NW CO in the WBE), more typical of adjacent ecoregions.
<i>Eriastrum [sparsiflorum var.] wilcoxii</i>	G5	Wide	S1S2 sparse distribution in WY, not of regional or rangewide concern.

<i>Erigeron nanus</i>	G4	Reg End	Sufficiently widespread in WY not to be considered a species of concern.
<i>Erigeron nematophyllus</i>	G3	Reg End	S1S2 in UT, S3 in WY, not tracked in CO, sufficiently widespread in WY not to be considered a regional species of concern.
<i>Eriogonum brevicaule</i> var. <i>micranthum</i>	G4T3	Reg End	S3 in WY (not tracked), sufficiently common not to be considered a regional species of concern (may be a WY endemic).
<i>Eriogonum corymbosum</i> var. <i>corymbosum</i>	G5T5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Eriogonum corymbosum</i> var. <i>hylophilum</i>	G5T1	Nar End	S1 in UT, located just outside the S border of the WBE in the Gate Canyon area of the Bad Land Cliffs, technically in the Utah High Plateaus Ecoregion.
<i>Eriogonum divaricatum</i>	G4G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Eriogonum hookeri</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Eriogonum lonchophyllum</i> var. <i>saurinum</i>	G4T3	Reg End	S3 in UT, mostly outside the WBE in the Dinosaur area of the Utah/Wyoming Rocky Mountains Ecoregion.
<i>Eriogonum mancum</i>	G4	Reg End	S1 in WY, but abundant in ID and MT (not tracked) where it is sufficiently common not to be considered a regional species of concern.
<i>Eupatorium maculatum</i> var. <i>bruneri</i>	G5TU	Wide	S1 peripheral in MT, mostly found outside the WBE.
<i>Galium</i> [<i>multiflorum</i> var.] <i>coloradoense</i>	G3G4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Glaucocarpum</i> [<i>Schoenocrambe</i>] <i>suffrutescens</i>	G1	Nar End	S1 in Utah (listed as Endangered), found just outside the S boundary of the WBE.
<i>Grayia spinosa</i>	G5	Wide	S2 peripheral in MT, not of regional or rangewide conservation concern.
<i>Hedysarum occidentale</i> var. <i>canone</i>	G5T2 Q	Nar End	Just outside the WBE boundary in northeast UT.
<i>Hesperochiron californicus</i>	G4G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Hutchinsia procumbens</i>	G5	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern.
<i>Hymenopappus filifolius</i> var. <i>luteus</i>	G5T?	Reg End	S3S4 in WY (not tracked), sufficiently common not to be a regional species of concern.
<i>Hymenopappus filifolius</i> var. <i>nudipes</i>	G5T?	Reg End	S2 in WY (not tracked), probably an S3 or S4 in UT, sufficiently common not to be a regional species of concern.
<i>Hymenoxys acaulis</i> var. <i>epunctata</i>	G5T?	Reg End	Cronquist (1994) reports the range as "chiefly in and near the Uinta Basin in Utah", but herbarium records and Welsh et al. (1993) suggest the range is largely outside the WBE.
<i>Hymenoxys lapidicola</i>	G1	Nar End	Apparently located just outside the WBE boundary in NE Utah (Dinosaur National Monument area).
<i>Hymenoxys torreyana</i>	G4	Reg End	Abundant in SW WY (S3, not tracked).
<i>Ipomopsis polycladon</i>	G4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Ipomopsis spicata</i>	G4?	Wide	S1 peripheral in UT, not of regional or rangewide conservation concern.
<i>Lathyrus eucosmus</i>	G4G5	Disjunct	S1 in WY, but not of regional or rangewide conservation concern.

<i>Lathyrus lanszwertii</i> var. <i>lanszwertii</i>	G4G5 T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Lepidium montanum</i> var. <i>alyssoides</i>	G5?T5 ?	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Lepidium montanum</i> var. <i>wyomingense</i>	G5?T?	Reg End	S2 in WY and reported for CO (status not known), may warrant attention in the future, not enough known to assess here.
<i>Leptodactylon caespitosum</i>	G3G4	Wide	S2 peripheral in MT, not of regional or rangewide conservation concern.
<i>Lesquerella alpina</i> var. <i>condensata</i>	G4Q	Reg End	S2S3 in WY (not tracked), SR in CO, and to be expected in NE UT. Probably secure in region, but potentially a low priority species of concern.
<i>Lesquerella paysonii</i>	G3	Reg End	S3 in WY and S2 in ID, found almost entirely outside the WBE. No longer considered a high priority taxon in either state.
<i>Lomatium bicolor</i> var. <i>bicolor</i>	G4T3	Reg End	S2 in WY (watch list), found almost entirely outside of the WBE.
<i>Lomatium juniperinum</i>	G4?	Reg End	Not tracked by any states in the WBE (status poorly known), ranked S2 in WY.
<i>Lomatium nuttallii</i>	G4	Reg End	S1 in MT, S1 in CO, S3 in WY and locally abundant in right habitat, sufficiently common in WY not to be of regional concern.
<i>Malacothrix torreyi</i>	G4	Wide	S1 peripheral in MT, S2 in WY (no longer tracked), not of regional or rangewide conservation concern.
<i>Mentzelia montana</i>	G4	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern.
<i>Mentzelia pumila</i> var. <i>lagarosa</i>	G4T2?	Reg End	S2? In UT, one population is found just outside the southern boundary of the WBE in Uinta County.
<i>Mentzelia pumila</i> var. <i>pumila</i>	G4T4	Wide	S2 peripheral in MT, S3 in WY (not tracked), more common in WBE than previously suspected.
<i>Mentzelia sinuata</i>	G3?	Reg End	S2 in WY, barely enters WBE near Laramie, found almost entirely in Colorado Rocky Mountain Ecoregion.
<i>Mertensia fusiformis</i>	G4G5	Reg End	Sufficiently widespread not to be of regional concern.
<i>Mimulus suksdorfii</i>	G4	Wide	S3 peripheral in MT (no longer tracked), not of regional or rangewide conservation concern.
<i>Monolepis pusilla</i>	G5	Wide	S1 in WY, not of regional or rangewide conservation concern.
<i>Muhlenbergia glomerata</i>	G4	Sparse	S1 in WY, where it is known from a single historical WBE record (most of its range is well outside of the ecoregion).
<i>Nama densum</i>	G5	Wide	S1 in MT, not of regional or rangewide conservation concern.
<i>Oenothera pallida</i> var. <i>trichocalyx</i>	G5T4?	Reg End	Sufficiently common and widespread in WY not to be of regional concern.
<i>Opuntia erinacea</i> var. <i>utahensis</i>	G4T4	Wide	S1 in WY, not of regional or rangewide conservation concern.
<i>Opuntia polyacantha</i> var. <i>juniperina</i>	G5T3? Q	Wide	S1 in WY, not of regional or rangewide conservation concern.
<i>Opuntia polyacantha</i> var. <i>rufispina</i>	G5T5	Wide	S2 in WY, not of regional or rangewide conservation concern.
<i>Oryzopsis contracta</i>	G4	Reg End	S4 in WY (not tracked), sufficiently common and widespread not to be of regional concern.
<i>Oxytheca dendroidea</i>	G4	Wide	SH peripheral in WY, not of regional or rangewide conservation concern.

<i>Oxytropis besseyi</i> var. <i>fallax</i>	G5T3	Reg End	Locally abundant in WY (S3, not tracked), sufficiently common not to be of regional concern.
<i>Oxytropis besseyi</i> var. <i>ventosa</i>	G5T3	Reg End	S1 in UT (possibly outside of WBE), locally abundant in WY (S3, not tracked), sufficiently common not to be of regional concern.
<i>Penstemon angustifolius</i> var. <i>vernalensis</i>	G5T3	Reg End	S3 in UT, found just outside the WBE boundary in the Dinosaur area of the Utah/Wyoming Rocky Mountains Ecoregion.
<i>Penstemon arenicola</i>	G3G4	Reg End	Locally abundant in WY (S3S4, not tracked), sufficiently common not to be of regional concern.
<i>Penstemon eriantherus</i> var. <i>cleburnei</i>	G5T3?	Reg End	S1 peripheral in UT, S2S3 in WY (not tracked), sufficiently common not to be of regional concern.
<i>Penstemon fremontii</i> var. <i>fremontii</i>	G4T4?	Reg End	Locally abundant in WY (S3, not tracked), sufficiently common not to be of regional concern.
<i>Penstemon laricifolius</i>	G4	Reg End	Locally abundant in WY (S3S4, not tracked), sufficiently common not to be of regional concern. Var. <i>exilifolius</i> , a regional endemic of SE WY and N CO is a questionably distinct taxon, differing from the typical variety in having white rather than pink flowers.
<i>Penstemon pachyphyllus</i> var. <i>mucronatus</i>	G5T4	Reg End	S2 (approaching S3) in WY, locally abundant in adjacent UT and not tracked.
<i>Penstemon watsonii</i>	G5	Wide	SH peripheral in WY, not of regional or rangewide conservation concern.
<i>Phacelia tetramera</i>	G4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Philadelphus microphyllus</i> var. <i>occidentalis</i>	G5?T3 T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Phlox albomarginata</i>	G4	Reg End	S1 peripheral in WY, most of the range of this taxon is outside of the WBE.
<i>Physaria acutifolia</i> var. <i>purpurea</i>	G5T2	Reg End	S2 in UT, located just outside the WBE boundary in the Uinta Basin.
<i>Physocarpus alternans</i>	G4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Platyschkuhria integrifolia</i> var. <i>integrifolia</i>	G5	Reg End	S3 in WY (not tracked) and S4 in MT (not tracked), sufficiently common not to be of regional concern.
<i>Platyschkuhria integrifolia</i> var. <i>ourolepis</i>	G5T3?	Reg End	S3? in UT, mostly outside of WBE.
<i>Populus deltoides</i> var. <i>wislizenii</i>	G5T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Potentilla diversifolia</i> var. <i>multisecta</i>	G3G4 Q	Wide	S1 peripheral in WY and S2 in UT, not of regional or rangewide conservation concern.
<i>Potentilla plattensis</i>	G4	Wide	S1 peripheral in MT, not of regional or rangewide conservation concern.
<i>Psilocarpus brevissimus</i>	G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Ranunculus flabellaris</i>	G5	Wide	SH peripheral in WY, not of regional or rangewide conservation concern.
<i>Sambucus cerulea</i>	G5?	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Selaginella mutica</i>	G4G5	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Selaginella selaginoides</i>	G5	Wide	S1 peripheral in WY, barely entering the WBE in mesic areas of the northern Green River Basin.
<i>Senecio crocatus</i>	G3	Reg End	SH in WY, a single, vague historical record barely enters the WBE in S WY (may actually belong in the

			UT/WY Rocky Mountains Ecoregion)
<i>Senecio spartioides</i> var. <i>multicapitatus</i>	G5T4	Wide	S1 peripheral in WY, not of regional or rangewide conservation concern.
<i>Sphaeromeria argentea</i>	G3	Disjunct	S2 in MT, but populations located outside WBE, S3 in WY (not tracked); sufficiently common in WY segment of WBE not to be of regional concern.
<i>Sphaeromeria capitata</i>	G3	Reg End	S1 in CO and UT, but these populations are all located outside of the WBE, S2S3 in MT and S3 in WY, but not tracked in either state, forms a community type that may be a good candidate for coarse filter protection.
<i>Stipa nevadensis</i>	G4	Disjunct	S1 in WY, not of regional or rangewide conservation concern.
<i>Tetradymia nuttallii</i>	G3G4	Reg End	S2S3 in WY (not tracked), relatively common in NE Utah and outside the WBE.
<i>Thelypodopsis elegans</i>	G3G5	Reg End	Relatively common in SW WY and NE UT, extends well beyond WBE boundary.
<i>Townsendia mensana</i>	G3	Nar End	S3 in UT, apparently secure in Uinta Basin, not actively tracked.
<i>Townsendia nuttallii</i>	G3	Reg End	S1 in UT, S3 in MT (no longer tracked) and S3 in WY (not tracked), sufficiently widespread and common in WY to not be of regional concern.
<i>Townsendia spathulata</i>	G3	Reg End	S3 in MT and S3 in WY, but no longer tracked in either state, sufficiently common to not be of regional concern.
<i>Townsendia strigosa</i>	G4	Reg End	S1 in CO, S3 in WY (not tracked), and SR in Utah, probably sufficiently common in WY to not be of regional concern, updated information from Utah would help resolve this.
<i>Trifolium andinum</i>	G3	Reg End	S1 in CO (but located outside the WBE), S3 in WY (not tracked), sufficiently common in WY not to be of regional concern.
<i>Viola beckwithii</i>	G4	Wide	S2 peripheral in UT, not of regional or rangewide conservation concern.
<i>Viola utahensis</i>	G4?Q	Reg End	S1 in WY but not tracked due to taxonomic questions.
<i>Xylorhiza glabriuscula</i>	G4G5	Reg End	Abundant in WY (S4S5, not tracked), not of regional concern.

References: Atwood et al. 1991; Colorado Natural Heritage Program 1997; Cronquist et al. 1972; Fertig and Beauvais 1999; Fertig et al. 1998; Goodrich and Neese 1986; Heidel 1999; Idaho Conservation Data Center 1999; Lesica 1998; Lesica and Achuff 1992; Lesica and Shelly 1991; Spackman et al. 1997; Stone 1998; Weber 1987; Welsh et al. 1993.

